

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                        )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/901**

**BLUE MARMOT V POWER PURCHASE AGREEMENT**

**January 31, 2020**

**STANDARD RENEWABLE OFF-SYSTEM VARIABLE POWER PURCHASE  
AGREEMENT**

THIS AGREEMENT is between **Blue Marmot V LLC** ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties") and is effective upon execution by both Parties ("Effective Date").

RECITALS

Seller intends to construct, own, operate and maintain a **Solar** facility for the generation of electric power located in **Lake County, Oregon at W 120.412 N 42.175** with a Nameplate Capacity Rating of **10000** kilowatt ("kW"), as further described in Exhibit A ("Facility"); and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.21, below, from the Facility in accordance with the terms and conditions of this Agreement.

AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

SECTION 1: DEFINITIONS

When used in this Agreement, the following terms shall have the following meanings:

1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.

1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year)

1.3. "Billing Period" means from the start of the first day of each calendar month to the end of the last day of each calendar month.

1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:

1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed

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Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);

1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.36;

1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement and was continuously mechanically available for operation for a minimum of 120 hours. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the mechanical availability of the Facility is interrupted during this initial testing period or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period;

1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;

1.5.5. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;

1.5.6. PGE has received a copy of the executed Generation Interconnection and Transmission Agreements.

1.6. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.

1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final Contract Year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.

1.8. "Effective Date" has the meaning set forth in Section 2.1.

1.9. "Environmental Attributes" shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as (subject to the foregoing) sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gasses (GHGs) that have been determined by the United Nations

Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

1.10. "Facility" has the meaning set forth in the Recitals.

1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with PacifiCorp electric system.

1.12. "Generation Unit" means each separate electrical generator that contributes toward Nameplate Capacity Rating included in Exhibit A. For solar facilities, a generating unit is a complete solar electrical generation system within the Facility that is able to generate and deliver energy to the Point of Delivery independent of other Generation Units within the same Facility.

1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.

1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

1.15. "Lost Energy" means "Lost Energy" means ((the Guarantee of Mechanical Availability as set forth in 3.1.10 / MAP) X Net Output for a Calendar Year) – Net Output for the Calendar Year. Lost Energy shall be zero unless the result of the calculation in this subsection results in a positive number.

1.16. "Lost Energy Value" means Lost Energy X the excess of the annual time-weighted average Mid-C Index Price for On Peak Hours and Off Peak Hours over the time weighted average Contract Price for On Peak and Off Peak Hours for the corresponding time period (provided that such excess shall not exceed the Contract Price and further provided that Lost Energy is deemed to be zero prior to reaching the Commercial Operation Date) plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery (For Start-Up Lost Energy Value See 1.35).

1.17. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

$$\text{MAP} = 100 \times (\text{Operational Hours}) / (\text{Base Hours} \times \text{Number of Units})$$

1.18. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") index price for the bilateral OTC market for energy at the Mid-C Physical for Average On Peak Power and Average Off Peak Power found on the following website:

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<https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

1.19. "Nameplate Capacity Rating" means the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW.

1.20. "Net Dependable Capacity" means the maximum capacity the Facility can sustain over a specified period modified for seasonal limitations, if any, and reduced by the capacity required for station service or auxiliaries.

1.21. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.

1.22. "Number of Units" means the number of Generation Units in the Facility as specified in Exhibit A.

1.23. "Off-Peak Hours" has the meaning provided in the Schedule.

1.24. "On-Peak Hours" has the meaning provided in the Schedule.

1.25. "Operational Hours" for the Facility means the total across all Generation Units of the number of hours each of the Facility's Generation Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, two hundred (200) hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit or Event of Force Majeure, the Operational Hours for a wind farm with five (5) separate two (2) MW turbines would be 43,800 for a Contract Year.

1.26. "Planned Maintenance" means outages scheduled ninety (90) days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.

1.27. "Point of Delivery" means the PGE system.

1.28. "Pre-Commercial Operation Date Minimum Net Output" shall mean, unless such MWh is specifically set forth by Seller in Exhibit A, an amount in MWh equal to seventy-five percent (75%) of Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours – 200 hours (assumed Planned Maintenance)) for each month. If Seller has provided specific expected monthly Net Output amounts for the Facility in Exhibit A, "Pre-Commercial Operation Date Minimum Net Output" shall mean seventy-five percent (75%) X expected net output set forth in Exhibit A for each month.

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1.29. "Prime Rate" means the publicly announced prime rate or reference rate for commercial loans to large businesses with the highest credit rating in the United States in effect from time to time quoted by Citibank, N.A. If a Citibank, N.A. prime rate is not available, the applicable Prime Rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, N.Y., selected by the Party to whom interest based on the prime rate is being paid.

1.30. "Prudent Electrical Practices" means those practices, methods, standards and acts engaged in or approved by a significant portion of the electric power industry in the Western Electricity Coordinating Council that at the relevant time period, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with good business practices, reliability, economy, safety and expedition, and which practices, methods, standards and acts reflect due regard for operation and maintenance standards recommended by applicable equipment suppliers and manufacturers, operational limits, and all applicable laws and regulations. Prudent Electrical Practices are not intended to be limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods and acts generally acceptable or approved by a significant portion of the electric power generation industry in the relevant region, during the relevant period, as described in the immediate preceding sentence.

1.31. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

1.32. "RPS Attributes" means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

1.33. "Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference.

1.34. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance

1.35. "Start-Up Lost Energy Value" means for the period after the date specified in Section 2.2.2 but prior to achievement of the Commercial Operation Date: zero, unless the Net Output is less than the pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable delay period, and the time-weighted average of the delay period's Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater

than the time-weighted average of the delay period's Contract Price for On-Peak Hours and Off-Peak Hours, in which case Startup Lost Energy Value equals: (pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable period - Net Output for the applicable period) X (the lower of: the time-weighted average of the Contract Price for On-Peak hours and Off-Peak Hours during the applicable period; or (the time-weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours during the applicable period – the time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours during the applicable period)). The time-weighted average in this section will reflect the relative proportions of On-Peak Hours and Off-Peak Hours in each day.

1.36. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.

1.37. "Step-in Rights" means the right of one party to assume an intervening position to satisfy all terms of an agreement in the event the other party fails to perform its obligations under the agreement.

1.38. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.

1.39. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

1.40. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.

1.41. "Transmission Curtailment" means a limitation on Seller's ability to deliver any portion of the scheduled energy to PGE due to the unavailability of transmission to the Point of Delivery (for any reason other than Force Majeure).

1.42. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Mid-C Index Price – Contract Price) X curtailed energy) for periods of Transmission Curtailment.

1.43. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.

1.44. "Transmission Services" means any and all services (including but not limited to ancillary services and control area services) required for the firm transmission and delivery of Energy from the Facility to the Point of Delivery for a term not less than the Term of this Agreement.

References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

## SECTION 2: TERM; COMMERCIAL OPERATION DATE

2.1. This Agreement shall become effective upon execution by both Parties ("Effective Date").

2.2. Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,

2.2.1. By **11/1/2019** Seller shall begin initial deliveries of Net Output; and

2.2.2. By **11/30/2019** Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.

2.2.3. Unless the Parties agree in writing that a later Commercial Operation Date is reasonable and necessary, the Commercial Operation Date shall be no more than three (3) years from the Effective Date. PGE will not unreasonably withhold agreement to a Commercial Operation Date that is more than three (3) years from the Effective date if the Seller has demonstrated that a later Commercial Operation Date is reasonable and necessary.

2.3. This Agreement shall terminate on **18 years after effective date**, or the date the Agreement is terminated in accordance with Section 8 or 11, whichever is earlier ("Termination Date").

### SECTION 3: REPRESENTATIONS AND WARRANTIES

3.1. Seller and PGE represent, covenant, and warrant as follows:

3.1.1. Seller warrants it is a **Limited liability company** duly organized under the laws of **Delaware**.

3.1.2. Seller warrants that the execution and delivery of this Agreement does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid order of any court, or any regulatory agency or other body having authority to which Seller is subject.

3.1.3. Seller warrants that the Facility is and shall for the Term of this Agreement continue to be a "Qualifying Facility" ("QF") as that term is defined in the version of 18 C.F.R. Part 292 in effect on the Effective Date. Seller has provided the appropriate QF certification, which may include a Federal Energy Regulatory Commission ("FERC") self-certification to PGE prior to PGE's execution of this Agreement. At any time during the Term of this Agreement, PGE may require Seller to provide PGE with evidence satisfactory to PGE in its reasonable discretion that the Facility continues to qualify as a QF under all applicable requirements.

3.1.4. Seller warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and Seller is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.5. Seller warrants that during the Term of this Agreement, all of Seller's right, title and interest in and to the Facility shall be free and clear of all liens and encumbrances other than liens and encumbrances arising from third-party financing of the Facility other than workers', mechanics', suppliers' or similar liens, or tax liens, in each case arising in the ordinary course of business that are either not yet due and



payable or that have been released by means of a performance bond acceptable to PGE posted within eight (8) calendar days of the commencement of any proceeding to foreclose the lien.

3.1.6. Seller warrants that it will design and operate the Facility consistent with Prudent Electrical Practices.

3.1.7. Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.

3.1.8. Seller warrants that Net Dependable Capacity of the Facility is 10,000 kW.

3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 21,999,568 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.

3.1.10. Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):

3.1.10.1. Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or

3.1.10.2. Ninety percent (90%) beginning in Contract Year three and extending throughout the remainder of the Term.

3.1.10.3. Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.

3.1.10.4. Seller's failure to meet the Guarantee of Mechanical Availability in a Calendar Year shall result in damages payable to PGE by Seller equal to the Lost Energy Value. PGE shall bill Seller for such damages in accordance with Section 7.

3.1.11. Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 33,750,000 kWh of Net Output during each Contract Year ("Maximum Net Output"). The cost of delivering energy from the Facility to PGE is the sole responsibility of the Seller.

3.1.12. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

3.1.13. PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.14. Seller warrants that the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power

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Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by PGE not more frequently than every 36 months, such documentation and information as may be reasonably required to establish Seller's continued compliance with such Definition. PGE agrees to take reasonable steps to maintain the confidentiality of any portion of the above described documentation and information that the Seller identifies as confidential except PGE will provide all such confidential information to the Commission upon the Commission's request.

3.1.15. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.5) associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050. PGE warrants that it will reasonably cooperate in Seller's efforts to meet such requirements, including, for example serving as the qualified reporting entity for the Facility if the Facility is located in PGE's balancing authority.

SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

4.1. Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.

4.2. PGE shall pay Seller the Contract Price for all delivered Net Output.

4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

4.4. Seller shall provide preschedules for all deliveries of energy hereunder, including identification of receiving and generating control areas, by 9:00:00 PPT on the last business day prior to the scheduled date of delivery. All energy shall be scheduled according to the most current North America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' respective representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the hourly schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of hourly energy schedules for accounting and

operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. All energy shall be prescheduled according to customary WECC scheduling practices. Seller shall make commercially reasonable efforts to schedule in any hour an amount equal to its expected Net Output for such hour. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records and to imbalance information kept by the Transmission Provider.

4.5. From the start of the Renewable Resource Deficiency Period through the remainder of the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any RPS Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained Environmental Attributes") Seller may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to Seller any of the Seller-Retained Environmental Attributes, and PGE shall not report under such program that such Seller-Retained Environmental Attributes belong to it. With respect to RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

#### SECTION 5: OPERATION AND CONTROL

5.1. Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.

5.2. Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.

5.3. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best

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efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Net Dependable Capacity). Notwithstanding the foregoing, in the event Seller is not current on construction related financial obligations, Seller shall notify PGE of such delinquency and PGE may, in its discretion, grant an exception to the requirements to provide default security if the QF has negotiated financial arrangements with the construction loan lender that mitigate Seller's financial risk to PGE.

#### SECTION 7: BILLINGS, COMPUTATIONS AND PAYMENTS

7.1. On or before the thirtieth (30<sup>th</sup>) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement and any other agreement related to the Facility between the Parties or otherwise. On or before the thirtieth (30<sup>th</sup>) day following the end of each Contract Year, PGE shall bill for any Lost Energy Value accrued pursuant to this Agreement.

7.2. Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law.

#### SECTION 8: DEFAULT, REMEDIES AND TERMINATION

8.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:

8.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.

8.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.

8.1.3. Seller's failure to meet the Guarantee of Mechanical Availability established in Section 3.1.10 for two consecutive Contract Years or Seller's failure to provide any written report required by that section.

8.1.4. If Seller is no longer a Qualifying Facility.

8.1.5. Failure of PGE to make any required payment pursuant to Section 7.1.

8.1.6. Seller's failure to meet the Commercial Operation Date.

8.2. In the event of a default under Section 8.1.6, PGE may provide Seller with written notice of default. Seller shall have one year in which to cure the default during which time the Seller shall pay PGE damages equal to the Lost Energy Value. If Seller is unable to cure the default, PGE may immediately terminate this Agreement as provided in Section 8.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 8.2.

8.3. In the event of a default hereunder, except as otherwise provided in this Agreement, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, the non-defaulting Party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 8 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

8.4. If this Agreement is terminated as provided in this Section 8, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.

8.5. In the event PGE terminates this Agreement pursuant to this Section 8, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.

8.6. Sections 8.1, 8.4, 8.5, 10, and 19.2 shall survive termination of this Agreement.

SECTION 9: TRANSMISSION CURTAILMENTS

9.1. Seller shall give PGE notice as soon as reasonably practicable of any Transmission Curtailment that is likely to affect Seller's ability to deliver any portion of energy scheduled pursuant to Section 4.4 of this Agreement.

9.2. If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 of this Agreement, Seller shall pay PGE the Transmission Curtailment Replacement Energy Cost for the number of MWh of energy reasonably determined by PGE as the difference between (i) the scheduled energy that would have been delivered to PGE under this Agreement during the period of Transmission Curtailment and (ii) the actual energy, if any, that was delivered to PGE for the period.

#### SECTION 10: INDEMNIFICATION AND LIABILITY

10.1. Seller agrees to defend, indemnify and hold harmless PGE, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with Seller's delivery of electric power to PGE or with the facilities at or prior to the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.

10.2. PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with PGE's receipt of electric power from Seller or with the facilities at or after the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.

10.3. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public, nor affect the status of PGE as an independent public utility corporation or Seller as an independent individual or entity.

10.4. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

#### SECTION 11: INSURANCE

11.1. Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, its directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of

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insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

11.2. Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility. Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

11.3. Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

SECTION 12: FORCE MAJEURE

12.1. As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect

the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

12.2. If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:

12.2.1. the non-performing Party, shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and

12.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and

12.2.3. the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.

12.3. No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.

12.4. Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

#### SECTION 13: SEVERAL OBLIGATIONS

Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or to impose a trust or partnership duty, obligation or liability between the Parties. If Seller includes two or more parties, each such party shall be jointly and severally liable for Seller's obligations under this Agreement.

#### SECTION 14: CHOICE OF LAW

This Agreement shall be interpreted and enforced in accordance with the laws of the state of Oregon, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

#### SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.



In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.

#### SECTION 16: WAIVER

Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement must be in writing, and such waiver shall not be deemed a waiver with respect to any subsequent default or other matter.

#### SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party or this Agreement. Seller shall at all times maintain in effect all local, state and federal licenses, permits and other approvals as then may be required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

#### SECTION 18: SUCCESSORS AND ASSIGNS

This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party.

#### SECTION 19: ENTIRE AGREEMENT

19.1. This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding PGE's purchase of Net Output from the Facility. No modification of this Agreement shall be effective unless it is in writing and signed by both Parties.

19.2. By executing this Agreement, Seller releases PGE from any third party claims related to the Facility, known or unknown, which may have arisen prior to the Effective Date.

#### SECTION 20: NOTICES

20.1. All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in person or when deposited in the U.S. Mail, postage prepaid by certified or registered mail and return receipt requested:

To Seller:                   Blue Marmot V LLC  
                                  c/o EDP Renewables North America LLC;  
                                  Attention: General Counsel  
                                  808 Travis, Suite 700  
                                  Houston, Texas 77002

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To PGE: Contracts Manager  
QF Contracts, 3WTC0306  
PGE - 121 SW Salmon St.  
Portland, Oregon 97204

20.2 The Parties may change the person to whom such notices are addressed, or their addresses, by providing written notices thereof in accordance with this Section 20.

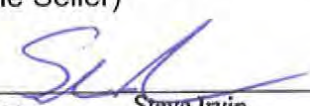
IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

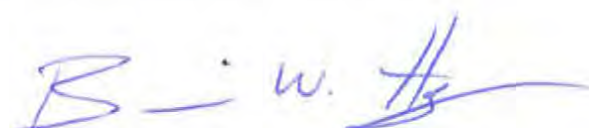
\_\_\_\_\_  
PGE

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

PGE Approved By:	
Business Terms	
Credit	
Legal	
Risk Mgt.	

**Blue Marmot V LLC**  
(Name Seller)

By:   
Name: Steve Irvin  
Title: Executive Vice President,  
Western and Central Regions and Mexico  
Date: 03/29/17



Brian Hayes  
Executive Vice President,  
Asset Operations

3/29/17

**EXHIBIT A  
DESCRIPTION OF SELLER'S FACILITY**

**The facility will be a solar PV plant consisting of 38,715 polycrystalline modules of nominal 335W rating each. Total plant rating will be 12.97MWdc/10MWac. Modules will be mounted to single-axis trackers.**

**Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.**

**The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 3.1 miles to the PacifiCorp Mile-Hi Substation.**

**Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.**

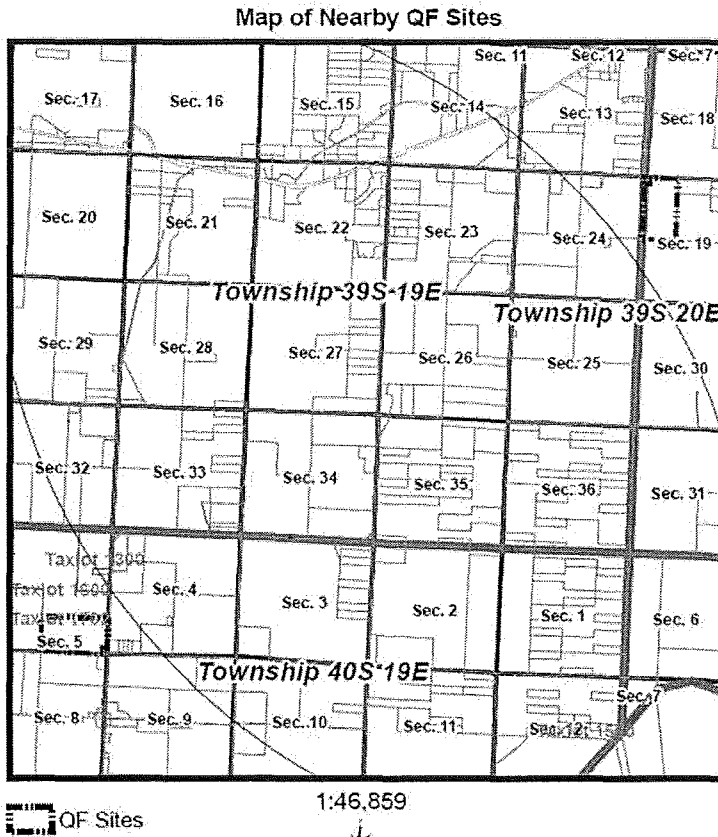
**The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.**

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Monthly detail of first year output

Monthly Hourly runs for E_Grid (MWh)	0H	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	Total
January	0	0	0	0	0	0	0	0	64	129	124	125	114	122	130	150	13	0	0	0	0	0	0	0	918
February	0	0	0	0	0	0	0	0	34	104	144	113	137	153	151	117	59	0	0	0	0	0	0	0	1261
March	0	0	0	0	0	0	0	0	31	171	183	159	195	196	195	173	132	31	0	0	0	0	0	0	1734
April	0	0	0	0	0	0	83	189	201	236	219	221	228	223	218	209	194	86	0	0	0	0	0	0	2288
May	0	0	0	0	0	51	181	227	251	260	268	254	247	242	244	239	222	164	45	0	0	0	0	0	2695
June	0	0	0	0	0	91	230	252	264	271	274	267	265	263	262	252	243	210	79	0	0	0	0	0	3223
July	0	0	0	0	0	64	195	215	261	269	276	263	257	258	243	229	224	165	70	0	0	0	0	0	3042
August	0	0	0	0	0	3	136	276	291	284	283	282	281	258	253	250	235	141	22	0	0	0	0	0	2945
September	0	0	0	0	0	0	68	303	233	237	238	231	230	233	232	233	171	45	0	0	0	0	0	0	2340
October	0	0	0	0	0	0	2	105	200	205	195	192	191	188	189	180	64	0	0	0	0	0	0	0	1731
November	0	0	0	0	0	0	0	20	39	115	117	117	121	130	134	70	0	0	0	0	0	0	0	0	927
December	0	0	0	0	0	0	0	0	55	97	98	102	101	122	130	66	0	0	0	0	0	0	0	0	771
Year	-2	-2	-2	-2	-2	209	904	1521	2104	2413	2430	2371	2336	2387	2381	2140	1556	860	215	-2	-2	-2	-2	-2	23987

9. Map adjoining QF sites owned by the same seller at this time , or within the past 12 months



FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

# Form 556

Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

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## General

Questions about completing this form should be sent to [Form556@ferc.gov](mailto:Form556@ferc.gov). Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, [www.ferc.gov/QF](http://www.ferc.gov/QF). The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

## Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

## How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button (  ) for assistance, or contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov).

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov) to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

## How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

## Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 ([DataClearance@ferc.gov](mailto:DataClearance@ferc.gov)); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 ([oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov)). Include the Control No. 1902-0075 in any correspondence.

## Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do <i>not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

## Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

## Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Notice Requirements link.

## What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

## Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

## Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

## Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See [www.ferc.gov/help/filing-guide/file-ceii.asp](http://www.ferc.gov/help/filing-guide/file-ceii.asp) for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

<p><b>Non-Public:</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.</p>
<p><b>Public (redacted):</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This public version of the applicant's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.</p>
<p><b>Privileged:</b> Indicate below which lines of your form contain data for which you are seeking privileged treatment</p>    
<p><b>Critical Energy Infrastructure Information (CEII):</b> Indicate below which lines of your form contain data for which you are seeking CEII status</p>    

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from [www.ferc.gov/QF](http://www.ferc.gov/QF). To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.



FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

**Form 556** Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

Application Information

<b>1a</b> Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Blue Marmot V LLC		
<b>1b</b> Applicant street address 808 Travis Street #700		
<b>1c</b> City Houston	<b>1d</b> State/province TX	
<b>1e</b> Postal code 77002	<b>1f</b> Country (if not United States)	<b>1g</b> Telephone number 713-265-0350
<b>1h</b> Has the instant facility ever previously been certified as a QF? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
<b>1i</b> If yes, provide the docket number of the last known QF filing pertaining to this facility: QF <u>16</u> - <u>1090</u> - <u>000</u>		
<b>1j</b> Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
<b>1k</b> What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
<b>1l</b> What is the purpose and expected effective date(s) of this filing? <input type="checkbox"/> Original certification; facility expected to be installed by _____ and to begin operation on _____ <input checked="" type="checkbox"/> Change(s) to a previously certified facility to be effective on <u>9/6/16</u> (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input checked="" type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input checked="" type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
<b>1m</b> If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	<b>2a</b> Name of contact person Leslie A. Freiman		<b>2b</b> Telephone number 713-265-0350	
	<b>2c</b> Which of the following describes the contact person's relationship to the applicant? (check one) <input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input checked="" type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	<b>2d</b> Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/> EDP Renewables North America LLC			
	<b>2e</b> Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>			
	<b>2f</b> City		<b>2g</b> State/province	
	<b>2h</b> Postal code		<b>2i</b> Country (if not United States)	
Facility Identification and Location	<b>3a</b> Facility name Blue Marmot V			
	<b>3b</b> Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>			
	<b>3c</b> Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.  Longitude <input type="checkbox"/> East (+) <u>120.412</u> degrees                      Latitude <input checked="" type="checkbox"/> North (+) <u>42.175</u> degrees <input checked="" type="checkbox"/> West (-)			
	<b>3d</b> City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Lakeview		<b>3e</b> State/province Oregon	
	<b>3f</b> County (or check here for independent city) <input type="checkbox"/> Lake		<b>3g</b> Country (if not United States)	
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	<b>4a</b> Identify utility interconnecting with the facility PacifiCorp (Pacific Power)			
	<b>4b</b> Identify utilities providing wheeling service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			
	<b>4c</b> Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Portland General Electric Company			
<b>4d</b> Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)				

Ownership and Operation

**5a** Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) Blue Marmot V LLC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
2) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
3) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
4) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
5) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
6) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
7) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
8) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
9) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
10) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5b** Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

Full legal names of electric utility or holding company upstream owners	% equity interest
1) EDP Renewables North America LLC	100 %
2) _____	_____ %
3) _____	_____ %
4) _____	_____ %
5) _____	_____ %
6) _____	_____ %
7) _____	_____ %
8) _____	_____ %
9) _____	_____ %
10) _____	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5c** Identify the facility operator

Blue Marmot V LLC

Energy Input

**6a** Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Biomass (specify)                     | <input checked="" type="checkbox"/> Renewable resources (specify)          | <input type="checkbox"/> Geothermal                                 |
| <input type="checkbox"/> Landfill gas                          | <input type="checkbox"/> Hydro power - river                               | <input type="checkbox"/> Fossil fuel (specify)                      |
| <input type="checkbox"/> Manure digester gas                   | <input type="checkbox"/> Hydro power - tidal                               | <input type="checkbox"/> Coal (not waste)                           |
| <input type="checkbox"/> Municipal solid waste                 | <input type="checkbox"/> Hydro power - wave                                | <input type="checkbox"/> Fuel oil/diesel                            |
| <input type="checkbox"/> Sewage digester gas                   | <input checked="" type="checkbox"/> Solar - photovoltaic                   | <input type="checkbox"/> Natural gas (not waste)                    |
| <input type="checkbox"/> Wood                                  | <input type="checkbox"/> Solar - thermal                                   | <input type="checkbox"/> Other fossil fuel<br>(describe on page 19) |
| <input type="checkbox"/> Other biomass (describe on page 19)   | <input type="checkbox"/> Wind  | <input type="checkbox"/> Other (describe on page 19)                |
| <input type="checkbox"/> Waste (specify type below in line 6b) | <input type="checkbox"/> Other renewable resource<br>(describe on page 19) |   |

**6b** If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

- Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)
- Anthracite culm produced prior to July 23, 1985
  - Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
  - Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
  - Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
  - Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
  - Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
  - Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
  - Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
  - Materials that a government agency has certified for disposal by combustion (describe on page 19)
  - Heat from exothermic reactions (describe on page 19)
  - Residual heat (describe on page 19)
  - Used rubber tires
  - Plastic materials
  - Refinery off-gas
  - Petroleum coke
- Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

**6c** Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	10,000 kW
<b>7b</b> Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	5 kW
<b>7c</b> Electrical losses in interconnection transformers	176 kW
<b>7d</b> Electrical losses in AC/DC conversion equipment, if any	10 kW
<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	41 kW
<b>7f</b> Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	232.0 kW
<b>7g</b> Maximum net power production capacity = 7a - 7f	9,768.0 kW

**7h** Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The facility will be a solar PV plant consisting of 38,715 polycrystalline modules of nominal 335W rating each. Total plant rating will be 12.97MWdc/10MWac. Modules will be mounted to single-axis trackers.

Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.

The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 3.1 miles to the PacifiCorp Mile-Hi Substation.

Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.

The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.

## Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).																				
	<b>8a</b> Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Check here if no such facilities exist. <input checked="" type="checkbox"/>																				
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 20%; text-align: center;">Facility location (city or county, state)</th> <th style="width: 10%; text-align: center;">Root docket # (if any)</th> <th style="width: 30%; text-align: center;">Common owner(s)</th> <th style="width: 10%; text-align: center;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1)</td> <td></td> <td style="text-align: center;">QF -</td> <td></td> <td style="text-align: center;">kW</td> </tr> <tr> <td style="text-align: center;">2)</td> <td></td> <td style="text-align: center;">QF -</td> <td></td> <td style="text-align: center;">kW</td> </tr> <tr> <td style="text-align: center;">3)</td> <td></td> <td style="text-align: center;">QF -</td> <td></td> <td style="text-align: center;">kW</td> </tr> </tbody> </table>		Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1)		QF -		kW	2)		QF -		kW	3)		QF -		kW
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	2)		QF -		kW																
3)		QF -		kW																	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed																					
<b>8b</b> The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? <input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)																					
<b>8c</b> Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994?    Yes <input type="checkbox"/> No <input type="checkbox"/>																					
<b>8d</b> Did construction of the facility commence on or before December 31, 1999?    Yes <input type="checkbox"/> No <input type="checkbox"/>																					
<b>8e</b> If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction?    Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.																					
Certification of Compliance with Fuel Use Requirements	Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																				
	<b>9a</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: <input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.																				
	<b>9b</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: <input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																				

## Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

<b>General Cogeneration Information</b>	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>		
	<p><b>10a</b> What type(s) of cogeneration technology does the facility represent? (check all that apply)</p> <p><input type="checkbox"/> Topping-cycle cogeneration      <input type="checkbox"/> Bottoming-cycle cogeneration</p>		
	<p><b>10b</b> To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p>		
	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%; text-align: center;"> <p>Check to certify compliance with indicated requirement</p> </td> <td style="text-align: center;"> <p>Requirement</p> </td> </tr> </table>	<p>Check to certify compliance with indicated requirement</p>	<p>Requirement</p>
	<p>Check to certify compliance with indicated requirement</p>	<p>Requirement</p>	
	<input type="checkbox"/>	<p>Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.</p>	
	<input type="checkbox"/>	<p>Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.</p>	
	<input type="checkbox"/>	<p>Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.</p>	
	<input type="checkbox"/>	<p>Diagram must specify average gross electric output in kW or MW for each generator.</p>	
	<input type="checkbox"/>	<p>Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.</p>	
<input type="checkbox"/>	<p>At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).</p>		
<input type="checkbox"/>	<p>Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.</p>		
<input type="checkbox"/>	<p>Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.</p>		
<input type="checkbox"/>	<p>Diagram must specify working fluid flow conditions at make-up water inputs.</p>		

EPAct 2005 Requirements for Fundamental Use  
of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

**11a** Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes  No

**11b** Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes  No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

**11c** With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

**11d** Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

**11e** Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

**11f** Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.



EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2)*.

<b>11g</b> Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
<b>11h</b> Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
<b>11i</b> Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	0 %

**11j** Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF)), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

### Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>			
	<p><b>12a</b> Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows.</p>			
		Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
	1)		Select thermal host's relationship to facility	Btu/h
			Select thermal host's use of thermal output	
	2)		Select thermal host's relationship to facility	Btu/h
			Select thermal host's use of thermal output	
	3)		Select thermal host's relationship to facility	Btu/h
			Select thermal host's use of thermal output	
	4)		Select thermal host's relationship to facility	Btu/h
		Select thermal host's use of thermal output		
5)		Select thermal host's relationship to facility	Btu/h	
		Select thermal host's use of thermal output		
6)		Select thermal host's relationship to facility	Btu/h	
		Select thermal host's use of thermal output		
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed				
<p><b>12b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>				

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

<b>13a</b> Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
<b>13b</b> Indicate the annual average rate of net electrical energy output	kW
<b>13c</b> Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
<b>13d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
<b>13e</b> Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
<b>13f</b> Indicate the annual average rate of energy input from natural gas and oil	Btu/h
<b>13g</b> Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
<b>13h</b> Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %

**13i** Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?  
 Yes (complies with operating standard)       No (does not comply with operating standard)

**13j** Did installation of the facility in its current form commence on or after March 13, 1980?  
 Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.  
 No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

**13k** Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:  
 Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

**13l** Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:  
 Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

## Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output	<p>The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.</p>			
	<p><b>14a</b> Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.</p>			
		<p>Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production</p>	<p>Thermal host's relationship to facility; Thermal host's process type</p>	<p>Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)</p>
	1)		Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>
			Select thermal host's process type	
	2)		Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>
			Select thermal host's process type	
	3)		Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>
			Select thermal host's process type	
	<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>			
<p><b>14b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>				

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

**15a** Did installation of the facility in its current form commence on or after March 13, 1980?

Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.

No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

<b>15b</b> Indicate the annual average rate of net electrical energy output	kW
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<b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
---	---------

<b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
---	----

<b>15e</b> Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
---	---------

<b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
---	-------

<b>15g</b> Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$	0 %
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**15h** Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

### Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
  - The person on whose behalf the filing is made
  - An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
  - An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
  - A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
- He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
- He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Leslie A. Freiman	808 Travis Street #700 Houston, TX 77002	9/6/2016

Audit Notes
Commission Staff Use Only: <input type="checkbox"/>

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## Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

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Section 1(1) continued:

Blue Marmot V LLC (Applicant) hereby updates its prior self-certification of qualifying facility status to reflect an anticipated installation date of September 30, 2019 and commercial operation date of November 30, 2019. In addition, Applicant also updates the facility description and rating information provided in section 7.

EXHIBIT B  
REQUIRED FACILITY DOCUMENTS

Sellers Generation Interconnection Agreement

Transmission Service Agreement with PacifiCorp

Purchase option agreement

Conditional Use Permit issued by Lake County

Any additional permits that might be required by Lake County or Oregon Department of Environmental Quality, including access permit, building and electric permits, and storm water prevention permit

FERC Qualifying Facility self-certification



EXHIBIT C  
START-UP TESTING

VISUAL AND MECHANICAL INSPECTIONS

INVERTER COMMISSIONING

ELECTRICAL OPERATION TESTS

SYSTEM MONITORING VERIFICATION

TRACKER VERIFICATION

INFRARED SCANS

BLOCK TESTING

72-HOUR FUNCTIONAL TEST

GRID MATCH TEST

POWER CHARACTERIZATION

REVENUE METER VERIFICATION

REACTIVE POWER TEST

POWER OUTPUT TEST - PLANT PERFORMANCE AND ACCEPTANCE

EXHIBIT D  
SCHEDULE

**SCHEDULE 201  
QUALIFYING FACILITY 10 MW or LESS  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

**APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

**POWER PURCHASE INFORMATION**

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**PPA**

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

**SCHEDULE 201 (Continued)**

PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

**STANDARD PPA (Nameplate capacity of 10 MW or less)**

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

**GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA**

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller. Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.

**SCHEDULE 201 (Continued)**

**OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

**BASIS FOR POWER PURCHASE PRICE**

**AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

**ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

**OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 93% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.

**SCHEDULE 201 (Continued)**

**PRICING FOR STANDARD PPA**

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour. Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed.

The Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any PPA year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard PPA; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. The Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

**1) Standard Fixed Price Option**

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 5%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 5%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1a												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	67.43	67.34	65.41	64.69	64.41	64.50	64.61	64.73	64.84	65.48	68.60	68.72
2022	69.01	68.84	68.08	67.13	66.81	66.91	67.04	67.17	67.29	67.83	71.38	71.70
2023	71.95	71.76	70.39	69.19	69.07	69.18	69.31	69.45	69.58	70.12	73.56	73.70
2024	74.17	73.85	72.67	71.29	71.10	71.21	71.35	71.50	71.63	72.20	76.49	76.64
2025	77.19	77.30	75.84	74.88	75.02	75.14	75.30	75.47	75.62	75.80	82.57	82.89
2026	85.18	85.30	82.77	81.28	81.22	81.36	81.56	81.74	81.90	82.36	89.02	88.72
2027	86.85	86.76	85.14	83.12	82.89	83.03	83.00	83.32	83.46	83.97	91.39	91.15
2028	89.32	89.31	87.96	85.46	85.30	85.46	85.31	85.64	85.95	86.65	94.66	93.55
2029	94.06	93.99	91.23	88.74	87.97	88.15	87.71	88.06	88.61	89.34	98.37	98.11
2030	97.60	97.54	94.87	92.62	92.40	92.57	92.61	93.00	93.12	93.68	102.42	102.70
2031	99.56	99.50	96.78	94.48	94.26	94.43	94.47	94.87	94.99	95.56	104.47	104.76
2032	103.85	103.80	100.57	98.18	97.96	98.15	98.23	98.65	98.76	99.36	108.86	109.41
2033	106.56	106.51	103.17	100.72	100.50	100.69	100.78	101.21	101.32	101.93	111.67	112.26
2034	109.12	109.07	105.60	103.10	102.88	103.08	103.17	103.61	103.72	104.35	114.33	114.96
2035	111.55	111.51	107.91	105.35	105.12	105.33	105.43	105.89	105.99	106.63	116.87	117.54
2036	113.85	113.80	110.14	107.53	107.30	107.51	107.60	108.07	108.18	108.83	119.27	119.95
2037	116.50	116.45	112.72	110.06	109.82	110.04	110.14	110.61	110.73	111.39	122.03	122.73
2038	119.08	119.03	115.22	112.51	112.27	112.49	112.59	113.08	113.19	113.87	124.71	125.42
2039	121.47	121.42	117.54	114.77	114.53	114.75	114.85	115.35	115.47	116.15	127.21	127.93
2040	124.25	124.20	120.25	117.43	117.18	117.41	117.51	118.02	118.14	118.84	130.10	130.85
2041	126.72	126.67	122.64	119.76	119.51	119.74	119.85	120.36	120.49	121.20	132.68	133.44

Effective for service  
on and after October 12, 2016



SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1b												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2a												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.37	18.62	11.77	10.87	8.62	13.12	20.12	23.12	21.12	19.87	22.87	27.62
2017	26.05	24.30	20.80	17.05	15.55	16.55	24.05	27.05	25.55	23.80	24.80	29.80
2018	27.72	27.12	24.12	18.14	17.29	17.29	25.94	29.38	26.64	24.62	27.87	31.72
2019	29.87	27.88	23.90	19.63	17.93	19.06	27.60	31.01	29.30	27.31	28.45	34.14
2020	31.59	29.49	25.30	20.80	19.00	20.20	29.19	32.79	30.99	28.89	30.09	36.09
2021	30.68	30.59	28.66	27.94	27.66	27.75	27.87	27.99	28.10	28.74	31.86	31.98
2022	31.56	31.39	30.62	29.68	29.36	29.46	29.59	29.72	29.84	30.38	33.93	34.25
2023	33.67	33.48	32.11	30.91	30.79	30.90	31.03	31.17	31.30	31.84	35.28	35.42
2024	35.38	35.06	33.88	32.49	32.30	32.42	32.56	32.70	32.84	33.40	37.70	37.85
2025	37.53	37.64	36.18	35.22	35.36	35.48	35.64	35.81	35.96	36.14	42.91	43.23
2026	44.75	44.87	42.35	40.86	40.79	40.94	41.13	41.32	41.48	41.94	48.60	48.29
2027	45.65	45.56	43.93	41.91	41.68	41.82	41.79	42.12	42.26	42.76	50.18	49.94
2028	47.32	47.31	45.96	43.46	43.30	43.46	43.31	43.64	43.95	44.65	52.66	51.55
2029	51.25	51.18	48.43	45.94	45.16	45.34	44.90	45.25	45.80	46.53	55.57	55.30
2030	53.96	53.90	51.23	48.98	48.76	48.93	48.97	49.36	49.48	50.04	58.78	59.06
2031	55.08	55.02	52.29	50.00	49.77	49.95	49.99	50.38	50.51	51.08	59.99	60.28
2032	58.77	58.72	55.49	53.10	52.88	53.07	53.15	53.57	53.68	54.28	63.78	64.33
2033	60.35	60.30	56.96	54.51	54.29	54.49	54.57	55.00	55.11	55.72	65.46	66.05
2034	61.88	61.83	58.36	55.86	55.63	55.84	55.93	56.37	56.48	57.10	67.09	67.72
2035	63.54	63.49	59.90	57.34	57.11	57.32	57.42	57.87	57.98	58.62	68.86	69.53
2036	65.04	65.00	61.33	58.72	58.49	58.70	58.80	59.27	59.38	60.03	70.46	71.15
2037	66.61	66.57	62.83	60.17	59.93	60.15	60.25	60.73	60.84	61.50	72.14	72.84
2038	68.23	68.18	64.37	61.66	61.42	61.64	61.74	62.23	62.34	63.02	73.86	74.57
2039	69.64	69.59	65.71	62.94	62.70	62.92	63.03	63.52	63.64	64.33	75.38	76.11
2040	71.42	71.37	67.41	64.60	64.35	64.58	64.68	65.18	65.30	66.00	77.27	78.01
2041	72.87	72.82	68.79	65.92	65.66	65.90	66.00	66.52	66.64	67.35	78.84	79.59

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2b												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.77	16.87	10.12	7.57	2.47	6.27	11.87	17.12	17.12	17.37	19.62	22.87
2017	21.80	20.30	18.30	11.80	9.80	8.80	15.80	21.30	21.55	20.80	21.80	24.05
2018	22.18	24.13	21.57	15.47	10.69	8.55	15.72	23.05	22.94	21.36	24.21	26.63
2019	25.77	24.02	21.68	14.08	11.74	10.57	18.76	25.19	25.48	24.60	25.77	28.40
2020	27.60	25.73	23.23	15.13	12.64	11.39	20.12	26.97	27.28	26.35	27.60	30.40
2021	24.65	24.56	22.63	21.92	21.64	21.72	21.84	21.96	22.07	22.71	25.83	25.95
2022	25.42	25.25	24.48	23.54	23.22	23.32	23.44	23.57	23.69	24.23	27.78	28.11
2023	27.39	27.20	25.82	24.62	24.51	24.61	24.75	24.88	25.01	25.56	28.99	29.13
2024	29.01	28.69	27.51	26.13	25.94	26.05	26.19	26.34	26.48	27.04	31.33	31.49
2025	31.02	31.13	29.68	28.71	28.86	28.97	29.14	29.30	29.45	29.63	36.41	36.72
2026	38.12	38.24	35.71	34.22	34.16	34.30	34.50	34.69	34.85	35.30	41.97	41.66
2027	38.89	38.80	37.17	35.15	34.92	35.06	35.03	35.35	35.50	36.00	43.42	43.18
2028	40.43	40.42	39.07	36.57	36.40	36.57	36.42	36.75	37.06	37.76	45.77	44.65
2029	44.23	44.16	41.40	38.91	38.14	38.32	37.88	38.23	38.78	39.51	48.54	48.28
2030	46.80	46.74	44.07	41.82	41.60	41.77	41.81	42.20	42.32	42.88	51.62	51.90
2031	47.78	47.72	44.99	42.70	42.47	42.65	42.69	43.09	43.21	43.78	52.69	52.98
2032	51.38	51.33	48.10	45.71	45.49	45.68	45.76	46.18	46.29	46.89	56.39	56.94
2033	52.77	52.72	49.38	46.93	46.71	46.90	46.99	47.42	47.53	48.14	57.88	58.47
2034	54.12	54.08	50.61	48.10	47.88	48.08	48.17	48.62	48.73	49.35	59.34	59.97
2035	55.66	55.62	52.02	49.46	49.23	49.44	49.54	50.00	50.10	50.74	60.98	61.65
2036	57.04	56.99	53.33	50.72	50.49	50.70	50.80	51.26	51.37	52.02	62.46	63.15
2037	58.43	58.38	54.65	51.99	51.75	51.97	52.06	52.54	52.65	53.32	63.95	64.65
2038	59.88	59.84	56.03	53.32	53.08	53.30	53.40	53.88	54.00	54.67	65.52	66.23
2039	61.13	61.08	57.20	54.44	54.19	54.42	54.52	55.02	55.13	55.82	66.87	67.60
2040	62.75	62.70	58.75	55.93	55.68	55.91	56.01	56.52	56.64	57.34	68.60	69.34
2041	64.04	63.98	59.95	57.08	56.83	57.06	57.17	57.68	57.80	58.52	70.00	70.76

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3a												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	33.98	33.89	31.96	31.24	30.96	31.05	31.16	31.28	31.39	32.03	35.15	35.27
2022	34.92	34.75	33.98	33.04	32.72	32.82	32.94	33.08	33.20	33.74	37.28	37.61
2023	37.09	36.90	35.52	34.32	34.21	34.31	34.44	34.58	34.71	35.26	38.69	38.83
2024	38.86	38.54	37.36	35.98	35.79	35.90	36.04	36.19	36.32	36.88	41.18	41.33
2025	41.08	41.19	39.73	38.77	38.92	39.03	39.19	39.36	39.51	39.69	46.46	46.78
2026	48.37	48.49	45.97	44.48	44.42	44.56	44.75	44.94	45.10	45.56	52.22	51.91
2027	49.34	49.25	47.62	45.61	45.38	45.51	45.48	45.81	45.95	46.45	53.87	53.63
2028	51.08	51.07	49.72	47.22	47.06	47.22	47.07	47.40	47.72	48.41	56.42	55.31
2029	55.08	55.01	52.26	49.77	48.99	49.17	48.73	49.08	49.63	50.36	59.40	59.13
2030	57.87	57.81	55.14	52.89	52.67	52.84	52.88	53.27	53.39	53.95	62.69	62.97
2031	59.07	59.00	56.28	53.98	53.76	53.93	53.98	54.37	54.49	55.06	63.98	64.26
2032	62.83	62.78	59.56	57.16	56.94	57.13	57.21	57.64	57.75	58.34	67.85	68.39
2033	64.49	64.44	61.09	58.64	58.42	58.62	58.70	59.14	59.25	59.86	69.60	70.18
2034	66.10	66.05	62.58	60.08	59.85	60.05	60.14	60.59	60.70	61.32	71.31	71.94
2035	67.84	67.79	64.20	61.64	61.41	61.62	61.71	62.17	62.28	62.92	73.16	73.83
2036	69.43	69.38	65.72	63.11	62.88	63.09	63.19	63.66	63.77	64.42	74.85	75.54
2037	71.08	71.04	67.30	64.64	64.40	64.62	64.72	65.20	65.31	65.97	76.61	77.31
2038	72.78	72.73	68.93	66.22	65.98	66.20	66.30	66.78	66.90	67.57	78.42	79.13
2039	74.28	74.23	70.35	67.58	67.34	67.56	67.67	68.16	68.28	68.97	80.02	80.75
2040	76.15	76.10	72.15	69.33	69.08	69.31	69.42	69.92	70.04	70.74	82.01	82.75
2041	77.69	77.64	73.61	70.74	70.48	70.72	70.82	71.34	71.46	72.17	83.66	84.41

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3b												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)

**2) Renewable Fixed Price Option**

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 5%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 5%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	115.34	115.32	114.56	115.02	118.22	117.33	117.01	116.89	115.60	114.63	115.47	114.45
2021	117.94	118.18	116.67	117.75	120.59	119.83	119.26	119.77	118.26	117.25	118.55	117.22
2022	120.48	120.36	118.46	120.19	123.17	122.14	121.69	121.65	120.55	119.55	120.98	119.53
2023	123.26	122.83	120.85	122.92	125.37	124.64	124.29	123.92	123.08	121.92	123.63	122.53
2024	124.86	125.01	123.06	125.07	127.80	126.78	126.67	126.41	126.22	123.83	124.83	124.96
2025	127.73	128.05	125.86	128.21	131.66	130.48	129.53	129.66	128.84	126.59	127.76	127.41
2026	130.91	130.58	129.12	131.30	135.76	132.28	132.28	132.69	132.40	129.34	131.17	130.23
2027	133.47	133.03	131.38	133.50	139.48	134.88	134.51	135.95	134.79	131.96	133.26	132.78
2028	135.95	134.91	132.89	136.24	141.79	136.93	137.64	137.65	136.77	134.76	135.84	135.06
2029	138.81	138.57	135.91	139.29	149.30	140.74	140.82	140.82	140.86	137.50	138.32	138.21
2030	141.68	141.39	139.11	142.00	153.18	145.20	143.05	142.93	144.31	140.18	140.75	140.79
2031	144.29	143.79	142.17	145.52	156.10	149.27	145.71	146.65	146.86	143.04	144.15	143.71
2032	146.51	146.00	144.35	147.76	158.51	151.58	147.95	148.91	149.13	145.24	146.37	145.92
2033	149.91	149.40	147.71	151.19	162.18	155.09	151.39	152.37	152.59	148.62	149.77	149.31
2034	152.96	152.43	150.71	154.26	165.46	158.24	154.46	155.46	155.68	151.64	152.81	152.35
2035	155.76	155.22	153.46	157.08	168.50	161.14	157.29	158.31	158.54	154.41	155.60	155.13
2036	158.31	157.76	155.97	159.65	171.26	163.78	159.86	160.90	161.13	156.94	158.15	157.67
2037	161.83	161.27	159.44	163.20	175.07	167.42	163.42	164.48	164.71	160.43	161.67	161.18
2038	164.95	164.38	162.52	166.35	178.45	170.65	166.57	167.65	167.89	163.52	164.79	164.29
2039	168.13	167.55	165.66	169.56	181.89	173.94	169.79	170.89	171.13	166.68	167.97	167.46
2040	171.05	170.46	168.54	172.51	185.04	176.96	172.74	173.85	174.10	169.58	170.89	170.37
2041	174.69	174.08	172.11	176.17	188.98	180.72	176.40	177.55	177.80	173.18	174.52	173.99

SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39



**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.52	18.77	11.92	11.02	8.77	13.27	20.27	23.27	21.27	20.02	23.02	27.77
2017	26.20	24.45	20.95	17.20	15.70	16.70	24.20	27.20	25.70	23.95	24.95	29.95
2018	27.87	27.27	24.27	18.29	17.44	17.44	26.09	29.53	26.79	24.77	28.02	31.87
2019	30.03	28.04	24.06	19.79	18.09	19.22	27.76	31.17	29.46	27.47	28.61	34.30
2020	75.38	75.37	74.61	75.06	78.26	77.37	77.05	76.93	75.64	74.67	75.51	74.49
2021	77.10	77.33	75.83	76.90	79.75	78.99	78.41	78.92	77.41	76.40	77.70	76.38
2022	78.85	78.72	76.82	78.56	81.53	80.51	80.05	80.02	78.92	77.92	79.34	77.90
2023	80.71	80.27	78.29	80.37	82.82	82.08	81.73	81.37	80.53	79.36	81.08	79.97
2024	81.74	81.89	79.93	81.95	84.68	83.66	83.55	83.28	83.10	80.71	81.71	81.84
2025	83.64	83.97	81.78	84.13	87.57	86.40	85.44	85.57	84.75	82.51	83.68	83.32
2026	85.97	85.64	84.18	86.37	90.82	87.34	87.34	87.75	87.46	84.40	86.23	85.29
2027	87.67	87.23	85.57	87.69	93.67	89.07	88.71	90.15	88.99	86.16	87.45	86.98
2028	89.26	88.22	86.20	89.55	95.10	90.24	90.95	90.96	90.08	88.07	89.15	88.37
2029	91.22	90.98	88.32	91.70	101.72	93.16	93.23	93.23	93.28	89.92	90.73	90.62
2030	93.17	92.88	90.60	93.49	104.67	96.69	94.54	94.42	95.80	91.67	92.24	92.28
2031	94.84	94.34	92.72	96.07	106.65	99.82	96.26	97.20	97.42	93.59	94.70	94.26
2032	96.40	95.90	94.24	97.65	108.40	101.47	97.85	98.80	99.02	95.13	96.26	95.82
2033	98.55	98.03	96.34	99.82	110.81	103.72	100.02	101.00	101.22	97.25	98.40	97.95
2034	100.44	99.91	98.19	101.74	112.94	105.72	101.94	102.94	103.17	99.12	100.29	99.83
2035	102.38	101.85	100.09	103.71	115.13	107.76	103.92	104.93	105.16	101.04	102.23	101.76
2036	104.06	103.51	101.72	105.40	117.01	109.53	105.61	106.65	106.88	102.69	103.90	103.42
2037	106.37	105.81	103.99	107.74	119.61	111.96	107.96	109.02	109.26	104.97	106.21	105.72
2038	108.42	107.86	105.99	109.82	121.92	114.12	110.05	111.12	111.37	107.00	108.26	107.76
2039	110.52	109.94	108.04	111.95	124.27	116.33	112.17	113.27	113.52	109.07	110.36	109.85
2040	112.32	111.73	109.81	113.77	126.31	118.23	114.00	115.12	115.37	110.85	112.16	111.64
2041	114.83	114.23	112.26	116.31	129.12	120.86	116.55	117.69	117.95	113.32	114.66	114.13

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.92	17.02	10.27	7.72	2.62	6.42	12.02	17.27	17.27	17.52	19.77	23.02
2017	21.95	20.45	18.45	11.95	9.95	8.95	15.95	21.45	21.70	20.95	21.95	24.20
2018	22.33	24.28	21.72	15.62	10.84	8.70	15.87	23.20	23.09	21.51	24.36	26.78
2019	25.93	24.18	21.84	14.24	11.90	10.73	18.92	25.35	25.64	24.76	25.93	28.56
2020	58.61	58.87	60.41	59.16	55.77	56.01	56.30	57.46	58.37	59.59	59.40	59.84
2021	60.70	59.92	61.62	60.25	57.35	57.39	58.04	58.39	59.55	61.59	59.15	60.86
2022	61.54	61.21	63.46	61.18	58.14	58.51	60.02	59.04	60.69	62.73	60.11	61.98
2023	62.31	62.36	64.71	62.89	58.45	59.62	61.01	60.46	61.75	64.02	60.99	63.24
2024	62.78	62.84	66.00	62.62	58.71	61.45	60.28	60.65	62.15	64.21	62.95	63.58
2025	64.06	64.04	67.38	63.52	58.61	61.72	61.56	62.56	62.67	65.63	65.12	64.50
2026	64.30	65.20	67.63	63.91	59.20	62.57	62.40	63.10	62.40	66.47	65.20	65.24
2027	66.57	66.55	68.39	65.60	58.95	63.71	64.05	63.42	63.83	68.48	65.93	66.44
2028	67.45	68.07	70.58	67.27	58.26	65.15	65.32	63.99	65.37	68.96	66.65	68.58
2029	67.86	68.68	71.87	68.58	53.33	65.37	66.45	65.08	66.61	69.66	68.69	69.76
2030	68.89	69.80	73.34	68.62	52.98	65.87	67.00	67.17	66.98	70.97	70.34	71.21
2031	70.39	71.58	74.28	68.88	54.05	65.55	68.43	68.59	67.04	72.12	71.95	71.19
2032	71.55	72.76	75.50	70.02	54.94	66.62	69.55	69.72	68.14	73.31	73.13	72.36
2033	73.15	74.38	77.19	71.58	56.17	68.11	71.11	71.27	69.66	74.94	74.76	73.98
2034	74.55	75.81	78.67	72.95	57.24	69.42	72.47	72.64	71.00	76.38	76.20	75.40
2035	76.00	77.28	80.19	74.36	58.35	70.76	73.87	74.05	72.37	77.86	77.67	76.86
2036	77.23	78.54	81.50	75.57	59.30	71.91	75.07	75.25	73.55	79.13	78.94	78.11
2037	78.95	80.29	83.31	77.26	60.62	73.51	76.75	76.93	75.19	80.89	80.70	79.85
2038	80.48	81.84	84.92	78.75	61.79	74.93	78.23	78.41	76.64	82.45	82.26	81.39
2039	82.03	83.42	86.56	80.27	62.99	76.38	79.74	79.93	78.12	84.05	83.85	82.96
2040	83.37	84.77	87.97	81.58	64.01	77.62	81.04	81.23	79.39	85.41	85.21	84.31
2041	85.23	86.67	89.94	83.40	65.44	79.36	82.85	83.05	81.17	87.32	87.12	86.20

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	78.62	78.60	77.84	78.30	81.50	80.60	80.29	80.17	78.88	77.91	78.74	77.73
2021	80.39	80.63	79.12	80.20	83.04	82.28	81.71	82.22	80.71	79.70	81.00	79.67
2022	82.21	82.08	80.18	81.92	84.89	83.87	83.41	83.38	82.27	81.27	82.70	81.25
2023	84.12	83.69	81.71	83.78	86.23	85.50	85.15	84.78	83.94	82.78	84.50	83.39
2024	85.22	85.37	83.41	85.43	88.16	87.14	87.03	86.76	86.58	84.19	85.19	85.32
2025	87.19	87.52	85.33	87.68	91.12	89.95	88.99	89.12	88.30	86.06	87.23	86.87
2026	89.59	89.26	87.80	89.99	94.44	90.96	90.96	91.37	91.08	88.02	89.85	88.91
2027	91.36	90.92	89.26	91.39	97.36	92.76	92.40	93.84	92.68	89.85	91.14	90.67
2028	93.02	91.98	89.96	93.31	98.86	94.00	94.71	94.72	93.84	91.84	92.91	92.13
2029	95.05	94.81	92.15	95.53	105.55	96.99	97.06	97.06	97.11	93.75	94.56	94.45
2030	97.08	96.79	94.51	97.40	108.58	100.60	98.45	98.33	99.71	95.58	96.15	96.19
2031	98.83	98.33	96.70	100.05	110.63	103.81	100.25	101.19	101.40	97.58	98.69	98.25
2032	100.47	99.96	98.30	101.71	112.47	105.53	101.91	102.87	103.08	99.20	100.32	99.88
2033	102.68	102.16	100.47	103.95	114.95	107.86	104.16	105.14	105.36	101.38	102.53	102.08
2034	104.66	104.13	102.41	105.96	117.16	109.94	106.16	107.16	107.38	103.34	104.51	104.05
2035	106.68	106.15	104.39	108.01	119.43	112.06	108.21	109.23	109.46	105.34	106.53	106.06
2036	108.44	107.90	106.11	109.79	121.40	113.91	110.00	111.04	111.27	107.08	108.29	107.81
2037	110.84	110.28	108.46	112.21	124.08	116.43	112.43	113.49	113.73	109.44	110.68	110.19
2038	112.98	112.41	110.55	114.38	126.47	118.68	114.60	115.68	115.92	111.55	112.82	112.32
2039	115.16	114.58	112.68	116.59	128.92	120.97	116.81	117.91	118.16	113.71	115.00	114.49
2040	117.06	116.47	114.54	118.51	131.04	122.96	118.74	119.86	120.11	115.58	116.89	116.37
2041	119.65	119.05	117.07	121.13	133.94	125.68	121.37	122.51	122.76	118.14	119.48	118.95

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

Effective for service  
on and after October 12, 2016

SCHEDULE 201 (Continued)

WIND INTEGRATION

TABLE 7	
Wind Integration	
Year	Cost
2015	3.77
2016	3.84
2017	3.91
2018	3.99
2019	4.07
2020	4.15
2021	4.23
2022	4.31
2023	4.39
2024	4.47
2025	4.56
2026	4.65
2027	4.74
2028	4.83
2029	4.92
2030	5.02
2031	5.12
2032	5.21
2033	5.31
2034	5.42
2035	5.52
2036	5.63
2037	5.74
2038	5.85
2039	5.96
2040	6.08

**SCHEDULE 201 (Continued)**

**MONTHLY SERVICE CHARGE**

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

**INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- 2) Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

**TRANSMISSION AGREEMENTS**

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

**INTERCONNECTION REQUIREMENTS**

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

**SCHEDULE 201 (Continued)**

**INTERCONNECTION REQUIREMENTS (Continued)**

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA**

A QF will be eligible to receive pricing under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW. A Community-Based or Family-Owned QF is exempt from these restrictions.

**Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**SCHEDULE 201 (Continued)**

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA (Continued)**

**Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for pricing under the Standard PPA is sought.

**Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

**OTHER DEFINITIONS**

**Mid-C Index Price**

As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for Average



**SCHEDULE 201 (Continued)**

OTHER DEFINITIONS (Continued)

On-Peak Power and Average Off-Peak Power found on the following website: <https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

**Definition of RPS Attributes**

As used in this schedule, RPS Attributes means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

**Definition of Environmental Attributes**

As used in this schedule, Environmental Attributes shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

**Definition of Resource Sufficiency Period**

This is the period from the current year through 2020.

**Definition of Resource Deficiency Period**

This is the period from 2021 through 2034.

**Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2019.

**Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

**SCHEDULE 201 (Concluded)**

**DISPUTE RESOLUTION**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to pricing under the Standard PPA.

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

**SPECIAL CONDITIONS**

1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

**TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/902**

**BLUE MARMOT VI POWER PURCHASE AGREEMENT**

**January 31, 2020**

Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

## STANDARD RENEWABLE OFF-SYSTEM VARIABLE POWER PURCHASE

### AGREEMENT

THIS AGREEMENT is between **Blue Marmot VI LLC** ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties") and is effective upon execution by both Parties ("Effective Date").

### RECITALS

Seller intends to construct, own, operate and maintain a **Solar** facility for the generation of electric power located in **Lake, County, Oregon @ W 120.498, N 42.122** with a Nameplate Capacity Rating of **10000** kilowatt ("kW"), as further described in Exhibit A ("Facility"); and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.21, below, from the Facility in accordance with the terms and conditions of this Agreement.

### AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

#### SECTION 1: DEFINITIONS

When used in this Agreement, the following terms shall have the following meanings:

1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.

1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year)

1.3. "Billing Period" means from the start of the first day of each calendar month to the end of the last day of each calendar month.

1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:

1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed

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Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);

1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.36;

1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement and was continuously mechanically available for operation for a minimum of 120 hours. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the mechanical availability of the Facility is interrupted during this initial testing period or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period;

1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;

1.5.5. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;

1.5.6. PGE has received a copy of the executed Generation Interconnection and Transmission Agreements.

1.6. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.

1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final Contract Year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.

1.8. "Effective Date" has the meaning set forth in Section 2.1.

1.9. "Environmental Attributes" shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), and other greenhouse gasses (GHGs) that have been determined by the United Nations

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Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

1.10. "Facility" has the meaning set forth in the Recitals.

1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with **PacifiCorp** electric system.

1.12. "Generation Unit" means each separate electrical generator that contributes toward Nameplate Capacity Rating included in Exhibit A. For solar facilities, a generating unit is a complete solar electrical generation system within the Facility that is able to generate and deliver energy to the Point of Delivery independent of other Generation Units within the same Facility.

1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.

1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

1.15. "Lost Energy" means "Lost Energy" means ((the Guarantee of Mechanical Availability as set forth in 3.1.10 / MAP) X Net Output for a Calendar Year) – Net Output for the Calendar Year. Lost Energy shall be zero unless the result of the calculation in this subsection results in a positive number.

1.16. "Lost Energy Value" means Lost Energy X the excess of the annual time-weighted average Mid-C Index Price for On Peak Hours and Off Peak Hours over the time weighted average Contract Price for On Peak and Off Peak Hours for the corresponding time period (provided that such excess shall not exceed the Contract Price and further provided that Lost Energy is deemed to be zero prior to reaching the Commercial Operation Date) plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery (For Start-Up Lost Energy Value See 1.35).

1.17. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

$$\text{MAP} = 100 \times (\text{Operational Hours}) / (\text{Base Hours} \times \text{Number of Units})$$

1.18. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") index price for the bilateral OTC market for energy at the Mid-C Physical for Average On Peak Power and Average Off Peak Power found on the following website:

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<https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

1.19. "Nameplate Capacity Rating" means the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW.

1.20. "Net Dependable Capacity" means the maximum capacity the Facility can sustain over a specified period modified for seasonal limitations, if any, and reduced by the capacity required for station service or auxiliaries.

1.21. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.

1.22. "Number of Units" means the number of Generation Units in the Facility as specified in Exhibit A.

1.23. "Off-Peak Hours" has the meaning provided in the Schedule.

1.24. "On-Peak Hours" has the meaning provided in the Schedule.

1.25. "Operational Hours" for the Facility means the total across all Generation Units of the number of hours each of the Facility's Generation Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, two hundred (200) hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit or Event of Force Majeure, the Operational Hours for a wind farm with five (5) separate two (2) MW turbines would be 43,800 for a Contract Year.

1.26. "Planned Maintenance" means outages scheduled ninety (90) days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.

1.27. "Point of Delivery" means the PGE system.

1.28. "Pre-Commercial Operation Date Minimum Net Output" shall mean, unless such MWh is specifically set forth by Seller in Exhibit A, an amount in MWh equal to seventy-five percent (75%) of Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours – 200 hours (assumed Planned Maintenance)) for each month. If Seller has provided specific expected monthly Net Output amounts for the Facility in Exhibit A, "Pre-Commercial Operation Date Minimum Net Output" shall mean seventy-five percent (75%) X expected net output set forth in Exhibit A for each month.

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1.29. "Prime Rate" means the publicly announced prime rate or reference rate for commercial loans to large businesses with the highest credit rating in the United States in effect from time to time quoted by Citibank, N.A. If a Citibank, N.A. prime rate is not available, the applicable Prime Rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, N.Y., selected by the Party to whom interest based on the prime rate is being paid.

1.30. "Prudent Electrical Practices" means those practices, methods, standards and acts engaged in or approved by a significant portion of the electric power industry in the Western Electricity Coordinating Council that at the relevant time period, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with good business practices, reliability, economy, safety and expedition, and which practices, methods, standards and acts reflect due regard for operation and maintenance standards recommended by applicable equipment suppliers and manufacturers, operational limits, and all applicable laws and regulations. Prudent Electrical Practices are not intended to be limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods and acts generally acceptable or approved by a significant portion of the electric power generation industry in the relevant region, during the relevant period, as described in the immediate preceding sentence.

1.31. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

1.32. "RPS Attributes" means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

1.33. "Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference.

1.34. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance

1.35. "Start-Up Lost Energy Value" means for the period after the date specified in Section 2.2.2 but prior to achievement of the Commercial Operation Date: zero, unless the Net Output is less than the pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable delay period, and the time-weighted average of the delay period's Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater



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than the time-weighted average of the delay period's Contract Price for On-Peak Hours and Off-Peak Hours, in which case Startup Lost Energy Value equals: (pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable period - Net Output for the applicable period) X (the lower of: the time-weighted average of the Contract Price for On-Peak hours and Off-Peak Hours during the applicable period; or (the time-weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours during the applicable period – the time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours during the applicable period)). The time-weighted average in this section will reflect the relative proportions of On-Peak Hours and Off-Peak Hours in each day.

1.36. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.

1.37. "Step-in Rights" means the right of one party to assume an intervening position to satisfy all terms of an agreement in the event the other party fails to perform its obligations under the agreement.

1.38. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.

1.39. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

1.40. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.

1.41. "Transmission Curtailment" means a limitation on Seller's ability to deliver any portion of the scheduled energy to PGE due to the unavailability of transmission to the Point of Delivery (for any reason other than Force Majeure).

1.42. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Mid-C Index Price – Contract Price) X curtailed energy) for periods of Transmission Curtailment.

1.43. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.

1.44. "Transmission Services" means any and all services (including but not limited to ancillary services and control area services) required for the firm transmission and delivery of Energy from the Facility to the Point of Delivery for a term not less than the Term of this Agreement.

References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

SECTION 2: TERM; COMMERCIAL OPERATION DATE

2.1. This Agreement shall become effective upon execution by both Parties ("Effective Date").

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2.2. Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,

2.2.1. By **November 1, 2019** Seller shall begin initial deliveries of Net Output; and

2.2.2. By **November 30, 2019** Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.

2.2.3. Unless the Parties agree in writing that a later Commercial Operation Date is reasonable and necessary, the Commercial Operation Date shall be no more than three (3) years from the Effective Date. PGE will not unreasonably withhold agreement to a Commercial Operation Date that is more than three (3) years from the Effective date if the Seller has demonstrated that a later Commercial Operation Date is reasonable and necessary.

2.3. This Agreement shall terminate on **18 years after effective date**, or the date the Agreement is terminated in accordance with Section 8 or 11, whichever is earlier ("Termination Date").

**SECTION 3: REPRESENTATIONS AND WARRANTIES**

3.1. Seller and PGE represent, covenant, and warrant as follows:

3.1.1. Seller warrants it is a **Limited liability company** duly organized under the laws of **Delaware**.

3.1.2. Seller warrants that the execution and delivery of this Agreement does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid order of any court, or any regulatory agency or other body having authority to which Seller is subject.

3.1.3. Seller warrants that the Facility is and shall for the Term of this Agreement continue to be a "Qualifying Facility" ("QF") as that term is defined in the version of 18 C.F.R. Part 292 in effect on the Effective Date. Seller has provided the appropriate QF certification, which may include a Federal Energy Regulatory Commission ("FERC") self-certification to PGE prior to PGE's execution of this Agreement. At any time during the Term of this Agreement, PGE may require Seller to provide PGE with evidence satisfactory to PGE in its reasonable discretion that the Facility continues to qualify as a QF under all applicable requirements.

3.1.4. Seller warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and Seller is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.5. Seller warrants that during the Term of this Agreement, all of Seller's right, title and interest in and to the Facility shall be free and clear of all liens and encumbrances other than liens and encumbrances arising from third-party financing of the Facility other than workers', mechanics', suppliers' or similar liens, or tax liens, in

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each case arising in the ordinary course of business that are either not yet due and payable or that have been released by means of a performance bond acceptable to PGE posted within eight (8) calendar days of the commencement of any proceeding to foreclose the lien.

3.1.6. Seller warrants that it will design and operate the Facility consistent with Prudent Electrical Practices.

3.1.7. Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.

3.1.8. Seller warrants that Net Dependable Capacity of the Facility is 10,000 kW.

3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 21,921,601 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.

3.1.10. Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):

3.1.10.1. Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or

3.1.10.2. Ninety percent (90%) beginning in Contract Year three and extending throughout the remainder of the Term.

3.1.10.3. Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.

3.1.10.4. Seller's failure to meet the Guarantee of Mechanical Availability in a Calendar Year shall result in damages payable to PGE by Seller equal to the Lost Energy Value. PGE shall bill Seller for such damages in accordance with Section 7.

3.1.11. Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 33,750,000 kWh of Net Output during each Contract Year ("Maximum Net Output"). The cost of delivering energy from the Facility to PGE is the sole responsibility of the Seller.

3.1.12. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

3.1.13. PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.14. Seller warrants that the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in

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compliance with the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by PGE not more frequently than every 36 months, such documentation and information as may be reasonably required to establish Seller's continued compliance with such Definition. PGE agrees to take reasonable steps to maintain the confidentiality of any portion of the above described documentation and information that the Seller identifies as confidential except PGE will provide all such confidential information to the Commission upon the Commission's request.

3.1.15. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.5) associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050. PGE warrants that it will reasonably cooperate in Seller's efforts to meet such requirements, including, for example serving as the qualified reporting entity for the Facility if the Facility is located in PGE's balancing authority.

SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

4.1. Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.

4.2. PGE shall pay Seller the Contract Price for all delivered Net Output.

4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

4.4. Seller shall provide preschedules for all deliveries of energy hereunder, including identification of receiving and generating control areas, by 9:00:00 PPT on the last business day prior to the scheduled date of delivery. All energy shall be scheduled according to the most current North America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' respective representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the hourly schedule established by the exchange of preschedules shall be considered final. Seller

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and PGE shall maintain records of hourly energy schedules for accounting and operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. All energy shall be prescheduled according to customary WECC scheduling practices. Seller shall make commercially reasonable efforts to schedule in any hour an amount equal to its expected Net Output for such hour. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records and to imbalance information kept by the Transmission Provider.

4.5. From the start of the Renewable Resource Deficiency Period through the remainder of the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any RPS Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained Environmental Attributes") Seller may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to Seller any of the Seller-Retained Environmental Attributes, and PGE shall not report under such program that such Seller-Retained Environmental Attributes belong to it. With respect to RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

SECTION 5: OPERATION AND CONTROL

5.1. Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.

5.2. Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.

5.3. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best

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efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Net Dependable Capacity). Notwithstanding the foregoing, in the event Seller is not current on construction related financial obligations, Seller shall notify PGE of such delinquency and PGE may, in its discretion, grant an exception to the requirements to provide default security if the QF has negotiated financial arrangements with the construction loan lender that mitigate Seller's financial risk to PGE.

#### SECTION 7: BILLINGS, COMPUTATIONS AND PAYMENTS

7.1. On or before the thirtieth (30<sup>th</sup>) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement and any other agreement related to the Facility between the Parties or otherwise. On or before the thirtieth (30<sup>th</sup>) day following the end of each Contract Year, PGE shall bill for any Lost Energy Value accrued pursuant to this Agreement.

7.2. Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law.

#### SECTION 8: DEFAULT, REMEDIES AND TERMINATION

8.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:

8.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.

8.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.

8.1.3. Seller's failure to meet the Guarantee of Mechanical Availability established in Section 3.1.10 for two consecutive Contract Years or Seller's failure to provide any written report required by that section.

8.1.4. If Seller is no longer a Qualifying Facility.

8.1.5. Failure of PGE to make any required payment pursuant to Section 7.1.

8.1.6. Seller's failure to meet the Commercial Operation Date.

8.2. In the event of a default under Section 8.1.6, PGE may provide Seller with written notice of default. Seller shall have one year in which to cure the default during which time the Seller shall pay PGE damages equal to the Lost Energy Value. If Seller is unable to cure the default, PGE may immediately terminate this Agreement as provided in Section 8.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 8.2.

8.3. In the event of a default hereunder, except as otherwise provided in this Agreement, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, the non-defaulting Party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 8 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

8.4. If this Agreement is terminated as provided in this Section 8, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.

8.5. In the event PGE terminates this Agreement pursuant to this Section 8, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.

8.6. Sections 8.1, 8.4, 8.5, 10, and 19.2 shall survive termination of this Agreement.

#### SECTION 9: TRANSMISSION CURTAILMENTS

9.1. Seller shall give PGE notice as soon as reasonably practicable of any Transmission Curtailment that is likely to affect Seller's ability to deliver any portion of energy scheduled pursuant to Section 4.4 of this Agreement.

9.2. If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 of this Agreement, Seller shall pay PGE the Transmission Curtailment Replacement Energy Cost for the number of MWh of energy reasonably determined by PGE as the difference between (i) the scheduled energy that would have been delivered to PGE under this Agreement during the period of Transmission Curtailment and (ii) the actual energy, if any, that was delivered to PGE for the period.

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### SECTION 10: INDEMNIFICATION AND LIABILITY

10.1. Seller agrees to defend, indemnify and hold harmless PGE, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with Seller's delivery of electric power to PGE or with the facilities at or prior to the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.

10.2. PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with PGE's receipt of electric power from Seller or with the facilities at or after the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.

10.3. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public, nor affect the status of PGE as an independent public utility corporation or Seller as an independent individual or entity.

10.4. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

### SECTION 11: INSURANCE

11.1. Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, its directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of



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insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

11.2. Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility. Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

11.3. Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

## SECTION 12: FORCE MAJEURE

12.1. As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect

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the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

12.2. If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:

12.2.1. the non-performing Party, shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and

12.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and

12.2.3. the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.

12.3. No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.

12.4. Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

SECTION 13: SEVERAL OBLIGATIONS

Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or to impose a trust or partnership duty, obligation or liability between the Parties. If Seller includes two or more parties, each such party shall be jointly and severally liable for Seller's obligations under this Agreement.

SECTION 14: CHOICE OF LAW

This Agreement shall be interpreted and enforced in accordance with the laws of the state of Oregon, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.

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In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.

SECTION 16: WAIVER

Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement must be in writing, and such waiver shall not be deemed a waiver with respect to any subsequent default or other matter.

SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party or this Agreement. Seller shall at all times maintain in effect all local, state and federal licenses, permits and other approvals as then may be required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

SECTION 18: SUCCESSORS AND ASSIGNS

This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party.

SECTION 19: ENTIRE AGREEMENT

19.1. This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding PGE's purchase of Net Output from the Facility. No modification of this Agreement shall be effective unless it is in writing and signed by both Parties.

19.2. By executing this Agreement, Seller releases PGE from any third party claims related to the Facility, known or unknown, which may have arisen prior to the Effective Date.

SECTION 20: NOTICES

20.1. All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in person or when deposited in the U.S. Mail, postage prepaid by certified or registered mail and return receipt requested:

To Seller:                   Blue Marmot VI LLC  
                                  c/o EDP Renewables North America LLC;  
                                  Attention: General Counsel  
                                  808 Travis, Suite 700  
                                  Houston, Texas 77002

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with a copy to:

To PGE:                    Contracts Manager  
                                  QF Contracts, 3WTC0306  
                                  PGE - 121 SW Salmon St.  
                                  Portland, Oregon 97204

20.2 The Parties may change the person to whom such notices are addressed, or their addresses, by providing written notices thereof in accordance with this Section 20.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

\_\_\_\_\_  
PGE

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

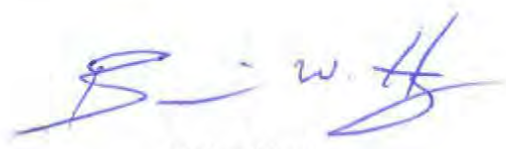
PGE Approved By:	
Business Terms	
Credit	
Legal	
Risk Mgt.	



**Blue Marmot VI LLC**  
(Name Seller)

By:   
Name: Steve Irvin  
Title: Executive Vice President,  
Western and Central Regions and Mexico  
Date: 03.29.17

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Brian Hayes  
Executive Vice President,  
Asset Operations

3/29/17

EXHIBIT A  
DESCRIPTION OF SELLER'S FACILITY

The facility will be a solar PV plant consisting of 39,324 polycrystalline modules of nominal 335W rating each. Total plant rating will be 13.174MWdc/10MWac. Modules will be mounted to single-axis trackers.

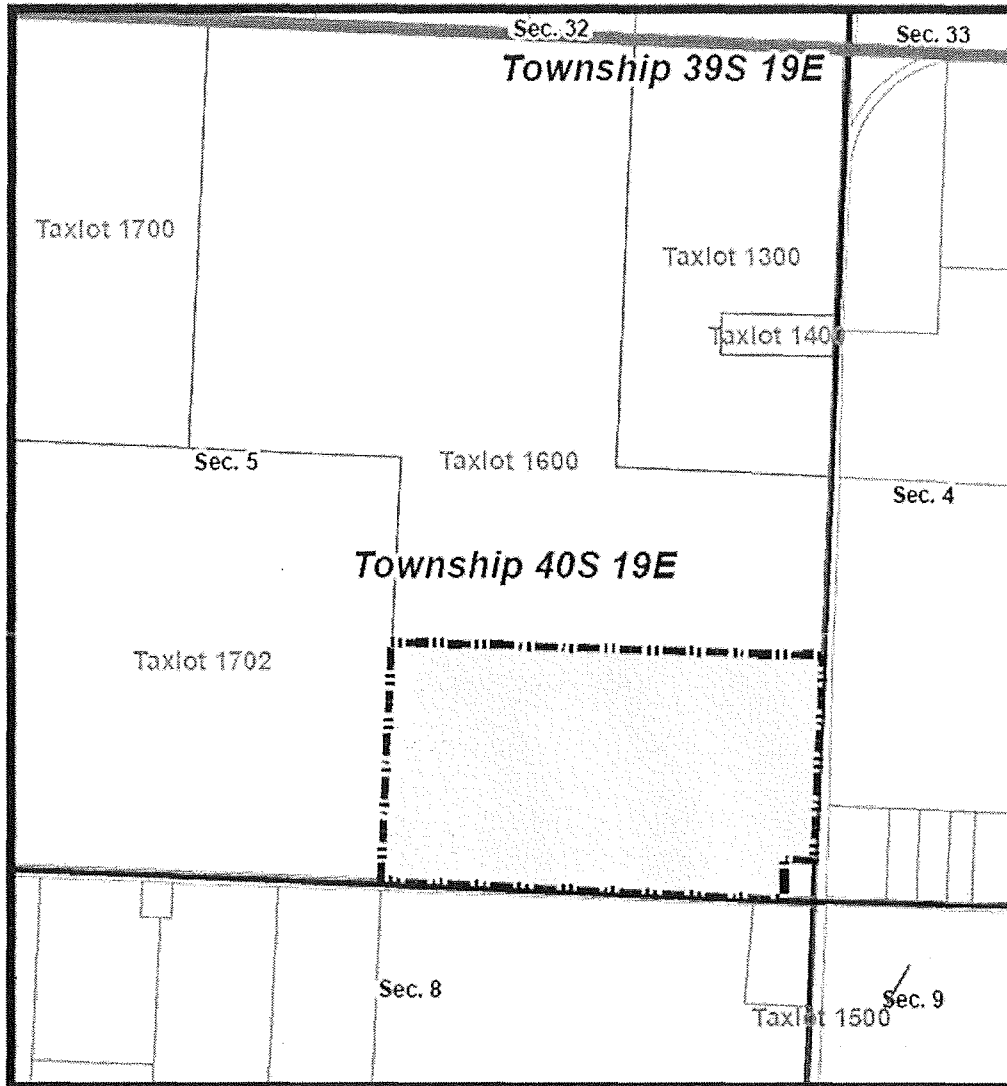
Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.

The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 11.1 miles to the PacifiCorp Mile-Hi Substation. Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.




The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.

Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

Map of Site

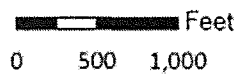


1:10,000

-  QF Site
-  Taxlot Boundary
-  Section Boundary



Lake County, OR



Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

Monthly Hourly sum for E_Grid (MWh)																									
	0H	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	Total
January	0	0	0	0	0	0	0	0	66	132	129	124	114	119	127	100	13	0	0	0	0	0	0	0	323
February	0	0	0	0	0	0	0	14	90	141	142	143	140	150	156	153	67	0	0	0	0	0	0	0	1209
March	0	0	0	0	0	0	6	33	173	355	332	337	324	388	378	359	137	36	0	0	0	0	0	0	1738
April	0	0	0	0	0	0	86	195	202	211	225	227	235	220	207	150	173	85	0	0	0	0	0	0	2256
May	0	0	0	0	0	53	152	231	245	258	264	253	246	236	244	230	220	167	46	0	0	0	0	0	2875
June	0	0	0	0	0	99	241	259	264	268	269	254	254	251	248	241	225	203	75	0	0	0	0	0	3154
July	0	0	0	0	0	63	203	243	251	260	266	262	261	254	255	248	236	154	74	0	0	0	0	0	3070
August	0	0	0	0	0	4	130	257	266	277	274	255	257	251	249	236	232	156	25	0	0	0	0	0	2877
September	0	0	0	0	0	0	73	212	237	244	244	225	225	220	230	224	175	46	0	0	0	0	0	0	2355
October	0	0	0	0	0	0	2	109	187	187	132	194	157	212	226	199	72	0	0	0	0	0	0	0	1767
November	0	0	0	0	0	0	25	95	119	117	116	116	135	131	77	1	0	0	0	0	0	0	0	0	333
December	0	0	0	0	0	0	0	54	103	102	105	103	111	111	122	64	0	0	0	0	0	0	0	0	764
Year	-2	-2	-2	-2	-2	216	323	1637	2145	2336	2417	2345	2332	2347	2375	2125	1652	686	226	-2	-2	-2	-2	-2	23503

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

# Form 556

Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

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## General

Questions about completing this form should be sent to [Form556@ferc.gov](mailto:Form556@ferc.gov). Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, [www.ferc.gov/QF](http://www.ferc.gov/QF). The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

## Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

## How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button (  ) for assistance, or contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov).

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov) to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

## How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

## Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 ([DataClearance@ferc.gov](mailto:DataClearance@ferc.gov)); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 ([oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov)). Include the Control No. 1902-0075 in any correspondence.



## Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

## Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

## Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Notice Requirements link.

## What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

## Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

## Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

## Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See [www.ferc.gov/help/filing-guide/file-ceii.asp](http://www.ferc.gov/help/filing-guide/file-ceii.asp) for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

<p><b>Non-Public:</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.</p>
<p><b>Public (redacted):</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This public version of the applicants's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.</p>
<p><b>Privileged:</b> Indicate below which lines of your form contain data for which you are seeking privileged treatment</p>
<p><b>Critical Energy Infrastructure Information (CEII):</b> Indicate below which lines of your form contain data for which you are seeking CEII status</p>

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from [www.ferc.gov/QF](http://www.ferc.gov/QF). To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

**Form 556** Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

Application Information

<b>1a</b> Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Blue Marmot VI LLC			
<b>1b</b> Applicant street address 808 Travis Street #700			
<b>1c</b> City Houston		<b>1d</b> State/province TX	
<b>1e</b> Postal code 77002	<b>1f</b> Country (if not United States)		<b>1g</b> Telephone number 713-265-0350
<b>1h</b> Has the instant facility ever previously been certified as a QF? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
<b>1i</b> If yes, provide the docket number of the last known QF filing pertaining to this facility: QF16 - 1091 - 000			
<b>1j</b> Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.			
<b>1k</b> What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status			
<b>1l</b> What is the purpose and expected effective date(s) of this filing? <input type="checkbox"/> Original certification; facility expected to be installed by _____ and to begin operation on _____ <input checked="" type="checkbox"/> Change(s) to a previously certified facility to be effective on <u>9/6/16</u> (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input checked="" type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input checked="" type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)			
<b>1m</b> If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)			

Contact Information	<b>2a</b> Name of contact person Leslie A. Freiman		<b>2b</b> Telephone number 713-265-0350	
	<b>2c</b> Which of the following describes the contact person's relationship to the applicant? (check one)			
	<input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input checked="" type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	<b>2d</b> Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/> EDP Renewables North America LLC			
	<b>2e</b> Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>			
	<b>2f</b> City		<b>2g</b> State/province	
<b>2h</b> Postal code		<b>2i</b> Country (if not United States)		
Facility Identification and Location	<b>3a</b> Facility name Blue Marmot VI			
	<b>3b</b> Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>			
	<b>3c</b> Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.			
	Longitude <input type="checkbox"/> East (+) _____ 120.498 degrees <input checked="" type="checkbox"/> West (-)		Latitude <input checked="" type="checkbox"/> North (+) _____ 42.122 degrees <input type="checkbox"/> South (-)	
	<b>3d</b> City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Lakeview		<b>3e</b> State/province Oregon	
<b>3f</b> County (or check here for independent city) <input type="checkbox"/> Lake		<b>3g</b> Country (if not United States)		
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	<b>4a</b> Identify utility interconnecting with the facility PacifiCorp (Pacific Power)			
	<b>4b</b> Identify utilities providing wheeling service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			
	<b>4c</b> Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Portland General Electric Company			
	<b>4d</b> Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			

Ownership and Operation

**5a** Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) Blue Marmot VI LLC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
2) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
3) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
4) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
5) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
6) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
7) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
8) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
9) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
10) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5b** Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

Full legal names of electric utility or holding company upstream owners	% equity interest
1) EDP Renewables North America LLC	100 %
2) _____	_____ %
3) _____	_____ %
4) _____	_____ %
5) _____	_____ %
6) _____	_____ %
7) _____	_____ %
8) _____	_____ %
9) _____	_____ %
10) _____	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5c** Identify the facility operator

Blue Marmot VI LLC

Energy Input

**6a** Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Biomass (specify)                     | <input checked="" type="checkbox"/> Renewable resources (specify)       | <input type="checkbox"/> Geothermal                              |
| <input type="checkbox"/> Landfill gas                          | <input type="checkbox"/> Hydro power - river                            | <input type="checkbox"/> Fossil fuel (specify)                   |
| <input type="checkbox"/> Manure digester gas                   | <input type="checkbox"/> Hydro power - tidal                            | <input type="checkbox"/> Coal (not waste)                        |
| <input type="checkbox"/> Municipal solid waste                 | <input type="checkbox"/> Hydro power - wave                             | <input type="checkbox"/> Fuel oil/diesel                         |
| <input type="checkbox"/> Sewage digester gas                   | <input checked="" type="checkbox"/> Solar - photovoltaic                | <input type="checkbox"/> Natural gas (not waste)                 |
| <input type="checkbox"/> Wood                                  | <input type="checkbox"/> Solar - thermal                                | <input type="checkbox"/> Other fossil fuel (describe on page 19) |
| <input type="checkbox"/> Other biomass (describe on page 19)   | <input type="checkbox"/> Wind   | <input type="checkbox"/> Other (describe on page 19)             |
| <input type="checkbox"/> Waste (specify type below in line 6b) | <input type="checkbox"/> Other renewable resource (describe on page 19) |  |

**6b** If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

- Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)
- Anthracite culm produced prior to July 23, 1985
  - Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
  - Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
  - Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
  - Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
  - Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
  - Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
  - Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
  - Materials that a government agency has certified for disposal by combustion (describe on page 19)
  - Heat from exothermic reactions (describe on page 19)
  - Residual heat (describe on page 19)
  - Used rubber tires
  - Plastic materials
  - Refinery off-gas
  - Petroleum coke

Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

**6c** Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

<b>Technical Facility Information</b>	Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.	
	<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	10,000 kW
	<b>7b</b> Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	5 kW
	<b>7c</b> Electrical losses in interconnection transformers	176 kW
	<b>7d</b> Electrical losses in AC/DC conversion equipment, if any	10 kW
	<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	150 kW
	<b>7f</b> Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	341.0 kW
	<b>7g</b> Maximum net power production capacity = 7a - 7f	9,659.0 kW
	<b>7h</b> Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19. <p>The facility will be a solar PV plant consisting of 39,324 polycrystalline modules of nominal 335W rating each. Total plant rating will be 13.174MWdc/10MWac. Modules will be mounted to single-axis trackers.</p> <p>Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.</p> <p>The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 11.1 miles to the PacifiCorp Mile-Hi Substation.</p> <p>Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.</p> <p>The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.</p>	



### Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																
	<p><b>8a</b> Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p> <p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p>																
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center;">Facility location (city or county, state)</th> <th style="width: 20%; text-align: center;">Root docket # (if any)</th> <th style="width: 30%; text-align: center;">Common owner(s)</th> <th style="width: 20%; text-align: center;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td>QF - _____</td> <td>_____</td> <td style="text-align: right;">kW</td> </tr> <tr> <td>2) _____</td> <td>QF - _____</td> <td>_____</td> <td style="text-align: right;">kW</td> </tr> <tr> <td>3) _____</td> <td>QF - _____</td> <td>_____</td> <td style="text-align: right;">kW</td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF - _____	_____	kW	2) _____	QF - _____	_____	kW	3) _____	QF - _____	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1) _____	QF - _____	_____	kW													
	2) _____	QF - _____	_____	kW													
3) _____	QF - _____	_____	kW														
<p><b>8b</b> The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p> <p><input type="checkbox"/> Yes (continue at line 8c below)                      <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																	
<p><b>8c</b> Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994?    Yes <input type="checkbox"/>    No <input type="checkbox"/></p>																	
<p><b>8d</b> Did construction of the facility commence on or before December 31, 1999?    Yes <input type="checkbox"/>    No <input type="checkbox"/></p>																	
<p><b>8e</b> If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction?    Yes <input type="checkbox"/>    No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																	
Certification of Compliance with Fuel Use Requirements	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																
	<p><b>9a</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.</p>																
	<p><b>9b</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																

## Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>	
	<p><b>10a</b> What type(s) of cogeneration technology does the facility represent? (check all that apply)</p> <p style="text-align: center;"> <input type="checkbox"/> Topping-cycle cogeneration      <input type="checkbox"/> Bottoming-cycle cogeneration         </p>	
	<p><b>10b</b> To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p>	
	Check to certify compliance with indicated requirement	Requirement
	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.
	<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
	<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.	
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.	
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.	

EPAct 2005 Requirements for Fundamental Use  
of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

**11a** Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes  No

**11b** Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes  No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

**11c** With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

**11d** Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

**11e** Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

**11f** Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2)*.

<b>11g</b> Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
<b>11h</b> Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
<b>11i</b> Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = $100 * 11g / (11g + 11h)$	0 %

**11j** Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF)), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

### Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>		
	<p><b>12a</b> Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows.</p>		
	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
	1)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	2)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	3)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	4)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	5)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	6)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed		
<p><b>12b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>			

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

<b>13a</b> Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
<b>13b</b> Indicate the annual average rate of net electrical energy output	kW
<b>13c</b> Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
<b>13d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
<b>13e</b> Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
<b>13f</b> Indicate the annual average rate of energy input from natural gas and oil	Btu/h
<b>13g</b> Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
<b>13h</b> Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %
<b>13i</b> Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%? <input type="checkbox"/> Yes (complies with operating standard) <input type="checkbox"/> No (does not comply with operating standard)	
<b>13j</b> Did installation of the facility in its current form commence on or after March 13, 1980? <input type="checkbox"/> Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below. <input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.	
<b>13k</b> Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%: <input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)	
<b>13l</b> Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%: <input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)	

### Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output	<p>The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.</p>		
	<p><b>14a</b> Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.</p>		
	<p>Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production</p>	<p>Thermal host's relationship to facility; Thermal host's process type</p>	<p>Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)</p>
	1)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's process type</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
	2)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's process type</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
	3)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's process type</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
	<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>		
	<p><b>14b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>		

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

**15a** Did installation of the facility in its current form commence on or after March 13, 1980?

- Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

<b>15b</b> Indicate the annual average rate of net electrical energy output	kW
---	----

<b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
---	---------

<b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
---	----

<b>15e</b> Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
---	---------

<b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
---	-------

<b>15g</b> Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$	0 %
---	-----

**15h** Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

- Yes (complies with efficiency standard)       No (does not comply with efficiency standard)



## Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
  - The person on whose behalf the filing is made
  - An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
  - An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
  - A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
- He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
- He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature

Leslie A. Freiman

Your address

808 Travis Street #700  
Houston, TX 77002

Date

9/6/2016

Audit Notes

Commission Staff Use Only:



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## Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

---

Section 1(1) continued:

Blue Marmot VI LLC (Applicant) hereby updates its prior self-certification of qualifying facility status to reflect an anticipated installation date of September 30, 2019 and commercial operation date of November 30, 2019. In addition, Applicant also updates the facility description and rating information provided in section 7.

EXHIBIT B  
REQUIRED FACILITY DOCUMENTS

Sellers Generation Interconnection Agreement

Transmission Service Agreement with PacifiCorp

Purchase option agreement

Conditional Use Permit issued by Lake County

Any additional permits that might be required by Lake County or Oregon Department of Environmental Quality, including access permit, building and electric permits, and storm water prevention permit

FERC Qualifying Facility self-certification

EXHIBIT C  
START-UP TESTING

**VISUAL AND MECHANICAL INSPECTIONS**

**INVERTER COMMISSIONING**

**ELECTRICAL OPERATION TESTS**

**SYSTEM MONITORING VERIFICATION**

**TRACKER VERIFICATION**

**INFRARED SCANS**

**BLOCK TESTING**

**72-HOUR FUNCTIONAL TEST**

**GRID MATCH TEST**

**POWER CHARACTERIZATION**

**REVENUE METER VERIFICATION**

**REACTIVE POWER TEST**

**POWER OUTPUT TEST – PLANT PERFORMANCE AND ACCEPTANCE**

EXHIBIT D  
SCHEDULE

**SCHEDULE 201  
QUALIFYING FACILITY 10 MW or LESS  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

**APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

**POWER PURCHASE INFORMATION**

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**PPA**

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

**SCHEDULE 201 (Continued)**

PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

**STANDARD PPA (Nameplate capacity of 10 MW or less)**

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

**GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA**

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller. Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.

**SCHEDULE 201 (Continued)**

**OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

**BASIS FOR POWER PURCHASE PRICE**

**AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

**ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

**OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 93% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.



**SCHEDULE 201 (Continued)**

**PRICING FOR STANDARD PPA**

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour. Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed.

The Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any PPA year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard PPA; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. The Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

**1) Standard Fixed Price Option**

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 5%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 5%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)

Standard Fixed Price Option (Continued)

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1a												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	67.43	67.34	65.41	64.69	64.41	64.50	64.61	64.73	64.84	65.48	68.60	68.72
2022	69.01	68.84	68.08	67.13	66.81	66.91	67.04	67.17	67.29	67.83	71.38	71.70
2023	71.95	71.76	70.39	69.19	69.07	69.18	69.31	69.45	69.58	70.12	73.56	73.70
2024	74.17	73.85	72.67	71.29	71.10	71.21	71.35	71.50	71.63	72.20	76.49	76.64
2025	77.19	77.30	75.84	74.88	75.02	75.14	75.30	75.47	75.62	75.80	82.57	82.89
2026	85.18	85.30	82.77	81.28	81.22	81.36	81.56	81.74	81.90	82.36	89.02	88.72
2027	86.85	86.76	85.14	83.12	82.89	83.03	83.00	83.32	83.46	83.97	91.39	91.15
2028	89.32	89.31	87.96	85.46	85.30	85.46	85.31	85.64	85.95	86.65	94.66	93.55
2029	94.06	93.99	91.23	88.74	87.97	88.15	87.71	88.06	88.61	89.34	98.37	98.11
2030	97.60	97.54	94.87	92.62	92.40	92.57	92.61	93.00	93.12	93.68	102.42	102.70
2031	99.56	99.50	96.78	94.48	94.26	94.43	94.47	94.87	94.99	95.56	104.47	104.76
2032	103.85	103.80	100.57	98.18	97.96	98.15	98.23	98.65	98.76	99.36	108.86	109.41
2033	106.56	106.51	103.17	100.72	100.50	100.69	100.78	101.21	101.32	101.93	111.67	112.26
2034	109.12	109.07	105.60	103.10	102.88	103.08	103.17	103.61	103.72	104.35	114.33	114.96
2035	111.55	111.51	107.91	105.35	105.12	105.33	105.43	105.89	105.99	106.63	116.87	117.54
2036	113.85	113.80	110.14	107.53	107.30	107.51	107.60	108.07	108.18	108.83	119.27	119.95
2037	116.50	116.45	112.72	110.06	109.82	110.04	110.14	110.61	110.73	111.39	122.03	122.73
2038	119.08	119.03	115.22	112.51	112.27	112.49	112.59	113.08	113.19	113.87	124.71	125.42
2039	121.47	121.42	117.54	114.77	114.53	114.75	114.85	115.35	115.47	116.15	127.21	127.93
2040	124.25	124.20	120.25	117.43	117.18	117.41	117.51	118.02	118.14	118.84	130.10	130.85
2041	126.72	126.67	122.64	119.76	119.51	119.74	119.85	120.36	120.49	121.20	132.68	133.44

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1b												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2a												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.37	18.62	11.77	10.87	8.62	13.12	20.12	23.12	21.12	19.87	22.87	27.62
2017	26.05	24.30	20.80	17.05	15.55	16.55	24.05	27.05	25.55	23.80	24.80	29.80
2018	27.72	27.12	24.12	18.14	17.29	17.29	25.94	29.38	26.64	24.62	27.87	31.72
2019	29.87	27.88	23.90	19.63	17.93	19.06	27.60	31.01	29.30	27.31	28.45	34.14
2020	31.59	29.49	25.30	20.80	19.00	20.20	29.19	32.79	30.99	28.89	30.09	36.09
2021	30.68	30.59	28.66	27.94	27.66	27.75	27.87	27.99	28.10	28.74	31.86	31.98
2022	31.56	31.39	30.62	29.68	29.36	29.46	29.59	29.72	29.84	30.38	33.93	34.25
2023	33.67	33.48	32.11	30.91	30.79	30.90	31.03	31.17	31.30	31.84	35.28	35.42
2024	35.38	35.06	33.88	32.49	32.30	32.42	32.56	32.70	32.84	33.40	37.70	37.85
2025	37.53	37.64	36.18	35.22	35.36	35.48	35.64	35.81	35.96	36.14	42.91	43.23
2026	44.75	44.87	42.35	40.86	40.79	40.94	41.13	41.32	41.48	41.94	48.60	48.29
2027	45.65	45.56	43.93	41.91	41.68	41.82	41.79	42.12	42.26	42.76	50.18	49.94
2028	47.32	47.31	45.96	43.46	43.30	43.46	43.31	43.64	43.95	44.65	52.66	51.55
2029	51.25	51.18	48.43	45.94	45.16	45.34	44.90	45.25	45.80	46.53	55.57	55.30
2030	53.96	53.90	51.23	48.98	48.76	48.93	48.97	49.36	49.48	50.04	58.78	59.06
2031	55.08	55.02	52.29	50.00	49.77	49.95	49.99	50.38	50.51	51.08	59.99	60.28
2032	58.77	58.72	55.49	53.10	52.88	53.07	53.15	53.57	53.68	54.28	63.78	64.33
2033	60.35	60.30	56.96	54.51	54.29	54.49	54.57	55.00	55.11	55.72	65.46	66.05
2034	61.88	61.83	58.36	55.86	55.63	55.84	55.93	56.37	56.48	57.10	67.09	67.72
2035	63.54	63.49	59.90	57.34	57.11	57.32	57.42	57.87	57.98	58.62	68.86	69.53
2036	65.04	65.00	61.33	58.72	58.49	58.70	58.80	59.27	59.38	60.03	70.46	71.15
2037	66.61	66.57	62.83	60.17	59.93	60.15	60.25	60.73	60.84	61.50	72.14	72.84
2038	68.23	68.18	64.37	61.66	61.42	61.64	61.74	62.23	62.34	63.02	73.86	74.57
2039	69.64	69.59	65.71	62.94	62.70	62.92	63.03	63.52	63.64	64.33	75.38	76.11
2040	71.42	71.37	67.41	64.60	64.35	64.58	64.68	65.18	65.30	66.00	77.27	78.01
2041	72.87	72.82	68.79	65.92	65.66	65.90	66.00	66.52	66.64	67.35	78.84	79.59

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2b												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.77	16.87	10.12	7.57	2.47	6.27	11.87	17.12	17.12	17.37	19.62	22.87
2017	21.80	20.30	18.30	11.80	9.80	8.80	15.80	21.30	21.55	20.80	21.80	24.05
2018	22.18	24.13	21.57	15.47	10.69	8.55	15.72	23.05	22.94	21.36	24.21	26.63
2019	25.77	24.02	21.68	14.08	11.74	10.57	18.76	25.19	25.48	24.60	25.77	28.40
2020	27.60	25.73	23.23	15.13	12.64	11.39	20.12	26.97	27.28	26.35	27.60	30.40
2021	24.65	24.56	22.63	21.92	21.64	21.72	21.84	21.96	22.07	22.71	25.83	25.95
2022	25.42	25.25	24.48	23.54	23.22	23.32	23.44	23.57	23.69	24.23	27.78	28.11
2023	27.39	27.20	25.82	24.62	24.51	24.61	24.75	24.88	25.01	25.56	28.99	29.13
2024	29.01	28.69	27.51	26.13	25.94	26.05	26.19	26.34	26.48	27.04	31.33	31.49
2025	31.02	31.13	29.68	28.71	28.86	28.97	29.14	29.30	29.45	29.63	36.41	36.72
2026	38.12	38.24	35.71	34.22	34.16	34.30	34.50	34.69	34.85	35.30	41.97	41.66
2027	38.89	38.80	37.17	35.15	34.92	35.06	35.03	35.35	35.50	36.00	43.42	43.18
2028	40.43	40.42	39.07	36.57	36.40	36.57	36.42	36.75	37.06	37.76	45.77	44.65
2029	44.23	44.16	41.40	38.91	38.14	38.32	37.88	38.23	38.78	39.51	48.54	48.28
2030	46.80	46.74	44.07	41.82	41.60	41.77	41.81	42.20	42.32	42.88	51.62	51.90
2031	47.78	47.72	44.99	42.70	42.47	42.65	42.69	43.09	43.21	43.78	52.69	52.98
2032	51.38	51.33	48.10	45.71	45.49	45.68	45.76	46.18	46.29	46.89	56.39	56.94
2033	52.77	52.72	49.38	46.93	46.71	46.90	46.99	47.42	47.53	48.14	57.88	58.47
2034	54.12	54.08	50.61	48.10	47.88	48.08	48.17	48.62	48.73	49.35	59.34	59.97
2035	55.66	55.62	52.02	49.46	49.23	49.44	49.54	50.00	50.10	50.74	60.98	61.65
2036	57.04	56.99	53.33	50.72	50.49	50.70	50.80	51.26	51.37	52.02	62.46	63.15
2037	58.43	58.38	54.65	51.99	51.75	51.97	52.06	52.54	52.65	53.32	63.95	64.65
2038	59.88	59.84	56.03	53.32	53.08	53.30	53.40	53.88	54.00	54.67	65.52	66.23
2039	61.13	61.08	57.20	54.44	54.19	54.42	54.52	55.02	55.13	55.82	66.87	67.60
2040	62.75	62.70	58.75	55.93	55.68	55.91	56.01	56.52	56.64	57.34	68.60	69.34
2041	64.04	63.98	59.95	57.08	56.83	57.06	57.17	57.68	57.80	58.52	70.00	70.76

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3a												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	33.98	33.89	31.96	31.24	30.96	31.05	31.16	31.28	31.39	32.03	35.15	35.27
2022	34.92	34.75	33.98	33.04	32.72	32.82	32.94	33.08	33.20	33.74	37.28	37.61
2023	37.09	36.90	35.52	34.32	34.21	34.31	34.44	34.58	34.71	35.26	38.69	38.83
2024	38.86	38.54	37.36	35.98	35.79	35.90	36.04	36.19	36.32	36.88	41.18	41.33
2025	41.08	41.19	39.73	38.77	38.92	39.03	39.19	39.36	39.51	39.69	46.46	46.78
2026	48.37	48.49	45.97	44.48	44.42	44.56	44.75	44.94	45.10	45.56	52.22	51.91
2027	49.34	49.25	47.62	45.61	45.38	45.51	45.48	45.81	45.95	46.45	53.87	53.63
2028	51.08	51.07	49.72	47.22	47.06	47.22	47.07	47.40	47.72	48.41	56.42	55.31
2029	55.08	55.01	52.26	49.77	48.99	49.17	48.73	49.08	49.63	50.36	59.40	59.13
2030	57.87	57.81	55.14	52.89	52.67	52.84	52.88	53.27	53.39	53.95	62.69	62.97
2031	59.07	59.00	56.28	53.98	53.76	53.93	53.98	54.37	54.49	55.06	63.98	64.26
2032	62.83	62.78	59.56	57.16	56.94	57.13	57.21	57.64	57.75	58.34	67.85	68.39
2033	64.49	64.44	61.09	58.64	58.42	58.62	58.70	59.14	59.25	59.86	69.60	70.18
2034	66.10	66.05	62.58	60.08	59.85	60.05	60.14	60.59	60.70	61.32	71.31	71.94
2035	67.84	67.79	64.20	61.64	61.41	61.62	61.71	62.17	62.28	62.92	73.16	73.83
2036	69.43	69.38	65.72	63.11	62.88	63.09	63.19	63.66	63.77	64.42	74.85	75.54
2037	71.08	71.04	67.30	64.64	64.40	64.62	64.72	65.20	65.31	65.97	76.61	77.31
2038	72.78	72.73	68.93	66.22	65.98	66.20	66.30	66.78	66.90	67.57	78.42	79.13
2039	74.28	74.23	70.35	67.58	67.34	67.56	67.67	68.16	68.28	68.97	80.02	80.75
2040	76.15	76.10	72.15	69.33	69.08	69.31	69.42	69.92	70.04	70.74	82.01	82.75
2041	77.69	77.64	73.61	70.74	70.48	70.72	70.82	71.34	71.46	72.17	83.66	84.41

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3b												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95



**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)

**2) Renewable Fixed Price Option**

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 5%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 5%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	115.34	115.32	114.56	115.02	118.22	117.33	117.01	116.89	115.60	114.63	115.47	114.45
2021	117.94	118.18	116.67	117.75	120.59	119.83	119.26	119.77	118.26	117.25	118.55	117.22
2022	120.48	120.36	118.46	120.19	123.17	122.14	121.69	121.65	120.55	119.55	120.98	119.53
2023	123.26	122.83	120.85	122.92	125.37	124.64	124.29	123.92	123.08	121.92	123.63	122.53
2024	124.86	125.01	123.06	125.07	127.80	126.78	126.67	126.41	126.22	123.83	124.83	124.96
2025	127.73	128.05	125.86	128.21	131.66	130.48	129.53	129.66	128.84	126.59	127.76	127.41
2026	130.91	130.58	129.12	131.30	135.76	132.28	132.28	132.69	132.40	129.34	131.17	130.23
2027	133.47	133.03	131.38	133.50	139.48	134.88	134.51	135.95	134.79	131.96	133.26	132.78
2028	135.95	134.91	132.89	136.24	141.79	136.93	137.64	137.65	136.77	134.76	135.84	135.06
2029	138.81	138.57	135.91	139.29	149.30	140.74	140.82	140.82	140.86	137.50	138.32	138.21
2030	141.68	141.39	139.11	142.00	153.18	145.20	143.05	142.93	144.31	140.18	140.75	140.79
2031	144.29	143.79	142.17	145.52	156.10	149.27	145.71	146.65	146.86	143.04	144.15	143.71
2032	146.51	146.00	144.35	147.76	158.51	151.58	147.95	148.91	149.13	145.24	146.37	145.92
2033	149.91	149.40	147.71	151.19	162.18	155.09	151.39	152.37	152.59	148.62	149.77	149.31
2034	152.96	152.43	150.71	154.26	165.46	158.24	154.46	155.46	155.68	151.64	152.81	152.35
2035	155.76	155.22	153.46	157.08	168.50	161.14	157.29	158.31	158.54	154.41	155.60	155.13
2036	158.31	157.76	155.97	159.65	171.26	163.78	159.86	160.90	161.13	156.94	158.15	157.67
2037	161.83	161.27	159.44	163.20	175.07	167.42	163.42	164.48	164.71	160.43	161.67	161.18
2038	164.95	164.38	162.52	166.35	178.45	170.65	166.57	167.65	167.89	163.52	164.79	164.29
2039	168.13	167.55	165.66	169.56	181.89	173.94	169.79	170.89	171.13	166.68	167.97	167.46
2040	171.05	170.46	168.54	172.51	185.04	176.96	172.74	173.85	174.10	169.58	170.89	170.37
2041	174.69	174.08	172.11	176.17	188.98	180.72	176.40	177.55	177.80	173.18	174.52	173.99

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.52	18.77	11.92	11.02	8.77	13.27	20.27	23.27	21.27	20.02	23.02	27.77
2017	26.20	24.45	20.95	17.20	15.70	16.70	24.20	27.20	25.70	23.95	24.95	29.95
2018	27.87	27.27	24.27	18.29	17.44	17.44	26.09	29.53	26.79	24.77	28.02	31.87
2019	30.03	28.04	24.06	19.79	18.09	19.22	27.76	31.17	29.46	27.47	28.61	34.30
2020	75.38	75.37	74.61	75.06	78.26	77.37	77.05	76.93	75.64	74.67	75.51	74.49
2021	77.10	77.33	75.83	76.90	79.75	78.99	78.41	78.92	77.41	76.40	77.70	76.38
2022	78.85	78.72	76.82	78.56	81.53	80.51	80.05	80.02	78.92	77.92	79.34	77.90
2023	80.71	80.27	78.29	80.37	82.82	82.08	81.73	81.37	80.53	79.36	81.08	79.97
2024	81.74	81.89	79.93	81.95	84.68	83.66	83.55	83.28	83.10	80.71	81.71	81.84
2025	83.64	83.97	81.78	84.13	87.57	86.40	85.44	85.57	84.75	82.51	83.68	83.32
2026	85.97	85.64	84.18	86.37	90.82	87.34	87.34	87.75	87.46	84.40	86.23	85.29
2027	87.67	87.23	85.57	87.69	93.67	89.07	88.71	90.15	88.99	86.16	87.45	86.98
2028	89.26	88.22	86.20	89.55	95.10	90.24	90.95	90.96	90.08	88.07	89.15	88.37
2029	91.22	90.98	88.32	91.70	101.72	93.16	93.23	93.23	93.28	89.92	90.73	90.62
2030	93.17	92.88	90.60	93.49	104.67	96.69	94.54	94.42	95.80	91.67	92.24	92.28
2031	94.84	94.34	92.72	96.07	106.65	99.82	96.26	97.20	97.42	93.59	94.70	94.26
2032	96.40	95.90	94.24	97.65	108.40	101.47	97.85	98.80	99.02	95.13	96.26	95.82
2033	98.55	98.03	96.34	99.82	110.81	103.72	100.02	101.00	101.22	97.25	98.40	97.95
2034	100.44	99.91	98.19	101.74	112.94	105.72	101.94	102.94	103.17	99.12	100.29	99.83
2035	102.38	101.85	100.09	103.71	115.13	107.76	103.92	104.93	105.16	101.04	102.23	101.76
2036	104.06	103.51	101.72	105.40	117.01	109.53	105.61	106.65	106.88	102.69	103.90	103.42
2037	106.37	105.81	103.99	107.74	119.61	111.96	107.96	109.02	109.26	104.97	106.21	105.72
2038	108.42	107.86	105.99	109.82	121.92	114.12	110.05	111.12	111.37	107.00	108.26	107.76
2039	110.52	109.94	108.04	111.95	124.27	116.33	112.17	113.27	113.52	109.07	110.36	109.85
2040	112.32	111.73	109.81	113.77	126.31	118.23	114.00	115.12	115.37	110.85	112.16	111.64
2041	114.83	114.23	112.26	116.31	129.12	120.86	116.55	117.69	117.95	113.32	114.66	114.13

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.92	17.02	10.27	7.72	2.62	6.42	12.02	17.27	17.27	17.52	19.77	23.02
2017	21.95	20.45	18.45	11.95	9.95	8.95	15.95	21.45	21.70	20.95	21.95	24.20
2018	22.33	24.28	21.72	15.62	10.84	8.70	15.87	23.20	23.09	21.51	24.36	26.78
2019	25.93	24.18	21.84	14.24	11.90	10.73	18.92	25.35	25.64	24.76	25.93	28.56
2020	58.61	58.87	60.41	59.16	55.77	56.01	56.30	57.46	58.37	59.59	59.40	59.84
2021	60.70	59.92	61.62	60.25	57.35	57.39	58.04	58.39	59.55	61.59	59.15	60.86
2022	61.54	61.21	63.46	61.18	58.14	58.51	60.02	59.04	60.69	62.73	60.11	61.98
2023	62.31	62.36	64.71	62.89	58.45	59.62	61.01	60.46	61.75	64.02	60.99	63.24
2024	62.78	62.84	66.00	62.62	58.71	61.45	60.28	60.65	62.15	64.21	62.95	63.58
2025	64.06	64.04	67.38	63.52	58.61	61.72	61.56	62.56	62.67	65.63	65.12	64.50
2026	64.30	65.20	67.63	63.91	59.20	62.57	62.40	63.10	62.40	66.47	65.20	65.24
2027	66.57	66.55	68.39	65.60	58.95	63.71	64.05	63.42	63.83	68.48	65.93	66.44
2028	67.45	68.07	70.58	67.27	58.26	65.15	65.32	63.99	65.37	68.96	66.65	68.58
2029	67.86	68.68	71.87	68.58	53.33	65.37	66.45	65.08	66.61	69.66	68.69	69.76
2030	68.89	69.80	73.34	68.62	52.98	65.87	67.00	67.17	66.98	70.97	70.34	71.21
2031	70.39	71.58	74.28	68.88	54.05	65.55	68.43	68.59	67.04	72.12	71.95	71.19
2032	71.55	72.76	75.50	70.02	54.94	66.62	69.55	69.72	68.14	73.31	73.13	72.36
2033	73.15	74.38	77.19	71.58	56.17	68.11	71.11	71.27	69.66	74.94	74.76	73.98
2034	74.55	75.81	78.67	72.95	57.24	69.42	72.47	72.64	71.00	76.38	76.20	75.40
2035	76.00	77.28	80.19	74.36	58.35	70.76	73.87	74.05	72.37	77.86	77.67	76.86
2036	77.23	78.54	81.50	75.57	59.30	71.91	75.07	75.25	73.55	79.13	78.94	78.11
2037	78.95	80.29	83.31	77.26	60.62	73.51	76.75	76.93	75.19	80.89	80.70	79.85
2038	80.48	81.84	84.92	78.75	61.79	74.93	78.23	78.41	76.64	82.45	82.26	81.39
2039	82.03	83.42	86.56	80.27	62.99	76.38	79.74	79.93	78.12	84.05	83.85	82.96
2040	83.37	84.77	87.97	81.58	64.01	77.62	81.04	81.23	79.39	85.41	85.21	84.31
2041	85.23	86.67	89.94	83.40	65.44	79.36	82.85	83.05	81.17	87.32	87.12	86.20

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	78.62	78.60	77.84	78.30	81.50	80.60	80.29	80.17	78.88	77.91	78.74	77.73
2021	80.39	80.63	79.12	80.20	83.04	82.28	81.71	82.22	80.71	79.70	81.00	79.67
2022	82.21	82.08	80.18	81.92	84.89	83.87	83.41	83.38	82.27	81.27	82.70	81.25
2023	84.12	83.69	81.71	83.78	86.23	85.50	85.15	84.78	83.94	82.78	84.50	83.39
2024	85.22	85.37	83.41	85.43	88.16	87.14	87.03	86.76	86.58	84.19	85.19	85.32
2025	87.19	87.52	85.33	87.68	91.12	89.95	88.99	89.12	88.30	86.06	87.23	86.87
2026	89.59	89.26	87.80	89.99	94.44	90.96	90.96	91.37	91.08	88.02	89.85	88.91
2027	91.36	90.92	89.26	91.39	97.36	92.76	92.40	93.84	92.68	89.85	91.14	90.67
2028	93.02	91.98	89.96	93.31	98.86	94.00	94.71	94.72	93.84	91.84	92.91	92.13
2029	95.05	94.81	92.15	95.53	105.55	96.99	97.06	97.06	97.11	93.75	94.56	94.45
2030	97.08	96.79	94.51	97.40	108.58	100.60	98.45	98.33	99.71	95.58	96.15	96.19
2031	98.83	98.33	96.70	100.05	110.63	103.81	100.25	101.19	101.40	97.58	98.69	98.25
2032	100.47	99.96	98.30	101.71	112.47	105.53	101.91	102.87	103.08	99.20	100.32	99.88
2033	102.68	102.16	100.47	103.95	114.95	107.86	104.16	105.14	105.36	101.38	102.53	102.08
2034	104.66	104.13	102.41	105.96	117.16	109.94	106.16	107.16	107.38	103.34	104.51	104.05
2035	106.68	106.15	104.39	108.01	119.43	112.06	108.21	109.23	109.46	105.34	106.53	106.06
2036	108.44	107.90	106.11	109.79	121.40	113.91	110.00	111.04	111.27	107.08	108.29	107.81
2037	110.84	110.28	108.46	112.21	124.08	116.43	112.43	113.49	113.73	109.44	110.68	110.19
2038	112.98	112.41	110.55	114.38	126.47	118.68	114.60	115.68	115.92	111.55	112.82	112.32
2039	115.16	114.58	112.68	116.59	128.92	120.97	116.81	117.91	118.16	113.71	115.00	114.49
2040	117.06	116.47	114.54	118.51	131.04	122.96	118.74	119.86	120.11	115.58	116.89	116.37
2041	119.65	119.05	117.07	121.13	133.94	125.68	121.37	122.51	122.76	118.14	119.48	118.95

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

SCHEDULE 201 (Continued)

WIND INTEGRATION

TABLE 7	
Wind Integration	
Year	Cost
2015	3.77
2016	3.84
2017	3.91
2018	3.99
2019	4.07
2020	4.15
2021	4.23
2022	4.31
2023	4.39
2024	4.47
2025	4.56
2026	4.65
2027	4.74
2028	4.83
2029	4.92
2030	5.02
2031	5.12
2032	5.21
2033	5.31
2034	5.42
2035	5.52
2036	5.63
2037	5.74
2038	5.85
2039	5.96
2040	6.08



**SCHEDULE 201 (Continued)**

**MONTHLY SERVICE CHARGE**

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

**INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- 2) Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

**TRANSMISSION AGREEMENTS**

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

**INTERCONNECTION REQUIREMENTS**

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

**SCHEDULE 201 (Continued)**

**INTERCONNECTION REQUIREMENTS (Continued)**

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA**

A QF will be eligible to receive pricing under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW. A Community-Based or Family-Owned QF is exempt from these restrictions.

**Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**SCHEDULE 201 (Continued)**

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA (Continued)**

**Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for pricing under the Standard PPA is sought.

**Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

**OTHER DEFINITIONS**

**Mid-C Index Price**

As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for Average

**SCHEDULE 201 (Continued)**

OTHER DEFINITIONS (Continued)

On-Peak Power and Average Off-Peak Power found on the following website: <https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

**Definition of RPS Attributes**

As used in this schedule, RPS Attributes means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

**Definition of Environmental Attributes**

As used in this schedule, Environmental Attributes shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

**Definition of Resource Sufficiency Period**

This is the period from the current year through 2020.

**Definition of Resource Deficiency Period**

This is the period from 2021 through 2034.

**Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2019.

**Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

**SCHEDULE 201 (Concluded)**

**DISPUTE RESOLUTION**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to pricing under the Standard PPA.

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

**SPECIAL CONDITIONS**

1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

**TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)	)
BLUE MARMOT VI LLC (UM 1830)	)
BLUE MARMOT VII LLC (UM 1831)	)
BLUE MARMOT VIII LLC (UM 1832)	)
BLUE MARMOT IX LLC (UM 1833)	)
Complainants	)
vs.	)
PORTLAND GENERAL ELECTRIC	)
COMPANY	)
Defendant	)
Pursuant to ORS 756.500.	)
_____	)

**EXHIBIT BLUE MARMOT/903**

**BLUE MARMOT VII POWER PURCHASE AGREEMENT**

**January 31, 2020**

**STANDARD RENEWABLE OFF-SYSTEM VARIABLE POWER PURCHASE  
AGREEMENT**

THIS AGREEMENT is between **Blue Marmot VII LLC** ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties") and is effective upon execution by both Parties ("Effective Date").

RECITALS

Seller intends to construct, own, operate and maintain a **Solar** facility for the generation of electric power located in **Lake ( W -120.333, N 42.117) County, Oregon** with a Nameplate Capacity Rating of **10,000** kilowatt ("kW"), as further described in Exhibit A ("Facility"); and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.21, below, from the Facility in accordance with the terms and conditions of this Agreement.

AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

SECTION 1: DEFINITIONS

When used in this Agreement, the following terms shall have the following meanings:

1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.

1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year)

1.3. "Billing Period" means from the start of the first day of each calendar month to the end of the last day of each calendar month.

1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:

1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed

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Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);

1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.36;

1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement and was continuously mechanically available for operation for a minimum of 120 hours. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the mechanical availability of the Facility is interrupted during this initial testing period or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period;

1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;

1.5.5. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;

1.5.6. PGE has received a copy of the executed Generation Interconnection and Transmission Agreements.

1.6. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.

1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final Contract Year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.

1.8. "Effective Date" has the meaning set forth in Section 2.1.

1.9. "Environmental Attributes" shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gasses (GHGs) that have been determined by the United Nations



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Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

1.10. "Facility" has the meaning set forth in the Recitals.

1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with Pacificorp electric system.

1.12. "Generation Unit" means each separate electrical generator that contributes toward Nameplate Capacity Rating included in Exhibit A. For solar facilities, a generating unit is a complete solar electrical generation system within the Facility that is able to generate and deliver energy to the Point of Delivery independent of other Generation Units within the same Facility.

1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.

1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

1.15. "Lost Energy" means "Lost Energy" means ((the Guarantee of Mechanical Availability as set forth in 3.1.10 / MAP) X Net Output for a Calendar Year) – Net Output for the Calendar Year. Lost Energy shall be zero unless the result of the calculation in this subsection results in a positive number.

1.16. "Lost Energy Value" means Lost Energy X the excess of the annual time-weighted average Mid-C Index Price for On Peak Hours and Off Peak Hours over the time weighted average Contract Price for On Peak and Off Peak Hours for the corresponding time period (provided that such excess shall not exceed the Contract Price and further provided that Lost Energy is deemed to be zero prior to reaching the Commercial Operation Date) plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery (For Start-Up Lost Energy Value See 1.35).

1.17. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

$$\text{MAP} = 100 \times (\text{Operational Hours}) / (\text{Base Hours} \times \text{Number of Units})$$

1.18. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") index price for the bilateral OTC market for energy at the Mid-C Physical for Average On Peak Power and Average Off Peak Power found on the following website:

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<https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

1.19. "Nameplate Capacity Rating" means the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW.

1.20. "Net Dependable Capacity" means the maximum capacity the Facility can sustain over a specified period modified for seasonal limitations, if any, and reduced by the capacity required for station service or auxiliaries.

1.21. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.

1.22. "Number of Units" means the number of Generation Units in the Facility as specified in Exhibit A.

1.23. "Off-Peak Hours" has the meaning provided in the Schedule.

1.24. "On-Peak Hours" has the meaning provided in the Schedule.

1.25. "Operational Hours" for the Facility means the total across all Generation Units of the number of hours each of the Facility's Generation Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, two hundred (200) hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit or Event of Force Majeure, the Operational Hours for a wind farm with five (5) separate two (2) MW turbines would be 43,800 for a Contract Year.

1.26. "Planned Maintenance" means outages scheduled ninety (90) days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.

1.27. "Point of Delivery" means the PGE system.

1.28. "Pre-Commercial Operation Date Minimum Net Output" shall mean, unless such MWh is specifically set forth by Seller in Exhibit A, an amount in MWh equal to seventy-five percent (75%) of Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours – 200 hours (assumed Planned Maintenance)) for each month. If Seller has provided specific expected monthly Net Output amounts for the Facility in Exhibit A, "Pre-Commercial Operation Date Minimum Net Output" shall mean seventy-five percent (75%) X expected net output set forth in Exhibit A for each month.

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1.29. "Prime Rate" means the publicly announced prime rate or reference rate for commercial loans to large businesses with the highest credit rating in the United States in effect from time to time quoted by Citibank, N.A. If a Citibank, N.A. prime rate is not available, the applicable Prime Rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, N.Y., selected by the Party to whom interest based on the prime rate is being paid.

1.30. "Prudent Electrical Practices" means those practices, methods, standards and acts engaged in or approved by a significant portion of the electric power industry in the Western Electricity Coordinating Council that at the relevant time period, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with good business practices, reliability, economy, safety and expedition, and which practices, methods, standards and acts reflect due regard for operation and maintenance standards recommended by applicable equipment suppliers and manufacturers, operational limits, and all applicable laws and regulations. Prudent Electrical Practices are not intended to be limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods and acts generally acceptable or approved by a significant portion of the electric power generation industry in the relevant region, during the relevant period, as described in the immediate preceding sentence.

1.31. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

1.32. "RPS Attributes" means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

1.33. "Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference.

1.34. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance

1.35. "Start-Up Lost Energy Value" means for the period after the date specified in Section 2.2.2 but prior to achievement of the Commercial Operation Date: zero, unless the Net Output is less than the pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable delay period, and the time-weighted average of the delay period's Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater

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than the time-weighted average of the delay period's Contract Price for On-Peak Hours and Off-Peak Hours, in which case Startup Lost Energy Value equals: (pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable period - Net Output for the applicable period) X (the lower of: the time-weighted average of the Contract Price for On-Peak hours and Off-Peak Hours during the applicable period; or (the time-weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours during the applicable period – the time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours during the applicable period)). The time-weighted average in this section will reflect the relative proportions of On-Peak Hours and Off-Peak Hours in each day.

1.36. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.

1.37. "Step-in Rights" means the right of one party to assume an intervening position to satisfy all terms of an agreement in the event the other party fails to perform its obligations under the agreement.

1.38. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.

1.39. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

1.40. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.

1.41. "Transmission Curtailment" means a limitation on Seller's ability to deliver any portion of the scheduled energy to PGE due to the unavailability of transmission to the Point of Delivery (for any reason other than Force Majeure).

1.42. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Mid-C Index Price – Contract Price) X curtailed energy) for periods of Transmission Curtailment.

1.43. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.

1.44. "Transmission Services" means any and all services (including but not limited to ancillary services and control area services) required for the firm transmission and delivery of Energy from the Facility to the Point of Delivery for a term not less than the Term of this Agreement.

References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

## SECTION 2: TERM; COMMERCIAL OPERATION DATE

2.1. This Agreement shall become effective upon execution by both Parties ("Effective Date").

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2.2. Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,

2.2.1. By **March 1, 2020** Seller shall begin initial deliveries of Net Output; and

2.2.2. By **March 31, 2020** Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.

2.2.3. Unless the Parties agree in writing that a later Commercial Operation Date is reasonable and necessary, the Commercial Operation Date shall be no more than three (3) years from the Effective Date. PGE will not unreasonably withhold agreement to a Commercial Operation Date that is more than three (3) years from the Effective date if the Seller has demonstrated that a later Commercial Operation Date is reasonable and necessary.

2.3. This Agreement shall terminate on the date **18 years after the effective date**, or the date the Agreement is terminated in accordance with Section 8 or 11, whichever is earlier ("Termination Date").

### SECTION 3: REPRESENTATIONS AND WARRANTIES

3.1. Seller and PGE represent, covenant, and warrant as follows:

3.1.1. Seller warrants it is a **Limited Liability Company** duly organized under the laws of **Delaware**.

3.1.2. Seller warrants that the execution and delivery of this Agreement does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid order of any court, or any regulatory agency or other body having authority to which Seller is subject.

3.1.3. Seller warrants that the Facility is and shall for the Term of this Agreement continue to be a "Qualifying Facility" ("QF") as that term is defined in the version of 18 C.F.R. Part 292 in effect on the Effective Date. Seller has provided the appropriate QF certification, which may include a Federal Energy Regulatory Commission ("FERC") self-certification to PGE prior to PGE's execution of this Agreement. At any time during the Term of this Agreement, PGE may require Seller to provide PGE with evidence satisfactory to PGE in its reasonable discretion that the Facility continues to qualify as a QF under all applicable requirements.

3.1.4. Seller warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and Seller is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.5. Seller warrants that during the Term of this Agreement, all of Seller's right, title and interest in and to the Facility shall be free and clear of all liens and encumbrances other than liens and encumbrances arising from third-party financing of the Facility other than workers', mechanics', suppliers' or similar liens, or tax liens, in each case arising in the ordinary course of business that are either not yet due and

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payable or that have been released by means of a performance bond acceptable to PGE posted within eight (8) calendar days of the commencement of any proceeding to foreclose the lien.

3.1.6. Seller warrants that it will design and operate the Facility consistent with Prudent Electrical Practices.

3.1.7. Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.

3.1.8. Seller warrants that Net Dependable Capacity of the Facility is 10,000 kW.

3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 21,900,000 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.

3.1.10. Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):

3.1.10.1. Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or

3.1.10.2. Ninety percent (90%) beginning in Contract Year three and extending throughout the remainder of the Term.

3.1.10.3. Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.

3.1.10.4. Seller's failure to meet the Guarantee of Mechanical Availability in a Calendar Year shall result in damages payable to PGE by Seller equal to the Lost Energy Value. PGE shall bill Seller for such damages in accordance with Section 7.

3.1.11. Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 33,750,000 kWh of Net Output during each Contract Year ("Maximum Net Output"). The cost of delivering energy from the Facility to PGE is the sole responsibility of the Seller.

3.1.12. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

3.1.13. PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.14. Seller warrants that the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power

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Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by PGE not more frequently than every 36 months, such documentation and information as may be reasonably required to establish Seller's continued compliance with such Definition. PGE agrees to take reasonable steps to maintain the confidentiality of any portion of the above described documentation and information that the Seller identifies as confidential except PGE will provide all such confidential information to the Commission upon the Commission's request.

3.1.15. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.5) associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050. PGE warrants that it will reasonably cooperate in Seller's efforts to meet such requirements, including, for example serving as the qualified reporting entity for the Facility if the Facility is located in PGE's balancing authority.

#### SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

4.1. Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.

4.2. PGE shall pay Seller the Contract Price for all delivered Net Output.

4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

4.4. Seller shall provide preschedules for all deliveries of energy hereunder, including identification of receiving and generating control areas, by 9:00:00 PPT on the last business day prior to the scheduled date of delivery. All energy shall be scheduled according to the most current North America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' respective representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the hourly schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of hourly energy schedules for accounting and

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operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. All energy shall be prescheduled according to customary WECC scheduling practices. Seller shall make commercially reasonable efforts to schedule in any hour an amount equal to its expected Net Output for such hour. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records and to imbalance information kept by the Transmission Provider.

4.5. From the start of the Renewable Resource Deficiency Period through the remainder of the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any RPS Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained Environmental Attributes") Seller may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to Seller any of the Seller-Retained Environmental Attributes, and PGE shall not report under such program that such Seller-Retained Environmental Attributes belong to it. With respect to RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

#### SECTION 5: OPERATION AND CONTROL

5.1. Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.

5.2. Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.

5.3. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best



efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Net Dependable Capacity). Notwithstanding the foregoing, in the event Seller is not current on construction related financial obligations, Seller shall notify PGE of such delinquency and PGE may, in its discretion, grant an exception to the requirements to provide default security if the QF has negotiated financial arrangements with the construction loan lender that mitigate Seller's financial risk to PGE.

#### SECTION 7: BILLINGS, COMPUTATIONS AND PAYMENTS

7.1. On or before the thirtieth (30<sup>th</sup>) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement and any other agreement related to the Facility between the Parties or otherwise. On or before the thirtieth (30<sup>th</sup>) day following the end of each Contract Year, PGE shall bill for any Lost Energy Value accrued pursuant to this Agreement.

7.2. Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law.

#### SECTION 8: DEFAULT, REMEDIES AND TERMINATION

8.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:

8.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.

8.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.

8.1.3. Seller's failure to meet the Guarantee of Mechanical Availability established in Section 3.1.10 for two consecutive Contract Years or Seller's failure to provide any written report required by that section.

8.1.4. If Seller is no longer a Qualifying Facility.

8.1.5. Failure of PGE to make any required payment pursuant to Section 7.1.

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8.1.6. Seller's failure to meet the Commercial Operation Date.

8.2. In the event of a default under Section 8.1.6, PGE may provide Seller with written notice of default. Seller shall have one year in which to cure the default during which time the Seller shall pay PGE damages equal to the Lost Energy Value. If Seller is unable to cure the default, PGE may immediately terminate this Agreement as provided in Section 8.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 8.2.

8.3. In the event of a default hereunder, except as otherwise provided in this Agreement, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, the non-defaulting Party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 8 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

8.4. If this Agreement is terminated as provided in this Section 8, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.

8.5. In the event PGE terminates this Agreement pursuant to this Section 8, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.

8.6. Sections 8.1, 8.4, 8.5, 10, and 19.2 shall survive termination of this Agreement.

#### SECTION 9: TRANSMISSION CURTAILMENTS

9.1. Seller shall give PGE notice as soon as reasonably practicable of any Transmission Curtailment that is likely to affect Seller's ability to deliver any portion of energy scheduled pursuant to Section 4.4 of this Agreement.

9.2. If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 of this Agreement, Seller shall pay PGE the Transmission Curtailment Replacement Energy Cost for the number of MWh of energy reasonably determined by PGE as the difference between (i) the scheduled energy that would have been delivered to PGE under this Agreement during the period of Transmission Curtailment and (ii) the actual energy, if any, that was delivered to PGE for the period.

#### SECTION 10: INDEMNIFICATION AND LIABILITY

10.1. Seller agrees to defend, indemnify and hold harmless PGE, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with Seller's delivery of electric power to PGE or with the facilities at or prior to the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.

10.2. PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with PGE's receipt of electric power from Seller or with the facilities at or after the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.

10.3. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public, nor affect the status of PGE as an independent public utility corporation or Seller as an independent individual or entity.

10.4. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

#### SECTION 11: INSURANCE

11.1. Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, its directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of

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insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

11.2. Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility. Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

11.3. Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

## SECTION 12: FORCE MAJEURE

12.1. As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect

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the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

12.2. If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:

12.2.1. the non-performing Party, shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and

12.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and

12.2.3. the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.

12.3. No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.

12.4. Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

### SECTION 13: SEVERAL OBLIGATIONS

Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or to impose a trust or partnership duty, obligation or liability between the Parties. If Seller includes two or more parties, each such party shall be jointly and severally liable for Seller's obligations under this Agreement.

### SECTION 14: CHOICE OF LAW

This Agreement shall be interpreted and enforced in accordance with the laws of the state of Oregon, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

### SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.

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In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.

SECTION 16: WAIVER

Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement must be in writing, and such waiver shall not be deemed a waiver with respect to any subsequent default or other matter.

SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party or this Agreement. Seller shall at all times maintain in effect all local, state and federal licenses, permits and other approvals as then may be required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

SECTION 18: SUCCESSORS AND ASSIGNS

This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party.

SECTION 19: ENTIRE AGREEMENT

19.1. This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding PGE's purchase of Net Output from the Facility. No modification of this Agreement shall be effective unless it is in writing and signed by both Parties.

19.2. By executing this Agreement, Seller releases PGE from any third party claims related to the Facility, known or unknown, which may have arisen prior to the Effective Date.

SECTION 20: NOTICES

20.1. All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in person or when deposited in the U.S. Mail, postage prepaid by certified or registered mail and return receipt requested:

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To Seller: Blue Marmot VII LLC  
c/o EDP Renewables North America LLC;  
Attention: General Counsel;  
808 Travis Suite 808  
Houston, TX 77002

with a copy to: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

To PGE: Contracts Manager  
QF Contracts, 3WTC0306  
PGE - 121 SW Salmon St.  
Portland, Oregon 97204

20.2 The Parties may change the person to whom such notices are addressed, or their addresses, by providing written notices thereof in accordance with this Section 20.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

PGE

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

PGE Approved By:	
Business Terms	<i>[Signature]</i>
Credit	<i>[Signature]</i>
Legal	
Risk Mgt.	



Blue Marmot VII LLC  
(Name Seller)

By: *[Signature]*  
Name: Steve Irvin  
Title: Executive Vice President,  
Date: Western and Central Regions and Mexico

*03/29/17*

*B - w. #*

Brian Hayes  
Executive Vice President,  
Asset Operations

*3/29/17*

**EXHIBIT A  
DESCRIPTION OF SELLER'S FACILITY**

**The facility will be a solar PV plant consisting of 38,715 polycrystalline modules of nominal 335W rating each. Total plant rating will be 12.970 MWdc/10MWac. Modules will be mounted to single-axis trackers.**

**Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.**

**The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 6.5 miles to the PacifiCorp Mile-Hi Substation.**

**Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.**

**The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.**



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**Solar Facility Characteristics:**

Note this information is considered representative design information which is to be updated at the time of project construction and is subject to design finalization

1. Generation		
a. PVsyst (or equivalent) simulation results detail, including but not limited to:		
i. Annual MWh (AC) for the first calendar year of commercial operation		23,875
ii. Annual degradation factor		0.70%
iii. Average 24-hr profile of generation MWh (AC) for each month during the first calendar year		See tab "Generation"
iv. Expected Solar Capacity Factor		27%
v. Maximum annual output (monthly MWh detail)		See tab "Generation"
vi. Loss Diagram		See tab "Generation"
2. Description of Modules:		
a. Module type	Polycrystalline Silicon	
b. # of modules	38,715	
c. Max power voltage	37.4V	
d. Max power current	8.97A	
e. Max system voltage	1500V	
f. Total DC system size	12970KW	
3. Description of Racking		
a. Racking		
i. Type: (fixed tilt, single-axis tracking, or dual-axis tracking, etc.)	Single-Axis Tracking	
ii. Tilt angle (if fixed-tilt)		N/A
iii. Azimuth (default = south-facing)	South-Facing	
4. Description of Inverters:		
a. Number of Inverters	5	
b. Model	ABB PVS980-58-1818KVA-6	
c. Maximum Power (kW)	2910kW DC	
d. Operating Voltage (VAC)	600	
e. Max. Output Current (A)	1925A	
f. Rated DC Voltage	1500	
g. Rated DC current	1945	
h. Maximum Output (kW)	2080	
i. Facility AC Capacity Rating	10.0MW	
j. Inverter loading ratio	1.297	
k. Facility AC rating	10.0MW	
5. Description of transformers		
a. Inverter LV-MV		
i. # of transformers	5	
ii. Model	ABB PadPlus+	
iii. High Voltage Rating	34,500	
iv. Low Voltage Rating	600	
v. MVA rating	2.0 each, 10.0 total	
vi. High voltage connection	Wye-Ground	
vii. Low voltage connection	Wye	
b. GSU MV-HV		
i. # of transformers	1	
ii. Model	ABB 10MVA	
iii. High Voltage Rating	115,000	
iv. Low Voltage Rating	34,500	
v. MVA rating	10/12.5 ONAF	
vi. High voltage connection	Wye	
vii. Low voltage connection	Delta	
	Meter shall be revenue-grade, located at POI. POI shall be slack bus on the high-side bushing of plant GSU transformer at Mile Hi Substation. Revenue meter shall transmit real-time data pulses (instantaneous MW, MVAR, kWh) to Operator's billing data program. Customer's 35KV switchgear at Mile Hi shall be fitted with Customer meter as an alternate data source. Breakers and relays at Customer's PV plant shall connect to operator SCADA system at Mile Hi substation via OPGW run on proposed Customer transmission line. Customer shall install line-protection panel, metering equipment and accessories, communication battery system, fiber optic network device and SCADA RTU (Remote Terminal Unit) in existing Mile Hi relay/control building to control, monitor, and transmit data to Operator and back to PV plant SCADA.	
6. Description of metering, communications, and monitoring		

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7. Description of station service requirements

15KVA, 240/120V 1-phase service at PV plant substation for Relay/SCADA/O&M building and plant accessory loads. 5KVA, 240/120V 1-phase at Mile Hi substation for Customer controls equipment.

Transmission line shall be new radial line consisting of 34.5KV ACSR, 1-conductor per phase with DPGW on wood poles, approx. 6.5 miles. Line will originate at PV plant 34.5kV main switchgear and terminate at dead-end structure feeding a new 35kV breaker at Mile Hi Substation. 35kV breaker will feed new GSU and new 115KV breaker at Mile Hi Substation. POI shall be slack bus between new 115kV breaker and existing 115KV bus at Mile Hi Substation.

Seller is taking necessary steps to execute required interconnection and transmission agreements prior to commercial operation date.

9. Transaction Service Request Number, Interconnection Queue number, and System impact/interconnection study document: Seller is taking necessary steps to execute required interconnection and transmission agreements prior to commercial operation date.

EXHIBIT B  
REQUIRED FACILITY DOCUMENTS

Sellers Generation Interconnection Agreement

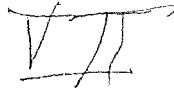
Transmission Service Agreement with PacifiCorp

Lease agreement

Conditional Use Permit issued by Lake County

Any additional permits that might be required by Lake County or Oregon Department of Environmental Quality, including access permit, building and electric permits, and storm water prevention permit

FERC Qualifying Facility self-certification



FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

# Form 556

Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

## General

Questions about completing this form should be sent to [Form556@ferc.gov](mailto:Form556@ferc.gov). Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, [www.ferc.gov/QF](http://www.ferc.gov/QF). The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

## Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

## How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button (🔍) for assistance, or contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov).

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov) to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

## How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

## Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 ([DataClearance@ferc.gov](mailto:DataClearance@ferc.gov)); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 ([oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov)). Include the Control No. 1902-0075 in any correspondence.

## Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

## Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

## Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Notice Requirements link.

## What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

## Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

## Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

## Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See [www.ferc.gov/help/filing-guide/file-ceii.asp](http://www.ferc.gov/help/filing-guide/file-ceii.asp) for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

<p><b>Non-Public:</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.</p>
<p><b>Public (redacted):</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This public version of the applicants's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.</p>
<p><b>Privileged:</b> Indicate below which lines of your form contain data for which you are seeking privileged treatment</p>
<p><b>Critical Energy Infrastructure Information (CEII):</b> Indicate below which lines of your form contain data for which you are seeking CEII status</p>

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from [www.ferc.gov/QF](http://www.ferc.gov/QF). To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

**Form 556** Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

Application Information

<b>1a</b> Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Blue Marmot VII LLC		
<b>1b</b> Applicant street address 808 Travis Street #700		
<b>1c</b> City Houston	<b>1d</b> State/province TX	
<b>1e</b> Postal code 77002	<b>1f</b> Country (if not United States)	<b>1g</b> Telephone number 713-265-0350
<b>1h</b> Has the instant facility ever previously been certified as a QF? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
<b>1i</b> If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ____ - ____ - ____		
<b>1j</b> Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
<b>1k</b> What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
<b>1l</b> What is the purpose and expected effective date(s) of this filing? <input checked="" type="checkbox"/> Original certification; facility expected to be installed by <u>3/1/20</u> and to begin operation on <u>3/31/20</u> <input type="checkbox"/> Change(s) to a previously certified facility to be effective on _____ (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
<b>1m</b> If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		



Contact Information	<b>2a</b> Name of contact person Leslie A. Freiman		<b>2b</b> Telephone number 713-265-0350	
	<b>2c</b> Which of the following describes the contact person's relationship to the applicant? (check one) <input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input checked="" type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	<b>2d</b> Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/> EDP Renewables North America LLC			
	<b>2e</b> Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>			
	<b>2f</b> City		<b>2g</b> State/province	
	<b>2h</b> Postal code		<b>2i</b> Country (if not United States)	
	<b>3a</b> Facility name Blue Marmot VII			
Facility Identification and Location	<b>3b</b> Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>			
	<b>3c</b> Geographic coordinates: If you indicated that no street address exists for your facility by checking the box, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places) using the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.  Longitude <input type="checkbox"/> East (+) <u>120.333</u> degrees    Latitude <input checked="" type="checkbox"/> North (+) <u>42.117</u> degrees <input checked="" type="checkbox"/> West (-)			
	<b>3d</b> City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Lakeview		<b>3e</b> State/province OR	
	<b>3f</b> County (or check here for independent city) <input type="checkbox"/> Lake		<b>3g</b> Country (if not United States)	
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	<b>4a</b> Identify utility interconnecting with the facility PacifiCorp (Pacific Power)			
	<b>4b</b> Identify utilities providing wheeling service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			
	<b>4c</b> Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Portland General Electric Company			
	<b>4d</b> Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			

Ownership and Operation

**5a** Direct ownership as of effective date or operation date: identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) Blue Marmot VII LLC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
2) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
3) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
4) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
5) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
6) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
7) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
8) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
9) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
10) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5b** Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

Full legal names of electric utility or holding company upstream owners	% equity interest
1) EDP Renewables North America LLC	100 %
2) _____	_____ %
3) _____	_____ %
4) _____	_____ %
5) _____	_____ %
6) _____	_____ %
7) _____	_____ %
8) _____	_____ %
9) _____	_____ %
10) _____	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5c** Identify the facility operator

Blue Marmot VII LLC

Energy Input

**6a** Describe the primary energy input: (check one main category and, if applicable, one subcategory)

<input type="checkbox"/> Biomass (specify)	<input checked="" type="checkbox"/> Renewable resources (specify)	<input type="checkbox"/> Geothermal
<input type="checkbox"/> Landfill gas	<input type="checkbox"/> Hydro power - river	<input type="checkbox"/> Fossil fuel (specify)
<input type="checkbox"/> Manure digester gas	<input type="checkbox"/> Hydro power - tidal	<input type="checkbox"/> Coal (not waste)
<input type="checkbox"/> Municipal solid waste	<input type="checkbox"/> Hydro power - wave	<input type="checkbox"/> Fuel oil/diesel
<input type="checkbox"/> Sewage digester gas	<input checked="" type="checkbox"/> Solar - photovoltaic	<input type="checkbox"/> Natural gas (not waste)
<input type="checkbox"/> Wood	<input type="checkbox"/> Solar - thermal	<input type="checkbox"/> Other fossil fuel (describe on page 19)
<input type="checkbox"/> Other biomass (describe on page 19)	<input type="checkbox"/> Wind	<input type="checkbox"/> Other (describe on page 19)
<input type="checkbox"/> Waste (specify type below in line 6b)	<input type="checkbox"/> Other renewable resource (describe on page 19)	

**6b** If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- Anthracite culm produced prior to July 23, 1985
- Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- Materials that a government agency has certified for disposal by combustion (describe on page 19)
- Heat from exothermic reactions (describe on page 19)
- Residual heat (describe on page 19)
- Used rubber tires
- Plastic materials
- Refinery off-gas
- Petroleum coke

Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

**6c** Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information	Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.	
	<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	10,000 kW
	<b>7b</b> Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	5 kW
	<b>7c</b> Electrical losses in interconnection transformers	102.5 kW
	<b>7d</b> Electrical losses in AC/DC conversion equipment, if any	10 kW
	<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	41 kW
	<b>7f</b> Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	158.5 kW
	<b>7g</b> Maximum net power production capacity = 7a - 7f	9,841.5 kW
	<p><b>7h</b> Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.</p> <p>The facility will be a solar PV plant consisting of 38,715 polycrystalline modules of nominal 335W rating each. Total plant rating will be 12.970 MWdc/10MWac. Modules will be mounted to single-axis trackers.</p> <p>Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.</p> <p>The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 6.5 miles to the PacifiCorp Mile-Hi Substation.</p> <p>Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.</p> <p>The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.</p>	

### Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).																
	<b>8a</b> Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Check here if no such facilities exist. <input checked="" type="checkbox"/>																
	<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:35%; text-align:center;">Facility location (city or county, state)</th> <th style="width:15%; text-align:center;">Root docket # (if any)</th> <th style="width:30%; text-align:center;">Common owner(s)</th> <th style="width:20%; text-align:center;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td style="text-align:center;">QF -</td> <td>_____</td> <td style="text-align:right;">kW</td> </tr> <tr> <td>2) _____</td> <td style="text-align:center;">QF -</td> <td>_____</td> <td style="text-align:right;">kW</td> </tr> <tr> <td>3) _____</td> <td style="text-align:center;">QF -</td> <td>_____</td> <td style="text-align:right;">kW</td> </tr> </tbody> </table>	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF -	_____	kW	2) _____	QF -	_____	kW	3) _____	QF -	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1) _____	QF -	_____	kW													
	2) _____	QF -	_____	kW													
3) _____	QF -	_____	kW														
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed																	
<b>8b</b> The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? <input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)																	
<b>8c</b> Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994?    Yes <input type="checkbox"/> No <input type="checkbox"/>																	
<b>8d</b> Did construction of the facility commence on or before December 31, 1999?    Yes <input type="checkbox"/> No <input type="checkbox"/>																	
<b>8e</b> If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction?    Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.																	
Certification of Compliance with Fuel Use Requirements	Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																
	<b>9a</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: <input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.																
	<b>9b</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: <input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																

### Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.	
	<b>10a</b> What type(s) of cogeneration technology does the facility represent? (check all that apply)	
	<input type="checkbox"/> Topping-cycle cogeneration	<input type="checkbox"/> Bottoming-cycle cogeneration
	<b>10b</b> To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.	
	Check to certify compliance with indicated requirement	
	Requirement	
	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.
<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.	
<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).	
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.	
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.	
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.	

EPAAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

**11a** Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes  No

**11b** Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes  No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

**11c** With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

**11d** Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

**11e** Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

**11f** Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

## EPC Act 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPC Act 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPC Act 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPC Act 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2)*.

<b>11g</b> Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
<b>11h</b> Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
<b>11i</b> Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = $100 * 11g / (11g + 11h)$	0 %

**11j** Is the response in line 11i greater than or equal to 50 percent?

- Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.
- 

- No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPC Act 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF)), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.
-



### Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>			
	<p><b>12a</b> Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows.</p>			
		<p>Name of entity (thermal host) taking thermal output</p>	<p>Thermal host's relationship to facility; Thermal host's use of thermal output</p>	<p>Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)</p>
	1)		Select thermal host's relationship to facility	
			Select thermal host's use of thermal output	Btu/h
	2)		Select thermal host's relationship to facility	
			Select thermal host's use of thermal output	Btu/h
	3)		Select thermal host's relationship to facility	
			Select thermal host's use of thermal output	Btu/h
	4)		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h	
5)		Select thermal host's relationship to facility		
		Select thermal host's use of thermal output	Btu/h	
6)		Select thermal host's relationship to facility		
		Select thermal host's use of thermal output	Btu/h	
<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>				
<p><b>12b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>				

Topping-Cycle Operating and Efficiency Value Calculation	<p>Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.</p>	
	13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
	13b Indicate the annual average rate of net electrical energy output	kW
	13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
	13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
	13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
	13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
	13g Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
	13h Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %
	<p>13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?</p> <p><input type="checkbox"/> Yes (complies with operating standard)      <input type="checkbox"/> No (does not comply with operating standard)</p>	
	<p>13j Did installation of the facility in its current form commence on or after March 13, 1980?</p> <p><input type="checkbox"/> Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.</p> <p><input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.</p>	
	<p>13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:</p> <p><input type="checkbox"/> Yes (complies with efficiency standard)      <input type="checkbox"/> No (does not comply with efficiency standard)</p>	
	<p>13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:</p> <p><input type="checkbox"/> Yes (complies with efficiency standard)      <input type="checkbox"/> No (does not comply with efficiency standard)</p>	

### Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output	The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.		
	<b>14a</b> Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows.		
	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
	1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
	2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
	3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
<b>14b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.			

<b>Bottoming-Cycle Operating and Efficiency Value Calculation</b>	<p>Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).</p>	
	<p><b>15a</b> Did installation of the facility in its current form commence on or after March 13, 1980?</p> <p><input type="checkbox"/> Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.</p> <p><input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.</p>	
	<p><b>15b</b> Indicate the annual average rate of net electrical energy output</p>	kW
	<p><b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h</p>	0 Btu/h
	<p><b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)</p>	hp
	<p><b>15e</b> Multiply line 15d by 2,544 to convert from hp to Btu/h</p>	0 Btu/h
	<p><b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil</p>	Btu/h
	<p><b>15g</b> Bottoming-cycle efficiency value = <math>100 * (15c + 15e) / 15f</math></p>	0 %
	<p><b>15h</b> Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:</p> <p><input type="checkbox"/> Yes (complies with efficiency standard)      <input type="checkbox"/> No (does not comply with efficiency standard)</p>	

### Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
  - The person on whose behalf the filing is made
  - An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
  - An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
  - A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
- He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
- He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Leslie A. Freiman	808 Travis Street #700 Houston, TX 77002	12/21/2016

Audit Notes
Commission Staff Use Only: <input type="checkbox"/>

## Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

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EXHIBIT C  
START-UP TESTING

VISUAL AND MECHANICAL INSPECTIONS

INVERTER COMMISSIONING

ELECTRICAL OPERATION TESTS

SYSTEM MONITORING VERIFICATION

TRACKER VERIFICATION

INFRARED SCANS

BLOCK TESTING

72-HOUR FUNCTIONAL TEST

GRID MATCH TEST

POWER CHARACTERIZATION

REVENUE METER VERIFICATION

REACTIVE POWER TEST

POWER OUTPUT TEST - PLANT PERFORMANCE AND ACCEPTANCE

EXHIBIT D  
SCHEDULE



**SCHEDULE 201  
QUALIFYING FACILITY 10 MW or LESS  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

**APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

**POWER PURCHASE INFORMATION**

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**PPA**

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

**SCHEDULE 201 (Continued)**

PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

**STANDARD PPA (Nameplate capacity of 10 MW or less)**

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

**GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA**

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller.

Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.

**SCHEDULE 201 (Continued)****OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

**BASIS FOR POWER PURCHASE PRICE****AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

**ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

**OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 93% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.

**SCHEDULE 201 (Continued)**

**PRICING FOR STANDARD PPA**

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour. Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed.

The Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any PPA year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard PPA; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. The Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

**1) Standard Fixed Price Option**

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 5%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 5%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1a												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	67.43	67.34	65.41	64.69	64.41	64.50	64.61	64.73	64.84	65.48	68.60	68.72
2022	69.01	68.84	68.08	67.13	66.81	66.91	67.04	67.17	67.29	67.83	71.38	71.70
2023	71.95	71.76	70.39	69.19	69.07	69.18	69.31	69.45	69.58	70.12	73.56	73.70
2024	74.17	73.85	72.67	71.29	71.10	71.21	71.35	71.50	71.63	72.20	76.49	76.64
2025	77.19	77.30	75.84	74.88	75.02	75.14	75.30	75.47	75.62	75.80	82.57	82.89
2026	85.18	85.30	82.77	81.28	81.22	81.36	81.56	81.74	81.90	82.36	89.02	88.72
2027	86.85	86.76	85.14	83.12	82.89	83.03	83.00	83.32	83.46	83.97	91.39	91.15
2028	89.32	89.31	87.96	85.46	85.30	85.46	85.31	85.64	85.95	86.65	94.66	93.55
2029	94.06	93.99	91.23	88.74	87.97	88.15	87.71	88.06	88.61	89.34	98.37	98.11
2030	97.60	97.54	94.87	92.62	92.40	92.57	92.61	93.00	93.12	93.68	102.42	102.70
2031	99.56	99.50	96.78	94.48	94.26	94.43	94.47	94.87	94.99	95.56	104.47	104.76
2032	103.85	103.80	100.57	98.18	97.96	98.15	98.23	98.65	98.76	99.36	108.86	109.41
2033	106.56	106.51	103.17	100.72	100.50	100.69	100.78	101.21	101.32	101.93	111.67	112.26
2034	109.12	109.07	105.60	103.10	102.88	103.08	103.17	103.61	103.72	104.35	114.33	114.96
2035	111.55	111.51	107.91	105.35	105.12	105.33	105.43	105.89	105.99	106.63	116.87	117.54
2036	113.85	113.80	110.14	107.53	107.30	107.51	107.60	108.07	108.18	108.83	119.27	119.95
2037	116.50	116.45	112.72	110.06	109.82	110.04	110.14	110.61	110.73	111.39	122.03	122.73
2038	119.08	119.03	115.22	112.51	112.27	112.49	112.59	113.08	113.19	113.87	124.71	125.42
2039	121.47	121.42	117.54	114.77	114.53	114.75	114.85	115.35	115.47	116.15	127.21	127.93
2040	124.25	124.20	120.25	117.43	117.18	117.41	117.51	118.02	118.14	118.84	130.10	130.85
2041	126.72	126.67	122.64	119.76	119.51	119.74	119.85	120.36	120.49	121.20	132.68	133.44

Effective for service  
on and after October 12, 2016

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1b												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2a												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.37	18.62	11.77	10.87	8.62	13.12	20.12	23.12	21.12	19.87	22.87	27.62
2017	26.05	24.30	20.80	17.05	15.55	16.55	24.05	27.05	25.55	23.80	24.80	29.80
2018	27.72	27.12	24.12	18.14	17.29	17.29	25.94	29.38	26.64	24.62	27.87	31.72
2019	29.87	27.88	23.90	19.63	17.93	19.06	27.60	31.01	29.30	27.31	28.45	34.14
2020	31.59	29.49	25.30	20.80	19.00	20.20	29.19	32.79	30.99	28.89	30.09	36.09
2021	30.68	30.59	28.66	27.94	27.66	27.75	27.87	27.99	28.10	28.74	31.86	31.98
2022	31.56	31.39	30.62	29.68	29.36	29.46	29.59	29.72	29.84	30.38	33.93	34.25
2023	33.67	33.48	32.11	30.91	30.79	30.90	31.03	31.17	31.30	31.84	35.28	35.42
2024	35.38	35.06	33.88	32.49	32.30	32.42	32.56	32.70	32.84	33.40	37.70	37.85
2025	37.53	37.64	36.18	35.22	35.36	35.48	35.64	35.81	35.96	36.14	42.91	43.23
2026	44.75	44.87	42.35	40.86	40.79	40.94	41.13	41.32	41.48	41.94	48.60	48.29
2027	45.65	45.56	43.93	41.91	41.68	41.82	41.79	42.12	42.26	42.76	50.18	49.94
2028	47.32	47.31	45.96	43.46	43.30	43.46	43.31	43.64	43.95	44.65	52.66	51.55
2029	51.25	51.18	48.43	45.94	45.16	45.34	44.90	45.25	45.80	46.53	55.57	55.30
2030	53.96	53.90	51.23	48.98	48.76	48.93	48.97	49.36	49.48	50.04	58.78	59.06
2031	55.08	55.02	52.29	50.00	49.77	49.95	49.99	50.38	50.51	51.08	59.99	60.28
2032	58.77	58.72	55.49	53.10	52.88	53.07	53.15	53.57	53.68	54.28	63.78	64.33
2033	60.35	60.30	56.96	54.51	54.29	54.49	54.57	55.00	55.11	55.72	65.46	66.05
2034	61.88	61.83	58.36	55.86	55.63	55.84	55.93	56.37	56.48	57.10	67.09	67.72
2035	63.54	63.49	59.90	57.34	57.11	57.32	57.42	57.87	57.98	58.62	68.86	69.53
2036	65.04	65.00	61.33	58.72	58.49	58.70	58.80	59.27	59.38	60.03	70.46	71.15
2037	66.61	66.57	62.83	60.17	59.93	60.15	60.25	60.73	60.84	61.50	72.14	72.84
2038	68.23	68.18	64.37	61.66	61.42	61.64	61.74	62.23	62.34	63.02	73.86	74.57
2039	69.64	69.59	65.71	62.94	62.70	62.92	63.03	63.52	63.64	64.33	75.38	76.11
2040	71.42	71.37	67.41	64.60	64.35	64.58	64.68	65.18	65.30	66.00	77.27	78.01
2041	72.87	72.82	68.79	65.92	65.66	65.90	66.00	66.52	66.64	67.35	78.84	79.59

Effective for service  
on and after October 12, 2016



**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

<b>TABLE 2b</b>												
<b>Avoided Costs</b>												
<b>Standard Fixed Price Option for Wind QF</b>												
<b>Off-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2016	21.77	16.87	10.12	7.57	2.47	6.27	11.87	17.12	17.12	17.37	19.62	22.87
2017	21.80	20.30	18.30	11.80	9.80	8.80	15.80	21.30	21.55	20.80	21.80	24.05
2018	22.18	24.13	21.57	15.47	10.69	8.55	15.72	23.05	22.94	21.36	24.21	26.63
2019	25.77	24.02	21.68	14.08	11.74	10.57	18.76	25.19	25.48	24.60	25.77	28.40
2020	27.60	25.73	23.23	15.13	12.64	11.39	20.12	26.97	27.28	26.35	27.60	30.40
2021	24.65	24.56	22.63	21.92	21.64	21.72	21.84	21.96	22.07	22.71	25.83	25.95
2022	25.42	25.25	24.48	23.54	23.22	23.32	23.44	23.57	23.69	24.23	27.78	28.11
2023	27.39	27.20	25.82	24.62	24.51	24.61	24.75	24.88	25.01	25.56	28.99	29.13
2024	29.01	28.69	27.51	26.13	25.94	26.05	26.19	26.34	26.48	27.04	31.33	31.49
2025	31.02	31.13	29.68	28.71	28.86	28.97	29.14	29.30	29.45	29.63	36.41	36.72
2026	38.12	38.24	35.71	34.22	34.16	34.30	34.50	34.69	34.85	35.30	41.97	41.66
2027	38.89	38.80	37.17	35.15	34.92	35.06	35.03	35.35	35.50	36.00	43.42	43.18
2028	40.43	40.42	39.07	36.57	36.40	36.57	36.42	36.75	37.06	37.76	45.77	44.65
2029	44.23	44.16	41.40	38.91	38.14	38.32	37.88	38.23	38.78	39.51	48.54	48.28
2030	46.80	46.74	44.07	41.82	41.60	41.77	41.81	42.20	42.32	42.88	51.62	51.90
2031	47.78	47.72	44.99	42.70	42.47	42.65	42.69	43.09	43.21	43.78	52.69	52.98
2032	51.38	51.33	48.10	45.71	45.49	45.68	45.76	46.18	46.29	46.89	56.39	56.94
2033	52.77	52.72	49.38	46.93	46.71	46.90	46.99	47.42	47.53	48.14	57.88	58.47
2034	54.12	54.08	50.61	48.10	47.88	48.08	48.17	48.62	48.73	49.35	59.34	59.97
2035	55.66	55.62	52.02	49.46	49.23	49.44	49.54	50.00	50.10	50.74	60.98	61.65
2036	57.04	56.99	53.33	50.72	50.49	50.70	50.80	51.26	51.37	52.02	62.46	63.15
2037	58.43	58.38	54.65	51.99	51.75	51.97	52.06	52.54	52.65	53.32	63.95	64.65
2038	59.88	59.84	56.03	53.32	53.08	53.30	53.40	53.88	54.00	54.67	65.52	66.23
2039	61.13	61.08	57.20	54.44	54.19	54.42	54.52	55.02	55.13	55.82	66.87	67.60
2040	62.75	62.70	58.75	55.93	55.68	55.91	56.01	56.52	56.64	57.34	68.60	69.34
2041	64.04	63.98	59.95	57.08	56.83	57.06	57.17	57.68	57.80	58.52	70.00	70.76

Effective for service  
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**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3a												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	33.98	33.89	31.96	31.24	30.96	31.05	31.16	31.28	31.39	32.03	35.15	35.27
2022	34.92	34.75	33.98	33.04	32.72	32.82	32.94	33.08	33.20	33.74	37.28	37.61
2023	37.09	36.90	35.52	34.32	34.21	34.31	34.44	34.58	34.71	35.26	38.69	38.83
2024	38.86	38.54	37.36	35.98	35.79	35.90	36.04	36.19	36.32	36.88	41.18	41.33
2025	41.08	41.19	39.73	38.77	38.92	39.03	39.19	39.36	39.51	39.69	46.46	46.78
2026	48.37	48.49	45.97	44.48	44.42	44.56	44.75	44.94	45.10	45.56	52.22	51.91
2027	49.34	49.25	47.62	45.61	45.38	45.51	45.48	45.81	45.95	46.45	53.87	53.63
2028	51.08	51.07	49.72	47.22	47.06	47.22	47.07	47.40	47.72	48.41	56.42	55.31
2029	55.08	55.01	52.26	49.77	48.99	49.17	48.73	49.08	49.63	50.36	59.40	59.13
2030	57.87	57.81	55.14	52.89	52.67	52.84	52.88	53.27	53.39	53.95	62.69	62.97
2031	59.07	59.00	56.28	53.98	53.76	53.93	53.98	54.37	54.49	55.06	63.98	64.26
2032	62.83	62.78	59.56	57.16	56.94	57.13	57.21	57.64	57.75	58.34	67.85	68.39
2033	64.49	64.44	61.09	58.64	58.42	58.62	58.70	59.14	59.25	59.86	69.60	70.18
2034	66.10	66.05	62.58	60.08	59.85	60.05	60.14	60.59	60.70	61.32	71.31	71.94
2035	67.84	67.79	64.20	61.64	61.41	61.62	61.71	62.17	62.28	62.92	73.16	73.83
2036	69.43	69.38	65.72	63.11	62.88	63.09	63.19	63.66	63.77	64.42	74.85	75.54
2037	71.08	71.04	67.30	64.64	64.40	64.62	64.72	65.20	65.31	65.97	76.61	77.31
2038	72.78	72.73	68.93	66.22	65.98	66.20	66.30	66.78	66.90	67.57	78.42	79.13
2039	74.28	74.23	70.35	67.58	67.34	67.56	67.67	68.16	68.28	68.97	80.02	80.75
2040	76.15	76.10	72.15	69.33	69.08	69.31	69.42	69.92	70.04	70.74	82.01	82.75
2041	77.69	77.64	73.61	70.74	70.48	70.72	70.82	71.34	71.46	72.17	83.66	84.41

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

## PRICING OPTIONS FOR STANDARD PPA (Continued)

## Standard Fixed Price Option (Continued)

TABLE 3b												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

## PRICING OPTIONS FOR STANDARD PPA (Continued)

**2) Renewable Fixed Price Option**

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 5%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 5%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	115.34	115.32	114.56	115.02	118.22	117.33	117.01	116.89	115.60	114.63	115.47	114.45
2021	117.94	118.18	116.67	117.75	120.59	119.83	119.26	119.77	118.26	117.25	118.55	117.22
2022	120.48	120.36	118.46	120.19	123.17	122.14	121.69	121.65	120.55	119.55	120.98	119.53
2023	123.26	122.83	120.85	122.92	125.37	124.64	124.29	123.92	123.08	121.92	123.63	122.53
2024	124.86	125.01	123.06	125.07	127.80	126.78	126.67	126.41	126.22	123.83	124.83	124.96
2025	127.73	128.05	125.86	128.21	131.66	130.48	129.53	129.66	128.84	126.59	127.76	127.41
2026	130.91	130.58	129.12	131.30	135.76	132.28	132.28	132.69	132.40	129.34	131.17	130.23
2027	133.47	133.03	131.38	133.50	139.48	134.88	134.51	135.95	134.79	131.96	133.26	132.78
2028	135.95	134.91	132.89	136.24	141.79	136.93	137.64	137.65	136.77	134.76	135.84	135.06
2029	138.81	138.57	135.91	139.29	149.30	140.74	140.82	140.82	140.86	137.50	138.32	138.21
2030	141.68	141.39	139.11	142.00	153.18	145.20	143.05	142.93	144.31	140.18	140.75	140.79
2031	144.29	143.79	142.17	145.52	156.10	149.27	145.71	146.65	146.86	143.04	144.15	143.71
2032	146.51	146.00	144.35	147.76	158.51	151.58	147.95	148.91	149.13	145.24	146.37	145.92
2033	149.91	149.40	147.71	151.19	162.18	155.09	151.39	152.37	152.59	148.62	149.77	149.31
2034	152.96	152.43	150.71	154.26	165.46	158.24	154.46	155.46	155.68	151.64	152.81	152.35
2035	155.76	155.22	153.46	157.08	168.50	161.14	157.29	158.31	158.54	154.41	155.60	155.13
2036	158.31	157.76	155.97	159.65	171.26	163.78	159.86	160.90	161.13	156.94	158.15	157.67
2037	161.83	161.27	159.44	163.20	175.07	167.42	163.42	164.48	164.71	160.43	161.67	161.18
2038	164.95	164.38	162.52	166.35	178.45	170.65	166.57	167.65	167.89	163.52	164.79	164.29
2039	168.13	167.55	165.66	169.56	181.89	173.94	169.79	170.89	171.13	166.68	167.97	167.46
2040	171.05	170.46	168.54	172.51	185.04	176.96	172.74	173.85	174.10	169.58	170.89	170.37
2041	174.69	174.08	172.11	176.17	188.98	180.72	176.40	177.55	177.80	173.18	174.52	173.99

Effective for service  
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**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

Effective for service  
on and after October 12, 2016

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.52	18.77	11.92	11.02	8.77	13.27	20.27	23.27	21.27	20.02	23.02	27.77
2017	26.20	24.45	20.95	17.20	15.70	16.70	24.20	27.20	25.70	23.95	24.95	29.95
2018	27.87	27.27	24.27	18.29	17.44	17.44	26.09	29.53	26.79	24.77	28.02	31.87
2019	30.03	28.04	24.06	19.79	18.09	19.22	27.76	31.17	29.46	27.47	28.61	34.30
2020	75.38	75.37	74.61	75.06	78.26	77.37	77.05	76.93	75.64	74.67	75.51	74.49
2021	77.10	77.33	75.83	76.90	79.75	78.99	78.41	78.92	77.41	76.40	77.70	76.38
2022	78.85	78.72	76.82	78.56	81.53	80.51	80.05	80.02	78.92	77.92	79.34	77.90
2023	80.71	80.27	78.29	80.37	82.82	82.08	81.73	81.37	80.53	79.36	81.08	79.97
2024	81.74	81.89	79.93	81.95	84.68	83.66	83.55	83.28	83.10	80.71	81.71	81.84
2025	83.64	83.97	81.78	84.13	87.57	86.40	85.44	85.57	84.75	82.51	83.68	83.32
2026	85.97	85.64	84.18	86.37	90.82	87.34	87.34	87.75	87.46	84.40	86.23	85.29
2027	87.67	87.23	85.57	87.69	93.67	89.07	88.71	90.15	88.99	86.16	87.45	86.98
2028	89.26	88.22	86.20	89.55	95.10	90.24	90.95	90.96	90.08	88.07	89.15	88.37
2029	91.22	90.98	88.32	91.70	101.72	93.16	93.23	93.23	93.28	89.92	90.73	90.62
2030	93.17	92.88	90.60	93.49	104.67	96.69	94.54	94.42	95.80	91.67	92.24	92.28
2031	94.84	94.34	92.72	96.07	106.65	99.82	96.26	97.20	97.42	93.59	94.70	94.26
2032	96.40	95.90	94.24	97.65	108.40	101.47	97.85	98.80	99.02	95.13	96.26	95.82
2033	98.55	98.03	96.34	99.82	110.81	103.72	100.02	101.00	101.22	97.25	98.40	97.95
2034	100.44	99.91	98.19	101.74	112.94	105.72	101.94	102.94	103.17	99.12	100.29	99.83
2035	102.38	101.85	100.09	103.71	115.13	107.76	103.92	104.93	105.16	101.04	102.23	101.76
2036	104.06	103.51	101.72	105.40	117.01	109.53	105.61	106.65	106.88	102.69	103.90	103.42
2037	106.37	105.81	103.99	107.74	119.61	111.96	107.96	109.02	109.26	104.97	106.21	105.72
2038	108.42	107.86	105.99	109.82	121.92	114.12	110.05	111.12	111.37	107.00	108.26	107.76
2039	110.52	109.94	108.04	111.95	124.27	116.33	112.17	113.27	113.52	109.07	110.36	109.85
2040	112.32	111.73	109.81	113.77	126.31	118.23	114.00	115.12	115.37	110.85	112.16	111.64
2041	114.83	114.23	112.26	116.31	129.12	120.86	116.55	117.69	117.95	113.32	114.66	114.13

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.92	17.02	10.27	7.72	2.62	6.42	12.02	17.27	17.27	17.52	19.77	23.02
2017	21.95	20.45	18.45	11.95	9.95	8.95	15.95	21.45	21.70	20.95	21.95	24.20
2018	22.33	24.28	21.72	15.62	10.84	8.70	15.87	23.20	23.09	21.51	24.36	26.78
2019	25.93	24.18	21.84	14.24	11.90	10.73	18.92	25.35	25.64	24.76	25.93	28.56
2020	58.61	58.87	60.41	59.16	55.77	56.01	56.30	57.46	58.37	59.59	59.40	59.84
2021	60.70	59.92	61.62	60.25	57.35	57.39	58.04	58.39	59.55	61.59	59.15	60.86
2022	61.54	61.21	63.46	61.18	58.14	58.51	60.02	59.04	60.69	62.73	60.11	61.98
2023	62.31	62.36	64.71	62.89	58.45	59.62	61.01	60.46	61.75	64.02	60.99	63.24
2024	62.78	62.84	66.00	62.62	58.71	61.45	60.28	60.65	62.15	64.21	62.95	63.58
2025	64.06	64.04	67.38	63.52	58.61	61.72	61.56	62.56	62.67	65.63	65.12	64.50
2026	64.30	65.20	67.63	63.91	59.20	62.57	62.40	63.10	62.40	66.47	65.20	65.24
2027	66.57	66.55	68.39	65.60	58.95	63.71	64.05	63.42	63.83	68.48	65.93	66.44
2028	67.45	68.07	70.58	67.27	58.26	65.15	65.32	63.99	65.37	68.96	66.65	68.58
2029	67.86	68.68	71.87	68.58	53.33	65.37	66.45	65.08	66.61	69.66	68.69	69.76
2030	68.89	69.80	73.34	68.62	52.98	65.87	67.00	67.17	66.98	70.97	70.34	71.21
2031	70.39	71.58	74.28	68.88	54.05	65.55	68.43	68.59	67.04	72.12	71.95	71.19
2032	71.55	72.76	75.50	70.02	54.94	66.62	69.55	69.72	68.14	73.31	73.13	72.36
2033	73.15	74.38	77.19	71.58	56.17	68.11	71.11	71.27	69.66	74.94	74.76	73.98
2034	74.55	75.81	78.67	72.95	57.24	69.42	72.47	72.64	71.00	76.38	76.20	75.40
2035	76.00	77.28	80.19	74.36	58.35	70.76	73.87	74.05	72.37	77.86	77.67	76.86
2036	77.23	78.54	81.50	75.57	59.30	71.91	75.07	75.25	73.55	79.13	78.94	78.11
2037	78.95	80.29	83.31	77.26	60.62	73.51	76.75	76.93	75.19	80.89	80.70	79.85
2038	80.48	81.84	84.92	78.75	61.79	74.93	78.23	78.41	76.64	82.45	82.26	81.39
2039	82.03	83.42	86.56	80.27	62.99	76.38	79.74	79.93	78.12	84.05	83.85	82.96
2040	83.37	84.77	87.97	81.58	64.01	77.62	81.04	81.23	79.39	85.41	85.21	84.31
2041	85.23	86.67	89.94	83.40	65.44	79.36	82.85	83.05	81.17	87.32	87.12	86.20



**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	78.62	78.60	77.84	78.30	81.50	80.60	80.29	80.17	78.88	77.91	78.74	77.73
2021	80.39	80.63	79.12	80.20	83.04	82.28	81.71	82.22	80.71	79.70	81.00	79.67
2022	82.21	82.08	80.18	81.92	84.89	83.87	83.41	83.38	82.27	81.27	82.70	81.25
2023	84.12	83.69	81.71	83.78	86.23	85.50	85.15	84.78	83.94	82.78	84.50	83.39
2024	85.22	85.37	83.41	85.43	88.16	87.14	87.03	86.76	86.58	84.19	85.19	85.32
2025	87.19	87.52	85.33	87.68	91.12	89.95	88.99	89.12	88.30	86.06	87.23	86.87
2026	89.59	89.26	87.80	89.99	94.44	90.96	90.96	91.37	91.08	88.02	89.85	88.91
2027	91.36	90.92	89.26	91.39	97.36	92.76	92.40	93.84	92.68	89.85	91.14	90.67
2028	93.02	91.98	89.96	93.31	98.86	94.00	94.71	94.72	93.84	91.84	92.91	92.13
2029	95.05	94.81	92.15	95.53	105.55	96.99	97.06	97.06	97.11	93.75	94.56	94.45
2030	97.08	96.79	94.51	97.40	108.58	100.60	98.45	98.33	99.71	95.58	96.15	96.19
2031	98.83	98.33	96.70	100.05	110.63	103.81	100.25	101.19	101.40	97.58	98.69	98.25
2032	100.47	99.96	98.30	101.71	112.47	105.53	101.91	102.87	103.08	99.20	100.32	99.88
2033	102.68	102.16	100.47	103.95	114.95	107.86	104.16	105.14	105.36	101.38	102.53	102.08
2034	104.66	104.13	102.41	105.96	117.16	109.94	106.16	107.16	107.38	103.34	104.51	104.05
2035	106.68	106.15	104.39	108.01	119.43	112.06	108.21	109.23	109.46	105.34	106.53	106.06
2036	108.44	107.90	106.11	109.79	121.40	113.91	110.00	111.04	111.27	107.08	108.29	107.81
2037	110.84	110.28	108.46	112.21	124.08	116.43	112.43	113.49	113.73	109.44	110.68	110.19
2038	112.98	112.41	110.55	114.38	126.47	118.68	114.60	115.68	115.92	111.55	112.82	112.32
2039	115.16	114.58	112.68	116.59	128.92	120.97	116.81	117.91	118.16	113.71	115.00	114.49
2040	117.06	116.47	114.54	118.51	131.04	122.96	118.74	119.86	120.11	115.58	116.89	116.37
2041	119.65	119.05	117.07	121.13	133.94	125.68	121.37	122.51	122.76	118.14	119.48	118.95

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

Effective for service  
on and after October 12, 2016

SCHEDULE 201 (Continued)

WIND INTEGRATION

TABLE 7	
Wind Integration	
Year	Cost
2015	3.77
2016	3.84
2017	3.91
2018	3.99
2019	4.07
2020	4.15
2021	4.23
2022	4.31
2023	4.39
2024	4.47
2025	4.56
2026	4.65
2027	4.74
2028	4.83
2029	4.92
2030	5.02
2031	5.12
2032	5.21
2033	5.31
2034	5.42
2035	5.52
2036	5.63
2037	5.74
2038	5.85
2039	5.96
2040	6.08

**SCHEDULE 201 (Continued)**

**MONTHLY SERVICE CHARGE**

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

**INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- 2) Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

**TRANSMISSION AGREEMENTS**

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

**INTERCONNECTION REQUIREMENTS**

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

**SCHEDULE 201 (Continued)**

**INTERCONNECTION REQUIREMENTS (Continued)**

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA**

A QF will be eligible to receive pricing under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW. A Community-Based or Family-Owned QF is exempt from these restrictions.

**Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**SCHEDULE 201 (Continued)**

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA (Continued)**

**Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for pricing under the Standard PPA is sought.

**Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

**OTHER DEFINITIONS**

**Mid-C Index Price**

As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for Average

**SCHEDULE 201 (Continued)**

OTHER DEFINITIONS (Continued)

On-Peak Power and Average Off-Peak Power found on the following website: <https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

**Definition of RPS Attributes**

As used in this schedule, RPS Attributes means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

**Definition of Environmental Attributes**

As used in this schedule, Environmental Attributes shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

**Definition of Resource Sufficiency Period**

This is the period from the current year through 2020.

**Definition of Resource Deficiency Period**

This is the period from 2021 through 2034.

**Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2019.

**Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

**SCHEDULE 201 (Concluded)**

**DISPUTE RESOLUTION**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to pricing under the Standard PPA.

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

**SPECIAL CONDITIONS**

1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

**TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years.



**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/904**

**BLUE MARMOT VIII POWER PURCHASE AGREEMENT**

**January 31, 2020**

## STANDARD RENEWABLE OFF-SYSTEM VARIABLE POWER PURCHASE

### AGREEMENT

THIS AGREEMENT is between **Blue Marmot VIII LLC** ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties") and is effective upon execution by both Parties ("Effective Date").

### RECITALS

Seller intends to construct, own, operate and maintain a **Solar** facility for the generation of electric power located in **Lake County, W -120.556, N 42.197** County, **Oregon** with a Nameplate Capacity Rating of **10000** kilowatt ("kW"), as further described in Exhibit A ("Facility"); and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.21, below, from the Facility in accordance with the terms and conditions of this Agreement.

### AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

#### SECTION 1: DEFINITIONS

When used in this Agreement, the following terms shall have the following meanings:

1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.

1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year)

1.3. "Billing Period" means from the start of the first day of each calendar month to the end of the last day of each calendar month.

1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:

1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed

Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);

1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.36;

1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement and was continuously mechanically available for operation for a minimum of 120 hours. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the mechanical availability of the Facility is interrupted during this initial testing period or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period;

1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;

1.5.5. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;

1.5.6. PGE has received a copy of the executed Generation Interconnection and Transmission Agreements.

1.6. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.

1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final Contract Year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.

1.8. "Effective Date" has the meaning set forth in Section 2.1.

1.9. "Environmental Attributes" shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), and other greenhouse gasses (GHGs) that have been determined by the United Nations

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Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

1.10. "Facility" has the meaning set forth in the Recitals.

1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with **PacifiCorp** electric system.

1.12. "Generation Unit" means each separate electrical generator that contributes toward Nameplate Capacity Rating included in Exhibit A. For solar facilities, a generating unit is a complete solar electrical generation system within the Facility that is able to generate and deliver energy to the Point of Delivery independent of other Generation Units within the same Facility.

1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.

1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

1.15. "Lost Energy" means "Lost Energy" means ((the Guarantee of Mechanical Availability as set forth in 3.1.10 / MAP) X Net Output for a Calendar Year) – Net Output for the Calendar Year. Lost Energy shall be zero unless the result of the calculation in this subsection results in a positive number.

1.16. "Lost Energy Value" means Lost Energy X the excess of the annual time-weighted average Mid-C Index Price for On Peak Hours and Off Peak Hours over the time weighted average Contract Price for On Peak and Off Peak Hours for the corresponding time period (provided that such excess shall not exceed the Contract Price and further provided that Lost Energy is deemed to be zero prior to reaching the Commercial Operation Date) plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery (For Start-Up Lost Energy Value See 1.35).

1.17. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

$$\text{MAP} = 100 \times (\text{Operational Hours}) / (\text{Base Hours} \times \text{Number of Units})$$

1.18. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") index price for the bilateral OTC market for energy at the Mid-C Physical for Average On Peak Power and Average Off Peak Power found on the following website:

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<https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

1.19. "Nameplate Capacity Rating" means the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW.

1.20. "Net Dependable Capacity" means the maximum capacity the Facility can sustain over a specified period modified for seasonal limitations, if any, and reduced by the capacity required for station service or auxiliaries.

1.21. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.

1.22. "Number of Units" means the number of Generation Units in the Facility as specified in Exhibit A.

1.23. "Off-Peak Hours" has the meaning provided in the Schedule.

1.24. "On-Peak Hours" has the meaning provided in the Schedule.

1.25. "Operational Hours" for the Facility means the total across all Generation Units of the number of hours each of the Facility's Generation Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, two hundred (200) hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit or Event of Force Majeure, the Operational Hours for a wind farm with five (5) separate two (2) MW turbines would be 43,800 for a Contract Year.

1.26. "Planned Maintenance" means outages scheduled ninety (90) days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.

1.27. "Point of Delivery" means the PGE system.

1.28. "Pre-Commercial Operation Date Minimum Net Output" shall mean, unless such MWh is specifically set forth by Seller in Exhibit A, an amount in MWh equal to seventy-five percent (75%) of Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours – 200 hours (assumed Planned Maintenance)) for each month. If Seller has provided specific expected monthly Net Output amounts for the Facility in Exhibit A, "Pre-Commercial Operation Date Minimum Net Output" shall mean seventy-five percent (75%) X expected net output set forth in Exhibit A for each month.

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1.29. "Prime Rate" means the publicly announced prime rate or reference rate for commercial loans to large businesses with the highest credit rating in the United States in effect from time to time quoted by Citibank, N.A. If a Citibank, N.A. prime rate is not available, the applicable Prime Rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, N.Y., selected by the Party to whom interest based on the prime rate is being paid.

1.30. "Prudent Electrical Practices" means those practices, methods, standards and acts engaged in or approved by a significant portion of the electric power industry in the Western Electricity Coordinating Council that at the relevant time period, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with good business practices, reliability, economy, safety and expedition, and which practices, methods, standards and acts reflect due regard for operation and maintenance standards recommended by applicable equipment suppliers and manufacturers, operational limits, and all applicable laws and regulations. Prudent Electrical Practices are not intended to be limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods and acts generally acceptable or approved by a significant portion of the electric power generation industry in the relevant region, during the relevant period, as described in the immediate preceding sentence.

1.31. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

1.32. "RPS Attributes" means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

1.33. "Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference.

1.34. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance

1.35. "Start-Up Lost Energy Value" means for the period after the date specified in Section 2.2.2 but prior to achievement of the Commercial Operation Date: zero, unless the Net Output is less than the pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable delay period, and the time-weighted average of the delay period's Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater

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than the time-weighted average of the delay period's Contract Price for On-Peak Hours and Off-Peak Hours, in which case Startup Lost Energy Value equals: (pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable period - Net Output for the applicable period) X (the lower of: the time-weighted average of the Contract Price for On-Peak hours and Off-Peak Hours during the applicable period; or (the time-weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours during the applicable period – the time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours during the applicable period)). The time-weighted average in this section will reflect the relative proportions of On-Peak Hours and Off-Peak Hours in each day.

1.36. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.

1.37. "Step-in Rights" means the right of one party to assume an intervening position to satisfy all terms of an agreement in the event the other party fails to perform its obligations under the agreement.

1.38. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.

1.39. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

1.40. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.

1.41. "Transmission Curtailment" means a limitation on Seller's ability to deliver any portion of the scheduled energy to PGE due to the unavailability of transmission to the Point of Delivery (for any reason other than Force Majeure).

1.42. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Mid-C Index Price – Contract Price) X curtailed energy) for periods of Transmission Curtailment.

1.43. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.

1.44. "Transmission Services" means any and all services (including but not limited to ancillary services and control area services) required for the firm transmission and delivery of Energy from the Facility to the Point of Delivery for a term not less than the Term of this Agreement.

References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

SECTION 2: TERM; COMMERCIAL OPERATION DATE

2.1. This Agreement shall become effective upon execution by both Parties ("Effective Date").

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2.2. Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,

2.2.1. By **March 1, 2020** Seller shall begin initial deliveries of Net Output; and

2.2.2. By **March 31, 2020** Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.

2.2.3. Unless the Parties agree in writing that a later Commercial Operation Date is reasonable and necessary, the Commercial Operation Date shall be no more than three (3) years from the Effective Date. PGE will not unreasonably withhold agreement to a Commercial Operation Date that is more than three (3) years from the Effective date if the Seller has demonstrated that a later Commercial Operation Date is reasonable and necessary.

2.3. This Agreement shall terminate on **date 18 years after effective date**, or the date the Agreement is terminated in accordance with Section 8 or 11, whichever is earlier ("Termination Date").

**SECTION 3: REPRESENTATIONS AND WARRANTIES**

3.1. Seller and PGE represent, covenant, and warrant as follows:

3.1.1. Seller warrants it is a **Limited liability company** duly organized under the laws of **Delaware**.

3.1.2. Seller warrants that the execution and delivery of this Agreement does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid order of any court, or any regulatory agency or other body having authority to which Seller is subject.

3.1.3. Seller warrants that the Facility is and shall for the Term of this Agreement continue to be a "Qualifying Facility" ("QF") as that term is defined in the version of 18 C.F.R. Part 292 in effect on the Effective Date. Seller has provided the appropriate QF certification, which may include a Federal Energy Regulatory Commission ("FERC") self-certification to PGE prior to PGE's execution of this Agreement. At any time during the Term of this Agreement, PGE may require Seller to provide PGE with evidence satisfactory to PGE in its reasonable discretion that the Facility continues to qualify as a QF under all applicable requirements.

3.1.4. Seller warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and Seller is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.5. Seller warrants that during the Term of this Agreement, all of Seller's right, title and interest in and to the Facility shall be free and clear of all liens and encumbrances other than liens and encumbrances arising from third-party financing of the Facility other than workers', mechanics', suppliers' or similar liens, or tax liens, in each case arising in the ordinary course of business that are either not yet due and



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payable or that have been released by means of a performance bond acceptable to PGE posted within eight (8) calendar days of the commencement of any proceeding to foreclose the lien.

3.1.6. Seller warrants that it will design and operate the Facility consistent with Prudent Electrical Practices.

3.1.7. Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.

3.1.8. Seller warrants that Net Dependable Capacity of the Facility is **10,000** kW.

3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is **21,950,953** kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.

3.1.10. Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):

3.1.10.1. Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or

3.1.10.2. Ninety percent (90%) beginning in Contract Year three and extending throughout the remainder of the Term.

3.1.10.3. Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.

3.1.10.4. Seller's failure to meet the Guarantee of Mechanical Availability in a Calendar Year shall result in damages payable to PGE by Seller equal to the Lost Energy Value. PGE shall bill Seller for such damages in accordance with Section 7.

3.1.11. Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of **33,750,000** kWh of Net Output during each Contract Year ("Maximum Net Output"). The cost of delivering energy from the Facility to PGE is the sole responsibility of the Seller.

3.1.12. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

3.1.13. PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.14. Seller warrants that the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power

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Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by PGE not more frequently than every 36 months, such documentation and information as may be reasonably required to establish Seller's continued compliance with such Definition. PGE agrees to take reasonable steps to maintain the confidentiality of any portion of the above described documentation and information that the Seller identifies as confidential except PGE will provide all such confidential information to the Commission upon the Commission's request.

3.1.15. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.5) associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050. PGE warrants that it will reasonably cooperate in Seller's efforts to meet such requirements, including, for example serving as the qualified reporting entity for the Facility if the Facility is located in PGE's balancing authority.

SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

4.1. Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.

4.2. PGE shall pay Seller the Contract Price for all delivered Net Output.

4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

4.4. Seller shall provide preschedules for all deliveries of energy hereunder, including identification of receiving and generating control areas, by 9:00:00 PPT on the last business day prior to the scheduled date of delivery. All energy shall be scheduled according to the most current North America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' respective representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the hourly schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of hourly energy schedules for accounting and

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operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. All energy shall be prescheduled according to customary WECC scheduling practices. Seller shall make commercially reasonable efforts to schedule in any hour an amount equal to its expected Net Output for such hour. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records and to imbalance information kept by the Transmission Provider.

4.5. From the start of the Renewable Resource Deficiency Period through the remainder of the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any RPS Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained Environmental Attributes") Seller may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to Seller any of the Seller-Retained Environmental Attributes, and PGE shall not report under such program that such Seller-Retained Environmental Attributes belong to it. With respect to RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

SECTION 5: OPERATION AND CONTROL

5.1. Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.

5.2. Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.

5.3. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best

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efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Net Dependable Capacity). Notwithstanding the foregoing, in the event Seller is not current on construction related financial obligations, Seller shall notify PGE of such delinquency and PGE may, in its discretion, grant an exception to the requirements to provide default security if the QF has negotiated financial arrangements with the construction loan lender that mitigate Seller's financial risk to PGE.

SECTION 7: BILLINGS, COMPUTATIONS AND PAYMENTS

7.1. On or before the thirtieth (30<sup>th</sup>) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement and any other agreement related to the Facility between the Parties or otherwise. On or before the thirtieth (30<sup>th</sup>) day following the end of each Contract Year, PGE shall bill for any Lost Energy Value accrued pursuant to this Agreement.

7.2. Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law.

SECTION 8: DEFAULT, REMEDIES AND TERMINATION

8.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:

8.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.

8.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.

8.1.3. Seller's failure to meet the Guarantee of Mechanical Availability established in Section 3.1.10 for two consecutive Contract Years or Seller's failure to provide any written report required by that section.

8.1.4. If Seller is no longer a Qualifying Facility.

8.1.5. Failure of PGE to make any required payment pursuant to Section 7.1.

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8.1.6. Seller's failure to meet the Commercial Operation Date.

8.2. In the event of a default under Section 8.1.6, PGE may provide Seller with written notice of default. Seller shall have one year in which to cure the default during which time the Seller shall pay PGE damages equal to the Lost Energy Value. If Seller is unable to cure the default, PGE may immediately terminate this Agreement as provided in Section 8.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 8.2.

8.3. In the event of a default hereunder, except as otherwise provided in this Agreement, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, the non-defaulting Party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 8 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

8.4. If this Agreement is terminated as provided in this Section 8, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.

8.5. In the event PGE terminates this Agreement pursuant to this Section 8, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.

8.6. Sections 8.1, 8.4, 8.5, 10, and 19.2 shall survive termination of this Agreement.

SECTION 9: TRANSMISSION CURTAILMENTS

9.1. Seller shall give PGE notice as soon as reasonably practicable of any Transmission Curtailment that is likely to affect Seller's ability to deliver any portion of energy scheduled pursuant to Section 4.4 of this Agreement.

9.2. If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 of this Agreement, Seller shall pay PGE the Transmission Curtailment Replacement Energy Cost for the number of MWh of energy reasonably determined by PGE as the difference between (i) the scheduled energy that would have been delivered to PGE under this Agreement during the period of Transmission Curtailment and (ii) the actual energy, if any, that was delivered to PGE for the period.

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SECTION 10: INDEMNIFICATION AND LIABILITY

10.1. Seller agrees to defend, indemnify and hold harmless PGE, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with Seller's delivery of electric power to PGE or with the facilities at or prior to the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.

10.2. PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with PGE's receipt of electric power from Seller or with the facilities at or after the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.

10.3. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public, nor affect the status of PGE as an independent public utility corporation or Seller as an independent individual or entity.

10.4. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

SECTION 11: INSURANCE

11.1. Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, its directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of

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insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

11.2. Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility. Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

11.3. Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

## SECTION 12: FORCE MAJEURE

12.1. As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect

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the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

12.2. If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:

12.2.1. the non-performing Party, shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and

12.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and

12.2.3. the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.

12.3. No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.

12.4. Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

SECTION 13: SEVERAL OBLIGATIONS

Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or to impose a trust or partnership duty, obligation or liability between the Parties. If Seller includes two or more parties, each such party shall be jointly and severally liable for Seller's obligations under this Agreement.

SECTION 14: CHOICE OF LAW

This Agreement shall be interpreted and enforced in accordance with the laws of the state of Oregon, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.



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In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.

SECTION 16: WAIVER

Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement must be in writing, and such waiver shall not be deemed a waiver with respect to any subsequent default or other matter.

SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party or this Agreement. Seller shall at all times maintain in effect all local, state and federal licenses, permits and other approvals as then may be required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

SECTION 18: SUCCESSORS AND ASSIGNS

This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party.

SECTION 19: ENTIRE AGREEMENT

19.1. This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding PGE's purchase of Net Output from the Facility. No modification of this Agreement shall be effective unless it is in writing and signed by both Parties.

19.2. By executing this Agreement, Seller releases PGE from any third party claims related to the Facility, known or unknown, which may have arisen prior to the Effective Date.

SECTION 20: NOTICES

20.1. All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in person or when deposited in the U.S. Mail, postage prepaid by certified or registered mail and return receipt requested:

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To Seller: **Blue Marmot VIII LLC**  
**c/o EDP Renewables North America LLC; Attention: General**  
**Counsel**  
**808 Travis, Suite 700**  
**Houston, Texas 77002**

with a copy to:

To PGE: Contracts Manager  
QF Contracts, 3WTC0306  
PGE - 121 SW Salmon St.  
Portland, Oregon 97204


20.2 The Parties may change the person to whom such notices are addressed, or their addresses, by providing written notices thereof in accordance with this Section 20.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

\_\_\_\_\_  
PGE

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**Blue Marmot VIII LLC**  
\_\_\_\_\_  
(Name Seller)

By:   
Name: Steve Irvin  
Title: Executive Vice President,  
Western and Central Regions and Mexico  
Date: 4/28/17

  
Bernardo Goarmon  
Executive Vice President, Finance

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EXHIBIT A  
DESCRIPTION OF SELLER'S FACILITY

The facility will be a solar PV plant consisting of 39,324 polycrystalline modules of nominal 335W rating each. Total plant rating will be 13.174MWdc/10MWac. Modules will be mounted to single-axis trackers.

Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.

The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 11.1 miles to the PacifiCorp Mile-Hi Substation.

Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.

The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.

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Note this information is considered representative design information which is to be updated at the time of project construction and is subject to design finalization

Solar Facility Characteristics:

<b>1. Generation</b>	
a. PVSystem (or equivalent) simulation results detail, including but not limited to:	
i. Annual MWh (AC) for the first calendar year of commercial operation	23,931
ii. Annual degradation factor	0.50%
iii. Average 24-hr profile of generation MWh (AC) for each month during the first calendar year	See tab "Generation"
iv. Expected Solar Capacity Factor	27%
v. Maximum annual output (monthly MWh detail)	See tab "Generation"
vi. Loss Diagram	See tab "Generation"
<b>2. Description of Modules:</b>	
a. Module type	Polycrystalline Silicon
b. # of modules	39,324
c. Max power voltage	37.4V
d. Max power current	8.97A
e. Max system voltage	1500V
f. Total DC system size	13,174kW
<b>3. Description of Racking</b>	
a. Racking	
i. Type: (fixed tilt, single-axis tracking, or dual-axis tracking, etc.)	Single-Axis Tracking
ii. Tilt angle (if fixed-tilt)	
iii. Azimuth (default = south-facing)	South-Facing
<b>4. Description of Inverters:</b>	
a. Number of Inverters	5
b. Model	ABB PVS980-58-1818kVA-6
c. Maximum Power (kW)	2910kW DC
d. Operating Voltage (VAC)	600
e. Max. Output Current (A)	1925A
f. Rated DC Voltage	1500
g. Rated DC current	1945
h. Maximum Output (kW)	2000
i. Facility AC Capacity Rating	10.0MW
j. Inverter loading ratio	1.317
k. Facility AC rating	10.0MW
<b>5. Description of transformers</b>	
• Inverter LV-MV	
a. # of transformers	5
b. Model	ABB PadPlus+
c. High Voltage Rating	34,500
d. Low Voltage Rating	600
e. MVA rating	2.0 each, 10.0 total
f. High Voltage connection	Wye-Ground
g. Low voltage connection	Wye
• GSU MV-HV	
a. # of transformers	1
b. Model	ABB 10MVA
c. High Voltage Rating	115,000
d. Low Voltage Rating	34,500
e. MVA rating	10/12.5 ONAF
f. High voltage connection	Wye
g. Low voltage connection	Delta
<b>6. Description of metering, communications, and monitoring</b>	
Meter shall be revenue-grade, located at POI. POI shall be slack bus on the high-side bushing of plant GSU transformer at Mile HI Substation. Revenue meter shall transmit real-time data pulses (instantaneous MW, MVAR, KWH) to Operator's billing data program. Customer's 35kV switchgear at Mile HI shall be fitted with Customer meter as an alternate data source. Breakers and relays at Customer's PV plant shall connect to operator SCADA system at Mile HI substation via OPGW run on proposed Customer transmission line. Customer shall install line-protection panel, metering equipment and accessories, communication battery system, fiber optic network device and SCADA RTU (Remote Terminal Unit) in existing Mile HI relay/control building to control, monitor, and transmit data to Operator and back to PV plant SCADA.	
<b>7. Description of station service requirements</b>	
15KVA, 240/120V 1-phase service at PV plant substation for Relay/SCADA/O&M building and plant accessory loads. 5KVA, 240/120V 1-phase at Mile HI substation for Customer controls equipment.	
Transmission line shall be new radial line consisting of 34.5KV AC5R, 1-conductor per phase with OPGW on wood poles, approx. 11.1 miles. Line will originate at PV plant 34.5KV main switchgear and terminate at dead-end structure feeding a new 35kV breaker at Mile HI Substation. 35kV breaker will feed new GSU and new 35kV breaker at Mile HI Substation. POI shall be slack bus	

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EXHIBIT B  
REQUIRED FACILITY DOCUMENTS

Sellers Generation Interconnection Agreement

Transmission Service Agreement with PacifiCorp

Lease agreement

Conditional Use Permit issued by Lake County

Any additional permits that might be required by Lake County or Oregon Department of Environmental Quality, including access permit, building and electric permits, and storm water prevention permit

FERC Qualifying Facility self-certification

**EXHIBIT C  
START-UP TESTING**

**VISUAL AND MECHANICAL INSPECTIONS**

**INVERTER COMMISSIONING**

**ELECTRICAL OPERATION TESTS**

**SYSTEM MONITORING VERIFICATION**

**TRACKER VERIFICATION**

**INFRARED SCANS**

**BLOCK TESTING**

**72-HOUR FUNCTIONAL TEST**

**GRID MATCH TEST**

**POWER CHARACTERIZATION**

**REVENUE METER VERIFICATION**

**REACTIVE POWER TEST**

**POWER OUTPUT TEST - PLANT PERFORMANCE AND ACCEPTANCE**

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EXHIBIT D  
SCHEDULE



**SCHEDULE 201  
QUALIFYING FACILITY 10 MW or LESS  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

**APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

**POWER PURCHASE INFORMATION**

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**PPA**

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

**SCHEDULE 201 (Continued)**

PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

**STANDARD PPA (Nameplate capacity of 10 MW or less)**

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

**GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA**

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller. Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.

**SCHEDULE 201 (Continued)**

**OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

**BASIS FOR POWER PURCHASE PRICE**

**AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

**ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

**OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 93% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.

**SCHEDULE 201 (Continued)**

**PRICING FOR STANDARD PPA**

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour. Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed.

The Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any PPA year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard PPA; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. The Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

**1) Standard Fixed Price Option**

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 5%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 5%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD PPA (Continued)**  
**Standard Fixed Price Option (Continued)**

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1a												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	67.43	67.34	65.41	64.69	64.41	64.50	64.61	64.73	64.84	65.48	68.60	68.72
2022	69.01	68.84	68.08	67.13	66.81	66.91	67.04	67.17	67.29	67.83	71.38	71.70
2023	71.95	71.76	70.39	69.19	69.07	69.18	69.31	69.45	69.58	70.12	73.56	73.70
2024	74.17	73.85	72.67	71.29	71.10	71.21	71.35	71.50	71.63	72.20	76.49	76.64
2025	77.19	77.30	75.84	74.88	75.02	75.14	75.30	75.47	75.62	75.80	82.57	82.89
2026	85.18	85.30	82.77	81.28	81.22	81.36	81.56	81.74	81.90	82.36	89.02	88.72
2027	86.85	86.76	85.14	83.12	82.89	83.03	83.00	83.32	83.46	83.97	91.39	91.15
2028	89.32	89.31	87.96	85.46	85.30	85.46	85.31	85.64	85.95	86.65	94.66	93.55
2029	94.06	93.99	91.23	88.74	87.97	88.15	87.71	88.06	88.61	89.34	98.37	98.11
2030	97.60	97.54	94.87	92.62	92.40	92.57	92.61	93.00	93.12	93.68	102.42	102.70
2031	99.56	99.50	96.78	94.48	94.26	94.43	94.47	94.87	94.99	95.56	104.47	104.76
2032	103.85	103.80	100.57	98.18	97.96	98.15	98.23	98.65	98.76	99.36	108.86	109.41
2033	106.56	106.51	103.17	100.72	100.50	100.69	100.78	101.21	101.32	101.93	111.67	112.26
2034	109.12	109.07	105.60	103.10	102.88	103.08	103.17	103.61	103.72	104.35	114.33	114.96
2035	111.55	111.51	107.91	105.35	105.12	105.33	105.43	105.89	105.99	106.63	116.87	117.54
2036	113.85	113.80	110.14	107.53	107.30	107.51	107.60	108.07	108.18	108.83	119.27	119.95
2037	116.50	116.45	112.72	110.06	109.82	110.04	110.14	110.61	110.73	111.39	122.03	122.73
2038	119.08	119.03	115.22	112.51	112.27	112.49	112.59	113.08	113.19	113.87	124.71	125.42
2039	121.47	121.42	117.54	114.77	114.53	114.75	114.85	115.35	115.47	116.15	127.21	127.93
2040	124.25	124.20	120.25	117.43	117.18	117.41	117.51	118.02	118.14	118.84	130.10	130.85
2041	126.72	126.67	122.64	119.76	119.51	119.74	119.85	120.36	120.49	121.20	132.68	133.44

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1b												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

<b>TABLE 2a</b>												
<b>Avoided Costs</b>												
<b>Standard Fixed Price Option for Wind QF</b>												
<b>On-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2016	24.37	18.62	11.77	10.87	8.62	13.12	20.12	23.12	21.12	19.87	22.87	27.62
2017	26.05	24.30	20.80	17.05	15.55	16.55	24.05	27.05	25.55	23.80	24.80	29.80
2018	27.72	27.12	24.12	18.14	17.29	17.29	25.94	29.38	26.64	24.62	27.87	31.72
2019	29.87	27.88	23.90	19.63	17.93	19.06	27.60	31.01	29.30	27.31	28.45	34.14
2020	31.59	29.49	25.30	20.80	19.00	20.20	29.19	32.79	30.99	28.89	30.09	36.09
2021	30.68	30.59	28.66	27.94	27.66	27.75	27.87	27.99	28.10	28.74	31.86	31.98
2022	31.56	31.39	30.62	29.68	29.36	29.46	29.59	29.72	29.84	30.38	33.93	34.25
2023	33.67	33.48	32.11	30.91	30.79	30.90	31.03	31.17	31.30	31.84	35.28	35.42
2024	35.38	35.06	33.88	32.49	32.30	32.42	32.56	32.70	32.84	33.40	37.70	37.85
2025	37.53	37.64	36.18	35.22	35.36	35.48	35.64	35.81	35.96	36.14	42.91	43.23
2026	44.75	44.87	42.35	40.86	40.79	40.94	41.13	41.32	41.48	41.94	48.60	48.29
2027	45.65	45.56	43.93	41.91	41.68	41.82	41.79	42.12	42.26	42.76	50.18	49.94
2028	47.32	47.31	45.96	43.46	43.30	43.46	43.31	43.64	43.95	44.65	52.66	51.55
2029	51.25	51.18	48.43	45.94	45.16	45.34	44.90	45.25	45.80	46.53	55.57	55.30
2030	53.96	53.90	51.23	48.98	48.76	48.93	48.97	49.36	49.48	50.04	58.78	59.06
2031	55.08	55.02	52.29	50.00	49.77	49.95	49.99	50.38	50.51	51.08	59.99	60.28
2032	58.77	58.72	55.49	53.10	52.88	53.07	53.15	53.57	53.68	54.28	63.78	64.33
2033	60.35	60.30	56.96	54.51	54.29	54.49	54.57	55.00	55.11	55.72	65.46	66.05
2034	61.88	61.83	58.36	55.86	55.63	55.84	55.93	56.37	56.48	57.10	67.09	67.72
2035	63.54	63.49	59.90	57.34	57.11	57.32	57.42	57.87	57.98	58.62	68.86	69.53
2036	65.04	65.00	61.33	58.72	58.49	58.70	58.80	59.27	59.38	60.03	70.46	71.15
2037	66.61	66.57	62.83	60.17	59.93	60.15	60.25	60.73	60.84	61.50	72.14	72.84
2038	68.23	68.18	64.37	61.66	61.42	61.64	61.74	62.23	62.34	63.02	73.86	74.57
2039	69.64	69.59	65.71	62.94	62.70	62.92	63.03	63.52	63.64	64.33	75.38	76.11
2040	71.42	71.37	67.41	64.60	64.35	64.58	64.68	65.18	65.30	66.00	77.27	78.01
2041	72.87	72.82	68.79	65.92	65.66	65.90	66.00	66.52	66.64	67.35	78.84	79.59



**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2b												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.77	16.87	10.12	7.57	2.47	6.27	11.87	17.12	17.12	17.37	19.62	22.87
2017	21.80	20.30	18.30	11.80	9.80	8.80	15.80	21.30	21.55	20.80	21.80	24.05
2018	22.18	24.13	21.57	15.47	10.69	8.55	15.72	23.05	22.94	21.36	24.21	26.63
2019	25.77	24.02	21.68	14.08	11.74	10.57	18.76	25.19	25.48	24.60	25.77	28.40
2020	27.60	25.73	23.23	15.13	12.64	11.39	20.12	26.97	27.28	26.35	27.60	30.40
2021	24.65	24.56	22.63	21.92	21.64	21.72	21.84	21.96	22.07	22.71	25.83	25.95
2022	25.42	25.25	24.48	23.54	23.22	23.32	23.44	23.57	23.69	24.23	27.78	28.11
2023	27.39	27.20	25.82	24.62	24.51	24.61	24.75	24.88	25.01	25.56	28.99	29.13
2024	29.01	28.69	27.51	26.13	25.94	26.05	26.19	26.34	26.48	27.04	31.33	31.49
2025	31.02	31.13	29.68	28.71	28.86	28.97	29.14	29.30	29.45	29.63	36.41	36.72
2026	38.12	38.24	35.71	34.22	34.16	34.30	34.50	34.69	34.85	35.30	41.97	41.66
2027	38.89	38.80	37.17	35.15	34.92	35.06	35.03	35.35	35.50	36.00	43.42	43.18
2028	40.43	40.42	39.07	36.57	36.40	36.57	36.42	36.75	37.06	37.76	45.77	44.65
2029	44.23	44.16	41.40	38.91	38.14	38.32	37.88	38.23	38.78	39.51	48.54	48.28
2030	46.80	46.74	44.07	41.82	41.60	41.77	41.81	42.20	42.32	42.88	51.62	51.90
2031	47.78	47.72	44.99	42.70	42.47	42.65	42.69	43.09	43.21	43.78	52.69	52.98
2032	51.38	51.33	48.10	45.71	45.49	45.68	45.76	46.18	46.29	46.89	56.39	56.94
2033	52.77	52.72	49.38	46.93	46.71	46.90	46.99	47.42	47.53	48.14	57.88	58.47
2034	54.12	54.08	50.61	48.10	47.88	48.08	48.17	48.62	48.73	49.35	59.34	59.97
2035	55.66	55.62	52.02	49.46	49.23	49.44	49.54	50.00	50.10	50.74	60.98	61.65
2036	57.04	56.99	53.33	50.72	50.49	50.70	50.80	51.26	51.37	52.02	62.46	63.15
2037	58.43	58.38	54.65	51.99	51.75	51.97	52.06	52.54	52.65	53.32	63.95	64.65
2038	59.88	59.84	56.03	53.32	53.08	53.30	53.40	53.88	54.00	54.67	65.52	66.23
2039	61.13	61.08	57.20	54.44	54.19	54.42	54.52	55.02	55.13	55.82	66.87	67.60
2040	62.75	62.70	58.75	55.93	55.68	55.91	56.01	56.52	56.64	57.34	68.60	69.34
2041	64.04	63.98	59.95	57.08	56.83	57.06	57.17	57.68	57.80	58.52	70.00	70.76

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3a												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	33.98	33.89	31.96	31.24	30.96	31.05	31.16	31.28	31.39	32.03	35.15	35.27
2022	34.92	34.75	33.98	33.04	32.72	32.82	32.94	33.08	33.20	33.74	37.28	37.61
2023	37.09	36.90	35.52	34.32	34.21	34.31	34.44	34.58	34.71	35.26	38.69	38.83
2024	38.86	38.54	37.36	35.98	35.79	35.90	36.04	36.19	36.32	36.88	41.18	41.33
2025	41.08	41.19	39.73	38.77	38.92	39.03	39.19	39.36	39.51	39.69	46.46	46.78
2026	48.37	48.49	45.97	44.48	44.42	44.56	44.75	44.94	45.10	45.56	52.22	51.91
2027	49.34	49.25	47.62	45.61	45.38	45.51	45.48	45.81	45.95	46.45	53.87	53.63
2028	51.08	51.07	49.72	47.22	47.06	47.22	47.07	47.40	47.72	48.41	56.42	55.31
2029	55.08	55.01	52.26	49.77	48.99	49.17	48.73	49.08	49.63	50.36	59.40	59.13
2030	57.87	57.81	55.14	52.89	52.67	52.84	52.88	53.27	53.39	53.95	62.69	62.97
2031	59.07	59.00	56.28	53.98	53.76	53.93	53.98	54.37	54.49	55.06	63.98	64.26
2032	62.83	62.78	59.56	57.16	56.94	57.13	57.21	57.64	57.75	58.34	67.85	68.39
2033	64.49	64.44	61.09	58.64	58.42	58.62	58.70	59.14	59.25	59.86	69.60	70.18
2034	66.10	66.05	62.58	60.08	59.85	60.05	60.14	60.59	60.70	61.32	71.31	71.94
2035	67.84	67.79	64.20	61.64	61.41	61.62	61.71	62.17	62.28	62.92	73.16	73.83
2036	69.43	69.38	65.72	63.11	62.88	63.09	63.19	63.66	63.77	64.42	74.85	75.54
2037	71.08	71.04	67.30	64.64	64.40	64.62	64.72	65.20	65.31	65.97	76.61	77.31
2038	72.78	72.73	68.93	66.22	65.98	66.20	66.30	66.78	66.90	67.57	78.42	79.13
2039	74.28	74.23	70.35	67.58	67.34	67.56	67.67	68.16	68.28	68.97	80.02	80.75
2040	76.15	76.10	72.15	69.33	69.08	69.31	69.42	69.92	70.04	70.74	82.01	82.75
2041	77.69	77.64	73.61	70.74	70.48	70.72	70.82	71.34	71.46	72.17	83.66	84.41

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3b												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD PPA (Continued)**

**2) Renewable Fixed Price Option**

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210.

This option is available for a maximum term of 15 years. Prices will be established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 5%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 5%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	115.34	115.32	114.56	115.02	118.22	117.33	117.01	116.89	115.60	114.63	115.47	114.45
2021	117.94	118.18	116.67	117.75	120.59	119.83	119.26	119.77	118.26	117.25	118.55	117.22
2022	120.48	120.36	118.46	120.19	123.17	122.14	121.69	121.65	120.55	119.55	120.98	119.53
2023	123.26	122.83	120.85	122.92	125.37	124.64	124.29	123.92	123.08	121.92	123.63	122.53
2024	124.86	125.01	123.06	125.07	127.80	126.78	126.67	126.41	126.22	123.83	124.83	124.96
2025	127.73	128.05	125.86	128.21	131.66	130.48	129.53	129.66	128.84	126.59	127.76	127.41
2026	130.91	130.58	129.12	131.30	135.76	132.28	132.28	132.69	132.40	129.34	131.17	130.23
2027	133.47	133.03	131.38	133.50	139.48	134.88	134.51	135.95	134.79	131.96	133.26	132.78
2028	135.95	134.91	132.89	136.24	141.79	136.93	137.64	137.65	136.77	134.76	135.84	135.06
2029	138.81	138.57	135.91	139.29	149.30	140.74	140.82	140.82	140.86	137.50	138.32	138.21
2030	141.68	141.39	139.11	142.00	153.18	145.20	143.05	142.93	144.31	140.18	140.75	140.79
2031	144.29	143.79	142.17	145.52	156.10	149.27	145.71	146.65	146.86	143.04	144.15	143.71
2032	146.51	146.00	144.35	147.76	158.51	151.58	147.95	148.91	149.13	145.24	146.37	145.92
2033	149.91	149.40	147.71	151.19	162.18	155.09	151.39	152.37	152.59	148.62	149.77	149.31
2034	152.96	152.43	150.71	154.26	165.46	158.24	154.46	155.46	155.68	151.64	152.81	152.35
2035	155.76	155.22	153.46	157.08	168.50	161.14	157.29	158.31	158.54	154.41	155.60	155.13
2036	158.31	157.76	155.97	159.65	171.26	163.78	159.86	160.90	161.13	156.94	158.15	157.67
2037	161.83	161.27	159.44	163.20	175.07	167.42	163.42	164.48	164.71	160.43	161.67	161.18
2038	164.95	164.38	162.52	166.35	178.45	170.65	166.57	167.65	167.89	163.52	164.79	164.29
2039	168.13	167.55	165.66	169.56	181.89	173.94	169.79	170.89	171.13	166.68	167.97	167.46
2040	171.05	170.46	168.54	172.51	185.04	176.96	172.74	173.85	174.10	169.58	170.89	170.37
2041	174.69	174.08	172.11	176.17	188.98	180.72	176.40	177.55	177.80	173.18	174.52	173.99

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.52	18.77	11.92	11.02	8.77	13.27	20.27	23.27	21.27	20.02	23.02	27.77
2017	26.20	24.45	20.95	17.20	15.70	16.70	24.20	27.20	25.70	23.95	24.95	29.95
2018	27.87	27.27	24.27	18.29	17.44	17.44	26.09	29.53	26.79	24.77	28.02	31.87
2019	30.03	28.04	24.06	19.79	18.09	19.22	27.76	31.17	29.46	27.47	28.61	34.30
2020	75.38	75.37	74.61	75.06	78.26	77.37	77.05	76.93	75.64	74.67	75.51	74.49
2021	77.10	77.33	75.83	76.90	79.75	78.99	78.41	78.92	77.41	76.40	77.70	76.38
2022	78.85	78.72	76.82	78.56	81.53	80.51	80.05	80.02	78.92	77.92	79.34	77.90
2023	80.71	80.27	78.29	80.37	82.82	82.08	81.73	81.37	80.53	79.36	81.08	79.97
2024	81.74	81.89	79.93	81.95	84.68	83.66	83.55	83.28	83.10	80.71	81.71	81.84
2025	83.64	83.97	81.78	84.13	87.57	86.40	85.44	85.57	84.75	82.51	83.68	83.32
2026	85.97	85.64	84.18	86.37	90.82	87.34	87.34	87.75	87.46	84.40	86.23	85.29
2027	87.67	87.23	85.57	87.69	93.67	89.07	88.71	90.15	88.99	86.16	87.45	86.98
2028	89.26	88.22	86.20	89.55	95.10	90.24	90.95	90.96	90.08	88.07	89.15	88.37
2029	91.22	90.98	88.32	91.70	101.72	93.16	93.23	93.23	93.28	89.92	90.73	90.62
2030	93.17	92.88	90.60	93.49	104.67	96.69	94.54	94.42	95.80	91.67	92.24	92.28
2031	94.84	94.34	92.72	96.07	106.65	99.82	96.26	97.20	97.42	93.59	94.70	94.26
2032	96.40	95.90	94.24	97.65	108.40	101.47	97.85	98.80	99.02	95.13	96.26	95.82
2033	98.55	98.03	96.34	99.82	110.81	103.72	100.02	101.00	101.22	97.25	98.40	97.95
2034	100.44	99.91	98.19	101.74	112.94	105.72	101.94	102.94	103.17	99.12	100.29	99.83
2035	102.38	101.85	100.09	103.71	115.13	107.76	103.92	104.93	105.16	101.04	102.23	101.76
2036	104.06	103.51	101.72	105.40	117.01	109.53	105.61	106.65	106.88	102.69	103.90	103.42
2037	106.37	105.81	103.99	107.74	119.61	111.96	107.96	109.02	109.26	104.97	106.21	105.72
2038	108.42	107.86	105.99	109.82	121.92	114.12	110.05	111.12	111.37	107.00	108.26	107.76
2039	110.52	109.94	108.04	111.95	124.27	116.33	112.17	113.27	113.52	109.07	110.36	109.85
2040	112.32	111.73	109.81	113.77	126.31	118.23	114.00	115.12	115.37	110.85	112.16	111.64
2041	114.83	114.23	112.26	116.31	129.12	120.86	116.55	117.69	117.95	113.32	114.66	114.13

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.92	17.02	10.27	7.72	2.62	6.42	12.02	17.27	17.27	17.52	19.77	23.02
2017	21.95	20.45	18.45	11.95	9.95	8.95	15.95	21.45	21.70	20.95	21.95	24.20
2018	22.33	24.28	21.72	15.62	10.84	8.70	15.87	23.20	23.09	21.51	24.36	26.78
2019	25.93	24.18	21.84	14.24	11.90	10.73	18.92	25.35	25.64	24.76	25.93	28.56
2020	58.61	58.87	60.41	59.16	55.77	56.01	56.30	57.46	58.37	59.59	59.40	59.84
2021	60.70	59.92	61.62	60.25	57.35	57.39	58.04	58.39	59.55	61.59	59.15	60.86
2022	61.54	61.21	63.46	61.18	58.14	58.51	60.02	59.04	60.69	62.73	60.11	61.98
2023	62.31	62.36	64.71	62.89	58.45	59.62	61.01	60.46	61.75	64.02	60.99	63.24
2024	62.78	62.84	66.00	62.62	58.71	61.45	60.28	60.65	62.15	64.21	62.95	63.58
2025	64.06	64.04	67.38	63.52	58.61	61.72	61.56	62.56	62.67	65.63	65.12	64.50
2026	64.30	65.20	67.63	63.91	59.20	62.57	62.40	63.10	62.40	66.47	65.20	65.24
2027	66.57	66.55	68.39	65.60	58.95	63.71	64.05	63.42	63.83	68.48	65.93	66.44
2028	67.45	68.07	70.58	67.27	58.26	65.15	65.32	63.99	65.37	68.96	66.65	68.58
2029	67.86	68.68	71.87	68.58	53.33	65.37	66.45	65.08	66.61	69.66	68.69	69.76
2030	68.89	69.80	73.34	68.62	52.98	65.87	67.00	67.17	66.98	70.97	70.34	71.21
2031	70.39	71.58	74.28	68.88	54.05	65.55	68.43	68.59	67.04	72.12	71.95	71.19
2032	71.55	72.76	75.50	70.02	54.94	66.62	69.55	69.72	68.14	73.31	73.13	72.36
2033	73.15	74.38	77.19	71.58	56.17	68.11	71.11	71.27	69.66	74.94	74.76	73.98
2034	74.55	75.81	78.67	72.95	57.24	69.42	72.47	72.64	71.00	76.38	76.20	75.40
2035	76.00	77.28	80.19	74.36	58.35	70.76	73.87	74.05	72.37	77.86	77.67	76.86
2036	77.23	78.54	81.50	75.57	59.30	71.91	75.07	75.25	73.55	79.13	78.94	78.11
2037	78.95	80.29	83.31	77.26	60.62	73.51	76.75	76.93	75.19	80.89	80.70	79.85
2038	80.48	81.84	84.92	78.75	61.79	74.93	78.23	78.41	76.64	82.45	82.26	81.39
2039	82.03	83.42	86.56	80.27	62.99	76.38	79.74	79.93	78.12	84.05	83.85	82.96
2040	83.37	84.77	87.97	81.58	64.01	77.62	81.04	81.23	79.39	85.41	85.21	84.31
2041	85.23	86.67	89.94	83.40	65.44	79.36	82.85	83.05	81.17	87.32	87.12	86.20



**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	28.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	78.62	78.60	77.84	78.30	81.50	80.60	80.29	80.17	78.88	77.91	78.74	77.73
2021	80.39	80.63	79.12	80.20	83.04	82.28	81.71	82.22	80.71	79.70	81.00	79.67
2022	82.21	82.08	80.18	81.92	84.89	83.87	83.41	83.38	82.27	81.27	82.70	81.25
2023	84.12	83.69	81.71	83.78	86.23	85.50	85.15	84.78	83.94	82.78	84.50	83.39
2024	85.22	85.37	83.41	85.43	88.16	87.14	87.03	86.76	86.58	84.19	85.19	85.32
2025	87.19	87.52	85.33	87.68	91.12	89.95	88.99	89.12	88.30	86.06	87.23	86.87
2026	89.59	89.26	87.80	89.99	94.44	90.96	90.96	91.37	91.08	88.02	89.85	88.91
2027	91.36	90.92	89.26	91.39	97.36	92.76	92.40	93.84	92.68	89.85	91.14	90.67
2028	93.02	91.98	89.96	93.31	98.86	94.00	94.71	94.72	93.84	91.84	92.91	92.13
2029	95.05	94.81	92.15	95.53	105.55	96.99	97.06	97.06	97.11	93.75	94.56	94.45
2030	97.08	96.79	94.51	97.40	108.58	100.60	98.45	98.33	99.71	95.58	96.15	96.19
2031	98.83	98.33	96.70	100.05	110.63	103.81	100.25	101.19	101.40	97.58	98.69	98.25
2032	100.47	99.96	98.30	101.71	112.47	105.53	101.91	102.87	103.08	99.20	100.32	99.88
2033	102.68	102.16	100.47	103.95	114.95	107.86	104.16	105.14	105.36	101.38	102.53	102.08
2034	104.66	104.13	102.41	105.96	117.16	109.94	106.16	107.16	107.38	103.34	104.51	104.05
2035	106.68	106.15	104.39	108.01	119.43	112.06	108.21	109.23	109.46	105.34	106.53	106.06
2036	108.44	107.90	106.11	109.79	121.40	113.91	110.00	111.04	111.27	107.08	108.29	107.81
2037	110.84	110.28	108.46	112.21	124.08	116.43	112.43	113.49	113.73	109.44	110.68	110.19
2038	112.98	112.41	110.55	114.38	126.47	118.68	114.60	115.68	115.92	111.55	112.82	112.32
2039	115.16	114.58	112.68	116.59	128.92	120.97	116.81	117.91	118.16	113.71	115.00	114.49
2040	117.06	116.47	114.54	118.51	131.04	122.96	118.74	119.86	120.11	115.58	116.89	116.37
2041	119.65	119.05	117.07	121.13	133.94	125.68	121.37	122.51	122.76	118.14	119.48	118.95

Effective for service  
on and after October 12, 2016

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

SCHEDULE 201 (Continued)

WIND INTEGRATION

TABLE 7	
Wind Integration	
Year	Cost
2015	3.77
2016	3.84
2017	3.91
2018	3.99
2019	4.07
2020	4.15
2021	4.23
2022	4.31
2023	4.39
2024	4.47
2025	4.56
2026	4.65
2027	4.74
2028	4.83
2029	4.92
2030	5.02
2031	5.12
2032	5.21
2033	5.31
2034	5.42
2035	5.52
2036	5.63
2037	5.74
2038	5.85
2039	5.96
2040	6.08

**SCHEDULE 201 (Continued)**

**MONTHLY SERVICE CHARGE**

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

**INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- 2) Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

**TRANSMISSION AGREEMENTS**

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

**INTERCONNECTION REQUIREMENTS**

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

**SCHEDULE 201 (Continued)**

**INTERCONNECTION REQUIREMENTS (Continued)**

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA**

A QF will be eligible to receive pricing under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW. A Community-Based or Family-Owned QF is exempt from these restrictions.

**Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**SCHEDULE 201 (Continued)**

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA (Continued)**

**Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for pricing under the Standard PPA is sought.

**Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

**OTHER DEFINITIONS**

**Mid-C Index Price**

As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for Average

**SCHEDULE 201 (Continued)**

**OTHER DEFINITIONS (Continued)**

On-Peak Power and Average Off-Peak Power found on the following website: <https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

**Definition of RPS Attributes**

As used in this schedule, RPS Attributes means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

**Definition of Environmental Attributes**

As used in this schedule, Environmental Attributes shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

**Definition of Resource Sufficiency Period**

This is the period from the current year through 2020.

**Definition of Resource Deficiency Period**

This is the period from 2021 through 2034.

**Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2019.

**Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

**SCHEDULE 201 (Concluded)**

**DISPUTE RESOLUTION**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to pricing under the Standard PPA.

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

**SPECIAL CONDITIONS**

1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

**TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years.



FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

# Form 556

Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

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## General

Questions about completing this form should be sent to [Form556@ferc.gov](mailto:Form556@ferc.gov). Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, [www.ferc.gov/QF](http://www.ferc.gov/QF). The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

## Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

## How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button (  ) for assistance, or contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov).

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov) to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

## How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

## Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 ([DataClearance@ferc.gov](mailto:DataClearance@ferc.gov)); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 ([oina\\_submission@omb.eop.gov](mailto:oina_submission@omb.eop.gov)). Include the Control No. 1902-0075 in any correspondence.

## Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

## Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

## Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Notice Requirements link.

## What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

## Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

## Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

## Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See [www.ferc.gov/help/filing-guide/file-ceii.asp](http://www.ferc.gov/help/filing-guide/file-ceii.asp) for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

<p><input type="checkbox"/> <b>Non-Public:</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.</p>
<p><input type="checkbox"/> <b>Public (redacted):</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicant's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.</p>
<p><b>Privileged:</b> Indicate below which lines of your form contain data for which you are seeking privileged treatment</p>   
<p><b>Critical Energy Infrastructure Information (CEII):</b> Indicate below which lines of your form contain data for which you are seeking CEII status</p>   

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from [www.ferc.gov/QF](http://www.ferc.gov/QF). To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

# Form 556

Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

Application Information

<b>1a</b> Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Blue Marmot VIII LLC		
<b>1b</b> Applicant street address 808 Travis Street #700		
<b>1c</b> City Houston	<b>1d</b> State/province TX	
<b>1e</b> Postal code 77002	<b>1f</b> Country (if not United States)	<b>1g</b> Telephone number 713-265-0350
<b>1h</b> Has the instant facility ever previously been certified as a QF? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
<b>1i</b> If yes, provide the docket number of the last known QF filing pertaining to this facility: QF _____ - _____ - _____		
<b>1j</b> Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
<b>1k</b> What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
<b>1l</b> What is the purpose and expected effective date(s) of this filing? <input checked="" type="checkbox"/> Original certification; facility expected to be installed by <u>3/1/20</u> and to begin operation on <u>3/31/20</u> <input type="checkbox"/> Change(s) to a previously certified facility to be effective on _____ (Identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
<b>1m</b> If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	2a Name of contact person Leslie A. Freiman		2b Telephone number 713-265-0350	
	2c Which of the following describes the contact person's relationship to the applicant? (check one) <input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input checked="" type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	2d Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/> EDP Renewables North America LLC			
	2e Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>			
	2f City		2g State/province	
	2h Postal code		2i Country (if not United States)	
	Facility Identification and Location	3a Facility name Blue Marmot VIII		
3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>				
3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.  Longitude <input type="checkbox"/> East (+) <input checked="" type="checkbox"/> West (-) <u>120.556</u> degrees      Latitude <input checked="" type="checkbox"/> North (+) <input type="checkbox"/> South (-) <u>42.197</u> degrees				
3d City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Lakeview		3e State/province OR		
3f County (or check here for independent city) <input type="checkbox"/> Lake		3g Country (if not United States)		
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	4a Identify utility interconnecting with the facility PacifiCorp (Pacific Power)			
	4b Identify utilities providing wheeling service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			
	4c Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Portland General Electric Company			
	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			

Ownership and Operation

**5a** Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	Blue Marmot VIII LLC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
2)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
3)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
4)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
5)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
6)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
7)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
8)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
9)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%
10)		Yes <input type="checkbox"/> No <input type="checkbox"/>	%

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5b** Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)	EDP Renewables North America LLC	100 %
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5c** Identify the facility operator

Blue Marmot VIII LLC

Energy Input

**6a** Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Biomass (specify)                     | <input checked="" type="checkbox"/> Renewable resources (specify)       | <input type="checkbox"/> Geothermal                              |
| <input type="checkbox"/> Landfill gas                          | <input type="checkbox"/> Hydro power - river                            | <input type="checkbox"/> Fossil fuel (specify)                   |
| <input type="checkbox"/> Manure digester gas                   | <input type="checkbox"/> Hydro power - tidal                            | <input type="checkbox"/> Coal (not waste)                        |
| <input type="checkbox"/> Municipal solid waste                 | <input type="checkbox"/> Hydro power - wave                             | <input type="checkbox"/> Fuel oil/diesel                         |
| <input type="checkbox"/> Sewage digester gas                   | <input checked="" type="checkbox"/> Solar - photovoltaic                | <input type="checkbox"/> Natural gas (not waste)                 |
| <input type="checkbox"/> Wood                                  | <input type="checkbox"/> Solar - thermal                                | <input type="checkbox"/> Other fossil fuel (describe on page 19) |
| <input type="checkbox"/> Other biomass (describe on page 19)   | <input type="checkbox"/> Wind   | <input type="checkbox"/> Other (describe on page 19)             |
| <input type="checkbox"/> Waste (specify type below in line 6b) | <input type="checkbox"/> Other renewable resource (describe on page 19) |  |

**6b** If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

- Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)
- Anthracite culm produced prior to July 23, 1985
  - Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
  - Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
  - Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
  - Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
  - Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
  - Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
  - Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
  - Materials that a government agency has certified for disposal by combustion (describe on page 19)
  - Heat from exothermic reactions (describe on page 19)
  - Residual heat (describe on page 19)
  - Used rubber tires
  - Plastic materials
  - Refinery off-gas
  - Petroleum coke
- Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

**6c** Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %



<b>Technical Facility Information</b>	Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.	
	<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	10,000 kW
	<b>7b</b> Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	5 kW
	<b>7c</b> Electrical losses in interconnection transformers	176 kW
	<b>7d</b> Electrical losses in AC/DC conversion equipment, if any	10 kW
	<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	240 kW
	<b>7f</b> Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	431.0 kW
	<b>7g</b> Maximum net power production capacity = 7a - 7f	9,569.0 kW
	<b>7h</b> Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19. <p>The facility will be a solar PV plant consisting of 39,324 polycrystalline modules of nominal 335W rating each. Total plant rating will be 13.174MWdc/10MWac. Modules will be mounted to single-axis trackers.</p> <p>Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.</p> <p>The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 11.1 miles to the PacifiCorp Mile-Hi Substation.</p> <p>Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSO transformer, associated breakers, switching, bus, and controls.</p> <p>The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.</p>	

### Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

<b>Certification of Compliance with Size Limitations</b>	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																
	<p><b>8a</b> Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p> <p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p>																
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center;">Facility location (city or county, state)</th> <th style="width: 15%; text-align: center;">Root docket # (if any)</th> <th style="width: 35%; text-align: center;">Common owner(s)</th> <th style="width: 20%; text-align: center;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: center;">kW</td> </tr> <tr> <td>2) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: center;">kW</td> </tr> <tr> <td>3) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: center;">kW</td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF -	_____	kW	2) _____	QF -	_____	kW	3) _____	QF -	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1) _____	QF -	_____	kW													
	2) _____	QF -	_____	kW													
3) _____	QF -	_____	kW														
<p><b>8b</b> The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p> <p><input type="checkbox"/> Yes (continue at line 8c below)                      <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																	
<p><b>8c</b> Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																	
<p><b>8d</b> Did construction of the facility commence on or before December 31, 1999? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																	
<p><b>8e</b> If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																	
<b>Certification of Compliance with Fuel Use Requirements</b>	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																
	<p><b>9a</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.</p>																
	<p><b>9b</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																

### Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>																				
	<p><b>10a</b> What type(s) of cogeneration technology does the facility represent? (check all that apply)</p> <p style="text-align: center;"> <input type="checkbox"/> Topping-cycle cogeneration      <input type="checkbox"/> Bottoming-cycle cogeneration         </p>																				
	<p><b>10b</b> To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p> <p style="text-align: center;">Check to certify compliance with</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center;">Indicated requirement</th> <th style="text-align: center;">Requirement</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify average gross electric output in kW or MW for each generator.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*°R) or 4.195 kJ/(kg*°K).</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at make-up water inputs.</td> </tr> </tbody> </table>	Indicated requirement	Requirement	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. 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EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

**11a** Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes  No

**11b** Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes  No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

**11c** With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

**11d** Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

**11e** Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will not be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) before selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

**11f** Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing  the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to  comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF)), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

### Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>						
	<p><b>12a</b> Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows.</p>						
	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)				
	1)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Select thermal host's relationship to facility</td> <td style="width: 50%;"></td> </tr> <tr> <td>Select thermal host's use of thermal output</td> <td style="text-align: right;">Btu/h</td> </tr> </table>	Select thermal host's relationship to facility		Select thermal host's use of thermal output	Btu/h	
	Select thermal host's relationship to facility						
	Select thermal host's use of thermal output	Btu/h					
	2)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Select thermal host's relationship to facility</td> <td style="width: 50%;"></td> </tr> <tr> <td>Select thermal host's use of thermal output</td> <td style="text-align: right;">Btu/h</td> </tr> </table>	Select thermal host's relationship to facility		Select thermal host's use of thermal output	Btu/h	
	Select thermal host's relationship to facility						
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	3)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Select thermal host's relationship to facility</td> <td style="width: 50%;"></td> </tr> <tr> <td>Select thermal host's use of thermal output</td> <td style="text-align: right;">Btu/h</td> </tr> </table>	Select thermal host's relationship to facility		Select thermal host's use of thermal output	Btu/h	
Select thermal host's relationship to facility							
Select thermal host's use of thermal output	Btu/h						
4)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Select thermal host's relationship to facility</td> <td style="width: 50%;"></td> </tr> <tr> <td>Select thermal host's use of thermal output</td> <td style="text-align: right;">Btu/h</td> </tr> </table>	Select thermal host's relationship to facility		Select thermal host's use of thermal output	Btu/h		
Select thermal host's relationship to facility							
Select thermal host's use of thermal output	Btu/h						
5)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Select thermal host's relationship to facility</td> <td style="width: 50%;"></td> </tr> <tr> <td>Select thermal host's use of thermal output</td> <td style="text-align: right;">Btu/h</td> </tr> </table>	Select thermal host's relationship to facility		Select thermal host's use of thermal output	Btu/h		
Select thermal host's relationship to facility							
Select thermal host's use of thermal output	Btu/h						
6)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Select thermal host's relationship to facility</td> <td style="width: 50%;"></td> </tr> <tr> <td>Select thermal host's use of thermal output</td> <td style="text-align: right;">Btu/h</td> </tr> </table>	Select thermal host's relationship to facility		Select thermal host's use of thermal output	Btu/h		
Select thermal host's relationship to facility							
Select thermal host's use of thermal output	Btu/h						
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed							
<p><b>12b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>							

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) If the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

**13a** Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water Btu/h

**13b** Indicate the annual average rate of net electrical energy output kW

**13c** Multiply line 13b by 3,412 to convert from kW to Btu/h 0 Btu/h

**13d** Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero) hp

**13e** Multiply line 13d by 2,544 to convert from hp to Btu/h 0 Btu/h

**13f** Indicate the annual average rate of energy input from natural gas and oil Btu/h

**13g** Topping-cycle operating value =  $100 * 13a / (13a + 13c + 13e)$  0 %

**13h** Topping-cycle efficiency value =  $100 * (0.5 * 13a + 13c + 13e) / 13f$  0 %

**13i** Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?  
 Yes (complies with operating standard)       No (does not comply with operating standard)

**13j** Did installation of the facility in its current form commence on or after March 13, 1980?  
 Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.  
 No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

**13k** Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:  
 Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

**13l** Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:  
 Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

### Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.



Usefulness of Bottoming-Cycle Thermal Output	The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.						
	<b>14a</b> Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows.						
	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)				
	1)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Select thermal host's relationship to facility</td> <td style="width: 50%; padding: 2px;">Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Select thermal host's process type</td> <td style="padding: 2px;"></td> </tr> </table>	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Select thermal host's process type		
	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>					
	Select thermal host's process type						
	2)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Select thermal host's relationship to facility</td> <td style="width: 50%; padding: 2px;">Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Select thermal host's process type</td> <td style="padding: 2px;"></td> </tr> </table>	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Select thermal host's process type		
	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>					
	Select thermal host's process type						
	3)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Select thermal host's relationship to facility</td> <td style="width: 50%; padding: 2px;">Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Select thermal host's process type</td> <td style="padding: 2px;"></td> </tr> </table>	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Select thermal host's process type		
Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>						
Select thermal host's process type							
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed							
<b>14b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.							



Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

**15a** Did installation of the facility in its current form commence on or after March 13, 1980?  
 Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.  
 No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

<b>15b</b> Indicate the annual average rate of net electrical energy output	kW
---	----

<b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
---	---------

<b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
---	----

<b>15e</b> Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
---	---------

<b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
---	-------

<b>15g</b> Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$	0 %
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**15h** Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:  
 Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

### Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with Incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
  - The person on whose behalf the filing is made
  - An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
  - An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
  - A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
- He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
- He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Leslie A. Freiman	808 Travis Street #700 Houston, TX 77002	1/26/2017

Audit Notes
Commission Staff Use Only: <input type="checkbox"/>

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## Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
                                  Complainants    )  
                                  vs.                    )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
                                  Defendant         )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/905**

**BLUE MARMOT IX POWER PURCHASE AGREEMENT**

**January 31, 2020**

Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

## STANDARD RENEWABLE OFF-SYSTEM VARIABLE POWER PURCHASE

### AGREEMENT

THIS AGREEMENT is between Blue Marmot IX LLC ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties") and is effective upon execution by both Parties ("Effective Date").

#### RECITALS

Seller intends to construct, own, operate and maintain a Solar facility for the generation of electric power located in Lake ( W -120.382, N 42.260 ) County, Oregon with a Nameplate Capacity Rating of 10,000 kilowatt ("kW"), as further described in Exhibit A ("Facility"); and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.21, below, from the Facility in accordance with the terms and conditions of this Agreement.

#### AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

#### SECTION 1: DEFINITIONS

When used in this Agreement, the following terms shall have the following meanings:

1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.

1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year)

1.3. "Billing Period" means from the start of the first day of each calendar month to the end of the last day of each calendar month.

1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:

1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed

Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);

1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.36;

1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement and was continuously mechanically available for operation for a minimum of 120 hours. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the mechanical availability of the Facility is interrupted during this initial testing period or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period;

1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;

1.5.5. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;

1.5.6. PGE has received a copy of the executed Generation Interconnection and Transmission Agreements.

1.6. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.

1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final Contract Year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.

1.8. "Effective Date" has the meaning set forth in Section 2.1.

1.9. "Environmental Attributes" shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), and other greenhouse gasses (GHGs) that have been determined by the United Nations

Schedule 201  
Standard Renewable Off-System Variable Power Purchase Agreement  
Form Effective August 12, 2016

Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

1.10. "Facility" has the meaning set forth in the Recitals.

1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with Pacificorp electric system.

1.12. "Generation Unit" means each separate electrical generator that contributes toward Nameplate Capacity Rating included in Exhibit A. For solar facilities, a generating unit is a complete solar electrical generation system within the Facility that is able to generate and deliver energy to the Point of Delivery independent of other Generation Units within the same Facility.

1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.

1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

1.15. "Lost Energy" means "Lost Energy" means ((the Guarantee of Mechanical Availability as set forth in 3.1.10 / MAP) X Net Output for a Calendar Year) – Net Output for the Calendar Year. Lost Energy shall be zero unless the result of the calculation in this subsection results in a positive number.

1.16. "Lost Energy Value" means Lost Energy X the excess of the annual time-weighted average Mid-C Index Price for On Peak Hours and Off Peak Hours over the time weighted average Contract Price for On Peak and Off Peak Hours for the corresponding time period (provided that such excess shall not exceed the Contract Price and further provided that Lost Energy is deemed to be zero prior to reaching the Commercial Operation Date) plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery (For Start-Up Lost Energy Value See 1.35).

1.17. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

$$\text{MAP} = 100 \times (\text{Operational Hours}) / (\text{Base Hours} \times \text{Number of Units})$$

1.18. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") index price for the bilateral OTC market for energy at the Mid-C Physical for Average On Peak Power and Average Off Peak Power found on the following website:

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<https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

1.19. "Nameplate Capacity Rating" means the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW.

1.20. "Net Dependable Capacity" means the maximum capacity the Facility can sustain over a specified period modified for seasonal limitations, if any, and reduced by the capacity required for station service or auxiliaries.

1.21. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.

1.22. "Number of Units" means the number of Generation Units in the Facility as specified in Exhibit A.

1.23. "Off-Peak Hours" has the meaning provided in the Schedule.

1.24. "On-Peak Hours" has the meaning provided in the Schedule.

1.25. "Operational Hours" for the Facility means the total across all Generation Units of the number of hours each of the Facility's Generation Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, two hundred (200) hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit or Event of Force Majeure, the Operational Hours for a wind farm with five (5) separate two (2) MW turbines would be 43,800 for a Contract Year.

1.26. "Planned Maintenance" means outages scheduled ninety (90) days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.

1.27. "Point of Delivery" means the PGE system.

1.28. "Pre-Commercial Operation Date Minimum Net Output" shall mean, unless such MWh is specifically set forth by Seller in Exhibit A, an amount in MWh equal to seventy-five percent (75%) of Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours – 200 hours (assumed Planned Maintenance)) for each month. If Seller has provided specific expected monthly Net Output amounts for the Facility in Exhibit A, "Pre-Commercial Operation Date Minimum Net Output" shall mean seventy-five percent (75%) X expected net output set forth in Exhibit A for each month.



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1.29. "Prime Rate" means the publicly announced prime rate or reference rate for commercial loans to large businesses with the highest credit rating in the United States in effect from time to time quoted by Citibank, N.A. If a Citibank, N.A. prime rate is not available, the applicable Prime Rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, N.Y., selected by the Party to whom interest based on the prime rate is being paid.

1.30. "Prudent Electrical Practices" means those practices, methods, standards and acts engaged in or approved by a significant portion of the electric power industry in the Western Electricity Coordinating Council that at the relevant time period, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with good business practices, reliability, economy, safety and expedition, and which practices, methods, standards and acts reflect due regard for operation and maintenance standards recommended by applicable equipment suppliers and manufacturers, operational limits, and all applicable laws and regulations. Prudent Electrical Practices are not intended to be limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods and acts generally acceptable or approved by a significant portion of the electric power generation industry in the relevant region, during the relevant period, as described in the immediate preceding sentence.

1.31. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

1.32. "RPS Attributes" means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

1.33. "Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference.

1.34. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance

1.35. "Start-Up Lost Energy Value" means for the period after the date specified in Section 2.2.2 but prior to achievement of the Commercial Operation Date: zero, unless the Net Output is less than the pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable delay period, and the time-weighted average of the delay period's Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater

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than the time-weighted average of the delay period's Contract Price for On-Peak Hours and Off-Peak Hours, in which case Startup Lost Energy Value equals: (pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable period - Net Output for the applicable period) X (the lower of: the time-weighted average of the Contract Price for On-Peak hours and Off-Peak Hours during the applicable period; or (the time-weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours during the applicable period - the time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours during the applicable period)). The time-weighted average in this section will reflect the relative proportions of On-Peak Hours and Off-Peak Hours in each day.

1.36. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.

1.37. "Step-in Rights" means the right of one party to assume an intervening position to satisfy all terms of an agreement in the event the other party fails to perform its obligations under the agreement.

1.38. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.

1.39. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

1.40. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.

1.41. "Transmission Curtailment" means a limitation on Seller's ability to deliver any portion of the scheduled energy to PGE due to the unavailability of transmission to the Point of Delivery (for any reason other than Force Majeure).

1.42. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Mid-C Index Price - Contract Price) X curtailed energy) for periods of Transmission Curtailment.

1.43. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.

1.44. "Transmission Services" means any and all services (including but not limited to ancillary services and control area services) required for the firm transmission and delivery of Energy from the Facility to the Point of Delivery for a term not less than the Term of this Agreement.

References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

## SECTION 2: TERM; COMMERCIAL OPERATION DATE

2.1. This Agreement shall become effective upon execution by both Parties ("Effective Date").

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2.2. Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,

2.2.1. By **March 1, 2020** Seller shall begin initial deliveries of Net Output; and

2.2.2. By **March 31, 2020** Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.

2.2.3. Unless the Parties agree in writing that a later Commercial Operation Date is reasonable and necessary, the Commercial Operation Date shall be no more than three (3) years from the Effective Date. PGE will not unreasonably withhold agreement to a Commercial Operation Date that is more than three (3) years from the Effective date if the Seller has demonstrated that a later Commercial Operation Date is reasonable and necessary.

2.3. This Agreement shall terminate on the date **18 years after the effective date**, or the date the Agreement is terminated in accordance with Section 8 or 11, whichever is earlier ("Termination Date").

### **SECTION 3: REPRESENTATIONS AND WARRANTIES**

3.1. Seller and PGE represent, covenant, and warrant as follows:

3.1.1. Seller warrants it is a **Limited Liability Company** duly organized under the laws of **Delaware**.

3.1.2. Seller warrants that the execution and delivery of this Agreement does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid order of any court, or any regulatory agency or other body having authority to which Seller is subject.

3.1.3. Seller warrants that the Facility is and shall for the Term of this Agreement continue to be a "Qualifying Facility" ("QF") as that term is defined in the version of 18 C.F.R. Part 292 in effect on the Effective Date. Seller has provided the appropriate QF certification, which may include a Federal Energy Regulatory Commission ("FERC") self-certification to PGE prior to PGE's execution of this Agreement. At any time during the Term of this Agreement, PGE may require Seller to provide PGE with evidence satisfactory to PGE in its reasonable discretion that the Facility continues to qualify as a QF under all applicable requirements.

3.1.4. Seller warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and Seller is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.5. Seller warrants that during the Term of this Agreement, all of Seller's right, title and interest in and to the Facility shall be free and clear of all liens and encumbrances other than liens and encumbrances arising from third-party financing of the Facility other than workers', mechanics', suppliers' or similar liens, or tax liens, in each case arising in the ordinary course of business that are either not yet due and

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payable or that have been released by means of a performance bond acceptable to PGE posted within eight (8) calendar days of the commencement of any proceeding to foreclose the lien.

3.1.6. Seller warrants that it will design and operate the Facility consistent with Prudent Electrical Practices.

3.1.7. Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.

3.1.8. Seller warrants that Net Dependable Capacity of the Facility is 10,000 kW.

3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 21,891,000 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.

3.1.10. Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):

3.1.10.1. Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or

3.1.10.2. Ninety percent (90%) beginning in Contract Year three and extending throughout the remainder of the Term.

3.1.10.3. Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.

3.1.10.4. Seller's failure to meet the Guarantee of Mechanical Availability in a Calendar Year shall result in damages payable to PGE by Seller equal to the Lost Energy Value. PGE shall bill Seller for such damages in accordance with Section 7.

3.1.11. Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 33,750,000 kWh of Net Output during each Contract Year ("Maximum Net Output"). The cost of delivering energy from the Facility to PGE is the sole responsibility of the Seller.

3.1.12. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

3.1.13. PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.

3.1.14. Seller warrants that the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power

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Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by PGE not more frequently than every 36 months, such documentation and information as may be reasonably required to establish Seller's continued compliance with such Definition. PGE agrees to take reasonable steps to maintain the confidentiality of any portion of the above described documentation and information that the Seller identifies as confidential except PGE will provide all such confidential information to the Commission upon the Commission's request.

3.1.15. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.5) associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050. PGE warrants that it will reasonably cooperate in Seller's efforts to meet such requirements, including, for example serving as the qualified reporting entity for the Facility if the Facility is located in PGE's balancing authority.

SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

4.1. Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.

4.2. PGE shall pay Seller the Contract Price for all delivered Net Output.

4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

4.4. Seller shall provide preschedules for all deliveries of energy hereunder, including identification of receiving and generating control areas, by 9:00:00 PPT on the last business day prior to the scheduled date of delivery. All energy shall be scheduled according to the most current North America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' respective representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the hourly schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of hourly energy schedules for accounting and

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operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. All energy shall be prescheduled according to customary WECC scheduling practices. Seller shall make commercially reasonable efforts to schedule in any hour an amount equal to its expected Net Output for such hour. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records and to imbalance information kept by the Transmission Provider.

4.5. From the start of the Renewable Resource Deficiency Period through the remainder of the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any RPS Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained Environmental Attributes") Seller may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to Seller any of the Seller-Retained Environmental Attributes, and PGE shall not report under such program that such Seller-Retained Environmental Attributes belong to it. With respect to RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

#### SECTION 5: OPERATION AND CONTROL

5.1. Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.

5.2. Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.

5.3. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best

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efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Net Dependable Capacity). Notwithstanding the foregoing, in the event Seller is not current on construction related financial obligations, Seller shall notify PGE of such delinquency and PGE may, in its discretion, grant an exception to the requirements to provide default security if the QF has negotiated financial arrangements with the construction loan lender that mitigate Seller's financial risk to PGE.

#### SECTION 7: BILLINGS, COMPUTATIONS AND PAYMENTS

7.1. On or before the thirtieth (30th) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement and any other agreement related to the Facility between the Parties or otherwise. On or before the thirtieth (30<sup>th</sup>) day following the end of each Contract Year, PGE shall bill for any Lost Energy Value accrued pursuant to this Agreement.

7.2. Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law.

#### SECTION 8: DEFAULT, REMEDIES AND TERMINATION

8.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:

8.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.

8.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.

8.1.3. Seller's failure to meet the Guarantee of Mechanical Availability established in Section 3.1.10 for two consecutive Contract Years or Seller's failure to provide any written report required by that section.

8.1.4. If Seller is no longer a Qualifying Facility.

8.1.5. Failure of PGE to make any required payment pursuant to Section 7.1.

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8.1.6. Seller's failure to meet the Commercial Operation Date.

8.2. In the event of a default under Section 8.1.6, PGE may provide Seller with written notice of default. Seller shall have one year in which to cure the default during which time the Seller shall pay PGE damages equal to the Lost Energy Value. If Seller is unable to cure the default, PGE may immediately terminate this Agreement as provided in Section 8.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 8.2.

8.3. In the event of a default hereunder, except as otherwise provided in this Agreement, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, the non-defaulting Party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 8 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

8.4. If this Agreement is terminated as provided in this Section 8, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.

8.5. In the event PGE terminates this Agreement pursuant to this Section 8, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.

8.6. Sections 8.1, 8.4, 8.5, 10, and 19.2 shall survive termination of this Agreement.

#### SECTION 9: TRANSMISSION CURTAILMENTS

9.1. Seller shall give PGE notice as soon as reasonably practicable of any Transmission Curtailment that is likely to affect Seller's ability to deliver any portion of energy scheduled pursuant to Section 4.4 of this Agreement.

9.2. If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 of this Agreement, Seller shall pay PGE the Transmission Curtailment Replacement Energy Cost for the number of MWh of energy reasonably determined by PGE as the difference between (i) the scheduled energy that would have been delivered to PGE under this Agreement during the period of Transmission Curtailment and (ii) the actual energy, if any, that was delivered to PGE for the period.



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SECTION 10: INDEMNIFICATION AND LIABILITY

10.1. Seller agrees to defend, indemnify and hold harmless PGE, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with Seller's delivery of electric power to PGE or with the facilities at or prior to the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.

10.2. PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with PGE's receipt of electric power from Seller or with the facilities at or after the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.

10.3. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public, nor affect the status of PGE as an independent public utility corporation or Seller as an independent individual or entity.

10.4. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

SECTION 11: INSURANCE

11.1. Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, its directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of

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insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

11.2. Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility. Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

11.3. Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

#### SECTION 12: FORCE MAJEURE

12.1. As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect

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the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

12.2. If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:

12.2.1. the non-performing Party, shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and

12.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and

12.2.3. the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.

12.3. No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.

12.4. Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

### SECTION 13: SEVERAL OBLIGATIONS

Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or to impose a trust or partnership duty, obligation or liability between the Parties. If Seller includes two or more parties, each such party shall be jointly and severally liable for Seller's obligations under this Agreement.

### SECTION 14: CHOICE OF LAW

This Agreement shall be interpreted and enforced in accordance with the laws of the state of Oregon, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

### SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.

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In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.

SECTION 16: WAIVER

Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement must be in writing, and such waiver shall not be deemed a waiver with respect to any subsequent default or other matter.

SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party or this Agreement. Seller shall at all times maintain in effect all local, state and federal licenses, permits and other approvals as then may be required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

SECTION 18: SUCCESSORS AND ASSIGNS

This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party.

SECTION 19: ENTIRE AGREEMENT

19.1. This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding PGE's purchase of Net Output from the Facility. No modification of this Agreement shall be effective unless it is in writing and signed by both Parties.

19.2. By executing this Agreement, Seller releases PGE from any third party claims related to the Facility, known or unknown, which may have arisen prior to the Effective Date.

SECTION 20: NOTICES

20.1. All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in person or when deposited in the U.S. Mail, postage prepaid by certified or registered mail and return receipt requested:

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To Seller: Blue Marmot IX LLC  
c/o EDP Renewables North America LLC;  
Attention: General Counsel;  
808 Travis Suite 808  
Houston, TX 77002

with a copy to: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

To PGE: Contracts Manager  
QF Contracts, 3WTC0306  
PGE - 121 SW Salmon St.  
Portland, Oregon 97204

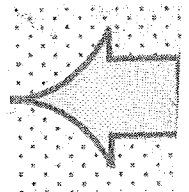
20.2 The Parties may change the person to whom such notices are addressed, or their addresses, by providing written notices thereof in accordance with this Section 20.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

PGE

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

PGE Approved By:	
Business Terms	<i>[Signature]</i>
Credit	<i>[Signature]</i>
Legal	
Risk Mgt.	



Blue Marmot IX LLC  
(Name Seller)

By: *[Signature]*  
Name: \_\_\_\_\_  
Title: Steve Irvin  
Executive Vice President,  
Date: Western and Central Regions and Mexico

03.29.17

*[Signature]*  
Brian Hayes  
President

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EXHIBIT A  
DESCRIPTION OF SELLER'S FACILITY

The facility will be a solar PV plant consisting of 38,715 polycrystalline modules of nominal 335W rating each. Total plant rating will be 12.970 MWdc/10MWac. Modules will be mounted to single-axis trackers.

Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.

The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 4.8 miles to the PacifiCorp Mile-Hi Substation.

Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.

The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.

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Solar Facility Characteristics:	end of project construction and is subject to design finalization
1. Generation	
a. PVsyst (or equivalent) simulation results detail, including but not limited to:	
i. Annual MWh (AC) for the first calendar year of commercial operation	23866
ii. Annual degradation factor	0.007
iii. Average 24-hr profile of generation MWh (AC) for each month	See tab "Generation"
iv. Expected Solar Capacity Factor	0.272442922
v. Maximum annual output (monthly MWh detail)	See tab "Generation"
vi. Loss Diagram	See tab "Generation"
2. Description of Modules:	
a. Module type	Polycrystalline Silicon
b. # of modules	38715
c. Max power voltage	37.4V
d. Max power current	8.97A
e. Max system voltage	1500V
f. Total DC system size	12970kW
3. Description of Racking	
a. Racking	
i. Type: (fixed tilt, single-axis tracking, or dual-axis tracking)	Single-Axis Tracking
ii. Tilt angle (if fixed-tilt)	N/A
iii. Azimuth (default = south-facing)	South-Facing
4. Description of Inverters:	
a. Number of Inverters	5
b. Model	ABB PVS980-58-1818kVA-6
c. Maximum Power (kW)	2910kW DC
d. Operating Voltage (VAC)	600
e. Max. Output Current (A)	1925A
f. Rated DC Voltage	1500
g. Rated DC current	1945
h. Maximum Output (kW)	2000
g. Facility AC Capacity Rating	10.0MW
h. Inverter loading ratio	1.297
i. Facility AC rating	10.0MW

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5. Description of transformers	
· Inverter LV-MV	
a. # of transformers	5
b. Model	ABB PadPlus+
c. High Voltage Rating	34500
d. Low Voltage Rating	600
e. MVA rating	2.0 each, 10.0 total
f. High voltage connection	Wye-Ground
g. Low voltage connection	Wye
· GSU MV-HV	
a. # of transformers	1
b. Model	ABB 10MVA
c. High Voltage Rating	115000
d. Low Voltage Rating	34500
e. MVA rating	10/12.5 ONAF
f. High voltage connection	Wye
g. Low voltage connection	Delta
6. Description of metering, communications, and monitoring, and transmit data to Operator and back to PV plant SCADA.	
7. Description of station service requirements base at Mile Hi substation for Customer controls equipment.	
8. Description and timeline of interconnection and transmission agreements prior to commercial operation date.	
9. Transaction Service Request Number, Interconnection Transmission agreements prior to commercial operation date.	



FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

# Form 556

Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility


## General

Questions about completing this form should be sent to [Form556@ferc.gov](mailto:Form556@ferc.gov). Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, [www.ferc.gov/QF](http://www.ferc.gov/QF). The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

## Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

## How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button (  ) for assistance, or contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov).

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at [Form556@ferc.gov](mailto:Form556@ferc.gov) to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

## How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

## Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 ([DataClearance@ferc.gov](mailto:DataClearance@ferc.gov)); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 ([oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov)). Include the Control No. 1902-0075 in any correspondence.

## Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do <i>not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

## Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

## Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Notice Requirements link.

## What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

## Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

## Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at [www.ferc.gov/QF](http://www.ferc.gov/QF) and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

## Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See [www.ferc.gov/help/filing-guide/file-ceii.asp](http://www.ferc.gov/help/filing-guide/file-ceii.asp) for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

<p><b>Non-Public:</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.</p>
<p><b>Public (redacted):</b> Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This public version of the applicants's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.</p>
<p><b>Privileged:</b> Indicate below which lines of your form contain data for which you are seeking privileged treatment</p>   
<p><b>Critical Energy Infrastructure Information (CEII):</b> Indicate below which lines of your form contain data for which you are seeking CEII status</p>   

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from [www.ferc.gov/QF](http://www.ferc.gov/QF). To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC

OMB Control # 1902-0075  
Expiration 06/30/2019

**Form 556** Certification of Qualifying Facility (QF) Status for a Small Power  
Production or Cogeneration Facility

Application Information

<b>1a</b> Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Blue Marmot IX LLC		
<b>1b</b> Applicant street address 808 Travis Street #700		
<b>1c</b> City Houston	<b>1d</b> State/province TX	
<b>1e</b> Postal code 77002	<b>1f</b> Country (if not United States)	<b>1g</b> Telephone number 713-265-0350
<b>1h</b> Has the instant facility ever previously been certified as a QF? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
<b>1i</b> If yes, provide the docket number of the last known QF filing pertaining to this facility: QF - -		
<b>1j</b> Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
<b>1k</b> What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
<b>1l</b> What is the purpose and expected effective date(s) of this filing? <input checked="" type="checkbox"/> Original certification; facility expected to be installed by <u>3/1/20</u> and to begin operation on <u>3/31/20</u> <input type="checkbox"/> Change(s) to a previously certified facility to be effective on _____ (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
<b>1m</b> If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	<b>2a</b> Name of contact person Leslie A. Freiman		<b>2b</b> Telephone number 713-265-0350	
	<b>2c</b> Which of the following describes the contact person's relationship to the applicant? (check one) <input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input checked="" type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	<b>2d</b> Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/> EDP Renewables North America LLC			
	<b>2e</b> Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>			
	<b>2f</b> City		<b>2g</b> State/province	
	<b>2h</b> Postal code		<b>2i</b> Country (if not United States)	
Facility Identification and Location	<b>3a</b> Facility name Blue Marmot IX			
	<b>3b</b> Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>			
	<b>3c</b> Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.  Longitude <input type="checkbox"/> East (+) <u>120.382</u> degrees      Latitude <input checked="" type="checkbox"/> North (+) <u>42.260</u> degrees <input checked="" type="checkbox"/> West (-)			
	<b>3d</b> City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Lakeview		<b>3e</b> State/province OR	
	<b>3f</b> County (or check here for independent city) <input type="checkbox"/> Lake		<b>3g</b> Country (if not United States)	
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	<b>4a</b> Identify utility interconnecting with the facility PacifiCorp (Pacific Power)			
	<b>4b</b> Identify utilities providing wheeling service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)			
	<b>4c</b> Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Portland General Electric Company			
<b>4d</b> Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> PacifiCorp (Pacific Power)				

Ownership and Operation

**5a** Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) Blue Marmot IX LLC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
2) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
3) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
4) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
5) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
6) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
7) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
8) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
9) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
10) _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5b** Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

Full legal names of electric utility or holding company upstream owners	% equity interest
1) EDP Renewables North America LLC	100 %
2) _____	_____ %
3) _____	_____ %
4) _____	_____ %
5) _____	_____ %
6) _____	_____ %
7) _____	_____ %
8) _____	_____ %
9) _____	_____ %
10) _____	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

**5c** Identify the facility operator

Blue Marmot IX LLC

Energy Input

**6a** Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Biomass (specify)                     | <input checked="" type="checkbox"/> Renewable resources (specify)          | <input type="checkbox"/> Geothermal                                 |
| <input type="checkbox"/> Landfill gas                          | <input type="checkbox"/> Hydro power - river                               | <input type="checkbox"/> Fossil fuel (specify)                      |
| <input type="checkbox"/> Manure digester gas                   | <input type="checkbox"/> Hydro power - tidal                               | <input type="checkbox"/> Coal (not waste)                           |
| <input type="checkbox"/> Municipal solid waste                 | <input type="checkbox"/> Hydro power - wave                                | <input type="checkbox"/> Fuel oil/diesel                            |
| <input type="checkbox"/> Sewage digester gas                   | <input checked="" type="checkbox"/> Solar - photovoltaic                   | <input type="checkbox"/> Natural gas (not waste)                    |
| <input type="checkbox"/> Wood                                  | <input type="checkbox"/> Solar - thermal                                   | <input type="checkbox"/> Other fossil fuel<br>(describe on page 19) |
| <input type="checkbox"/> Other biomass (describe on page 19)   | <input type="checkbox"/> Wind  | <input type="checkbox"/> Other (describe on page 19)                |
| <input type="checkbox"/> Waste (specify type below in line 6b) | <input type="checkbox"/> Other renewable resource<br>(describe on page 19) |   |

**6b** If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

- Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)
- Anthracite culm produced prior to July 23, 1985
  - Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
  - Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
  - Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
  - Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
  - Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
  - Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
  - Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
  - Materials that a government agency has certified for disposal by combustion (describe on page 19)
  - Heat from exothermic reactions (describe on page 19)
  - Residual heat (describe on page 19)
  - Used rubber tires
  - Plastic materials
  - Refinery off-gas
  - Petroleum coke
- Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

**6c** Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %



<b>Technical Facility Information</b>	Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.	
	<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	10,000 kW
	<b>7b</b> Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	5 kW
	<b>7c</b> Electrical losses in interconnection transformers	102.5 kW
	<b>7d</b> Electrical losses in AC/DC conversion equipment, if any	10 kW
	<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	41 kW
	<b>7f</b> Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	158.5 kW
	<b>7g</b> Maximum net power production capacity = 7a - 7f	9,841.5 kW
	<b>7h</b> Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19. <p>The facility will be a solar PV plant consisting of 38,715 polycrystalline modules of nominal 335W rating each. Total plant rating will be 12.970 MWdc/10MWac. Modules will be mounted to single-axis trackers.</p> <p>Central inverter stations will be located at intermediate points in the PV field. Modules will be evenly distributed to the inverter stations. The total inverter nameplate rating will be 10.0MWac. Each inverter will be directly coupled to a 34.5kV step-up transformer. The transformers will be connected to a 34.5kV AC collection system, which will feed into the plant switchgear.</p> <p>The plant switchgear will feed a 34.5kV transmission line, which will run overhead approximately 4.8 miles to the PacifiCorp Mile-Hi Substation.</p> <p>Inside the Mile-Hi Substation, the transmission line will connect to a new bay containing a facility-owned 34.5kV/115kV GSU transformer, associated breakers, switching, bus, and controls.</p> <p>The facility-owned components at Mile-Hi substation are considered part of the self-certified qualifying facility.</p>	

## Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

<b>Certification of Compliance with Size Limitations</b>	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																
	<p><b>8a</b> Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p> <p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p>																
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center;">Facility location (city or county, state)</th> <th style="width: 20%; text-align: center;">Root docket # (if any)</th> <th style="width: 30%; text-align: center;">Common owner(s)</th> <th style="width: 20%; text-align: center;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: right;">kW</td> </tr> <tr> <td>2) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: right;">kW</td> </tr> <tr> <td>3) _____</td> <td style="text-align: center;">QF -</td> <td>_____</td> <td style="text-align: right;">kW</td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF -	_____	kW	2) _____	QF -	_____	kW	3) _____	QF -	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1) _____	QF -	_____	kW													
	2) _____	QF -	_____	kW													
3) _____	QF -	_____	kW														
<p><b>8b</b> The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p> <p><input type="checkbox"/> Yes (continue at line 8c below)                      <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																	
<p><b>8c</b> Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994?    Yes <input type="checkbox"/>    No <input type="checkbox"/></p>																	
<p><b>8d</b> Did construction of the facility commence on or before December 31, 1999?    Yes <input type="checkbox"/>    No <input type="checkbox"/></p>																	
<p><b>8e</b> If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction?    Yes <input type="checkbox"/>    No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																	
<b>Certification of Compliance with Fuel Use Requirements</b>	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																
	<p><b>9a</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.</p>																
	<p><b>9b</b> Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																

## Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

<b>General Cogeneration Information</b>	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>		
	<p><b>10a</b> What type(s) of cogeneration technology does the facility represent? (check all that apply)</p> <p><input type="checkbox"/> Topping-cycle cogeneration      <input type="checkbox"/> Bottoming-cycle cogeneration</p>		
	<p><b>10b</b> To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p>		
	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%; text-align: center;"> <p>Check to certify compliance with indicated requirement</p> </td> <td style="text-align: center;"> <p>Requirement</p> </td> </tr> </table>	<p>Check to certify compliance with indicated requirement</p>	<p>Requirement</p>
	<p>Check to certify compliance with indicated requirement</p>	<p>Requirement</p>	
	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.	
	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.	
	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.	
	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.	
	<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.	
<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*°R) or 4.195 kJ/(kg*K).		
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.		
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.		
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.		

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

**11a** Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes  No

**11b** Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes  No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

**11c** With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

**11d** Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

**11e** Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

**11f** Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2)*.

<b>11g</b> Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
<b>11h</b> Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
<b>11i</b> Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	0 %

**11j** Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at [www.ferc.gov/QF](http://www.ferc.gov/QF)), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

### Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>			
	<p><b>12a</b> Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use <i>in separate rows</i>.</p>			
		Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
	1)		Select thermal host's relationship to facility	
			Select thermal host's use of thermal output	Btu/h
	2)		Select thermal host's relationship to facility	
			Select thermal host's use of thermal output	Btu/h
	3)		Select thermal host's relationship to facility	
			Select thermal host's use of thermal output	Btu/h
	4)		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h	
5)		Select thermal host's relationship to facility		
		Select thermal host's use of thermal output	Btu/h	
6)		Select thermal host's relationship to facility		
		Select thermal host's use of thermal output	Btu/h	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed				
<p><b>12b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>				

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

<b>13a</b> Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
<b>13b</b> Indicate the annual average rate of net electrical energy output	kW
<b>13c</b> Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
<b>13d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
<b>13e</b> Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
<b>13f</b> Indicate the annual average rate of energy input from natural gas and oil	Btu/h
<b>13g</b> Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
<b>13h</b> Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %
<b>13i</b> Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%? <input type="checkbox"/> Yes (complies with operating standard) <input type="checkbox"/> No (does not comply with operating standard)	
<b>13j</b> Did installation of the facility in its current form commence on or after March 13, 1980? <input type="checkbox"/> Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below. <input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.	
<b>13k</b> Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%: <input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)	
<b>13l</b> Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%: <input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)	

### Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output	<p>The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.</p>						
	<p><b>14a</b> Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.</p>						
	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)				
	1)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Select thermal host's relationship to facility</td> <td style="width: 50%; padding: 2px;">Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Select thermal host's process type</td> <td style="padding: 2px;"></td> </tr> </table>	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Select thermal host's process type		
	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>					
	Select thermal host's process type						
	2)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Select thermal host's relationship to facility</td> <td style="width: 50%; padding: 2px;">Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Select thermal host's process type</td> <td style="padding: 2px;"></td> </tr> </table>	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Select thermal host's process type		
	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>					
	Select thermal host's process type						
	3)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Select thermal host's relationship to facility</td> <td style="width: 50%; padding: 2px;">Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Select thermal host's process type</td> <td style="padding: 2px;"></td> </tr> </table>	Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>	Select thermal host's process type		
Select thermal host's relationship to facility	Yes <input type="checkbox"/> No <input type="checkbox"/>						
Select thermal host's process type							
<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>							
<p><b>14b</b> Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>							



Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

**15a** Did installation of the facility in its current form commence on or after March 13, 1980?

Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.

No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

<b>15b</b> Indicate the annual average rate of net electrical energy output	kW
---	----

<b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
---	---------

<b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
---	----

<b>15e</b> Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
---	---------

<b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
---	-------

<b>15g</b> Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$	0 %
---	-----

**15h** Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

Yes (complies with efficiency standard)       No (does not comply with efficiency standard)

## Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
  - The person on whose behalf the filing is made
  - An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
  - An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
  - A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
- He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
- He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature

Leslie A. Freiman

Your address

808 Travis Street #700  
Houston, TX 77002

Date

12/21/2016

Audit Notes

Commission Staff Use Only:



## Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

---

EXHIBIT B  
REQUIRED FACILITY DOCUMENTS

Sellers Generation Interconnection Agreement

Transmission Service Agreement with PacifiCorp

Purchase option agreement

Conditional Use Permit issued by Lake County

Any additional permits that might be required by Lake County or Oregon Department of Environmental Quality, including access permit, building and electric permits, and storm water prevention permit

FERC Qualifying Facility self-certification

EXHIBIT C  
START-UP TESTING

VISUAL AND MECHANICAL INSPECTIONS

INVERTER COMMISSIONING

ELECTRICAL OPERATION TESTS

SYSTEM MONITORING VERIFICATION

TRACKER VERIFICATION

INFRARED SCANS

BLOCK TESTING

72-HOUR FUNCTIONAL TEST

GRID MATCH TEST

POWER CHARACTERIZATION

REVENUE METER VERIFICATION

REACTIVE POWER TEST

POWER OUTPUT TEST - PLANT PERFORMANCE AND ACCEPTANCE

EXHIBIT D  
SCHEDULE

Portland General Electric Company

Sheet No. 201-1

**SCHEDULE 201  
QUALIFYING FACILITY 10 MW or LESS  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

**APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

**POWER PURCHASE INFORMATION**

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**PPA**

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

**SCHEDULE 201 (Continued)**

PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

**STANDARD PPA (Nameplate capacity of 10 MW or less)**

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

**GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA**

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller.

Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.



**SCHEDULE 201 (Continued)****OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

**BASIS FOR POWER PURCHASE PRICE****AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

**ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

**OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 93% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.

**SCHEDULE 201 (Continued)****PRICING FOR STANDARD PPA**

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour. Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed.

The Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any PPA year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard PPA; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. The Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

**1) Standard Fixed Price Option**

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 5%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 5%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

Portland General Electric Company

Sheet No. 201-5

**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD PPA (Continued)**  
**Standard Fixed Price Option (Continued)**

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1a												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	67.43	67.34	65.41	64.69	64.41	64.50	64.61	64.73	64.84	65.48	68.60	68.72
2022	69.01	68.84	68.08	67.13	66.81	66.91	67.04	67.17	67.29	67.83	71.38	71.70
2023	71.95	71.76	70.39	69.19	69.07	69.18	69.31	69.45	69.58	70.12	73.56	73.70
2024	74.17	73.85	72.67	71.29	71.10	71.21	71.35	71.50	71.63	72.20	76.49	76.64
2025	77.19	77.30	75.84	74.88	75.02	75.14	75.30	75.47	75.62	75.80	82.57	82.89
2026	85.18	85.30	82.77	81.28	81.22	81.36	81.56	81.74	81.90	82.36	89.02	88.72
2027	86.85	86.76	85.14	83.12	82.89	83.03	83.00	83.32	83.46	83.97	91.39	91.15
2028	89.32	89.31	87.96	85.46	85.30	85.46	85.31	85.64	85.95	86.65	94.66	93.55
2029	94.06	93.99	91.23	88.74	87.97	88.15	87.71	88.06	88.61	89.34	98.37	98.11
2030	97.60	97.54	94.87	92.62	92.40	92.57	92.61	93.00	93.12	93.68	102.42	102.70
2031	99.56	99.50	96.78	94.48	94.26	94.43	94.47	94.87	94.99	95.56	104.47	104.76
2032	103.85	103.80	100.57	98.18	97.96	98.15	98.23	98.65	98.76	99.36	108.86	109.41
2033	106.56	106.51	103.17	100.72	100.50	100.69	100.78	101.21	101.32	101.93	111.67	112.26
2034	109.12	109.07	105.60	103.10	102.88	103.08	103.17	103.61	103.72	104.35	114.33	114.96
2035	111.55	111.51	107.91	105.35	105.12	105.33	105.43	105.89	105.99	106.63	116.87	117.54
2036	113.85	113.80	110.14	107.53	107.30	107.51	107.60	108.07	108.18	108.83	119.27	119.95
2037	116.50	116.45	112.72	110.06	109.82	110.04	110.14	110.61	110.73	111.39	122.03	122.73
2038	119.08	119.03	115.22	112.51	112.27	112.49	112.59	113.08	113.19	113.87	124.71	125.42
2039	121.47	121.42	117.54	114.77	114.53	114.75	114.85	115.35	115.47	116.15	127.21	127.93
2040	124.25	124.20	120.25	117.43	117.18	117.41	117.51	118.02	118.14	118.84	130.10	130.85
2041	126.72	126.67	122.64	119.76	119.51	119.74	119.85	120.36	120.49	121.20	132.68	133.44

Portland General Electric Company

Sheet No. 201-7

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)

Standard Fixed Price Option (Continued)

TABLE 1b												
Avoided Costs												
Standard Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

Effective for service  
on and after October 12, 2016

Portland General Electric Company

Sheet No. 201-8

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
 Standard Fixed Price Option (Continued)

TABLE 2a												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.37	18.62	11.77	10.87	8.62	13.12	20.12	23.12	21.12	19.87	22.87	27.62
2017	26.05	24.30	20.80	17.05	15.55	16.55	24.05	27.05	25.55	23.80	24.80	29.80
2018	27.72	27.12	24.12	18.14	17.29	17.29	25.94	29.38	26.64	24.62	27.87	31.72
2019	29.87	27.88	23.90	19.63	17.93	19.06	27.60	31.01	29.30	27.31	28.45	34.14
2020	31.59	29.49	25.30	20.80	19.00	20.20	29.19	32.79	30.99	28.89	30.09	36.09
2021	30.68	30.59	28.66	27.94	27.66	27.75	27.87	27.99	28.10	28.74	31.86	31.98
2022	31.56	31.39	30.62	29.68	29.36	29.46	29.59	29.72	29.84	30.38	33.93	34.25
2023	33.67	33.48	32.11	30.91	30.79	30.90	31.03	31.17	31.30	31.84	35.28	35.42
2024	35.38	35.06	33.88	32.49	32.30	32.42	32.56	32.70	32.84	33.40	37.70	37.85
2025	37.53	37.64	36.18	35.22	35.36	35.48	35.64	35.81	35.96	36.14	42.91	43.23
2026	44.75	44.87	42.35	40.86	40.79	40.94	41.13	41.32	41.48	41.94	48.60	48.29
2027	45.65	45.56	43.93	41.91	41.68	41.82	41.79	42.12	42.26	42.76	50.18	49.94
2028	47.32	47.31	45.96	43.46	43.30	43.46	43.31	43.64	43.95	44.65	52.66	51.55
2029	51.25	51.18	48.43	45.94	45.16	45.34	44.90	45.25	45.80	46.53	55.57	55.30
2030	53.96	53.90	51.23	48.98	48.76	48.93	48.97	49.36	49.48	50.04	58.78	59.06
2031	55.08	55.02	52.29	50.00	49.77	49.95	49.99	50.38	50.51	51.08	59.99	60.28
2032	58.77	58.72	55.49	53.10	52.88	53.07	53.15	53.57	53.68	54.28	63.78	64.33
2033	60.35	60.30	56.96	54.51	54.29	54.49	54.57	55.00	55.11	55.72	65.46	66.05
2034	61.88	61.83	58.36	55.86	55.63	55.84	55.93	56.37	56.48	57.10	67.09	67.72
2035	63.54	63.49	59.90	57.34	57.11	57.32	57.42	57.87	57.98	58.62	68.86	69.53
2036	65.04	65.00	61.33	58.72	58.49	58.70	58.80	59.27	59.38	60.03	70.46	71.15
2037	66.61	66.57	62.83	60.17	59.93	60.15	60.25	60.73	60.84	61.50	72.14	72.84
2038	68.23	68.18	64.37	61.66	61.42	61.64	61.74	62.23	62.34	63.02	73.86	74.57
2039	69.64	69.59	65.71	62.94	62.70	62.92	63.03	63.52	63.64	64.33	75.38	76.11
2040	71.42	71.37	67.41	64.60	64.35	64.58	64.68	65.18	65.30	66.00	77.27	78.01
2041	72.87	72.82	68.79	65.92	65.66	65.90	66.00	66.52	66.64	67.35	78.84	79.59

Effective for service  
 on and after October 12, 2016

Portland General Electric Company

Sheet No. 201-9

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
 Standard Fixed Price Option (Continued)

TABLE 2b												
Avoided Costs												
Standard Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.77	16.87	10.12	7.57	2.47	6.27	11.87	17.12	17.12	17.37	19.62	22.87
2017	21.80	20.30	18.30	11.80	9.80	8.80	15.80	21.30	21.55	20.80	21.80	24.05
2018	22.18	24.13	21.57	15.47	10.69	8.55	15.72	23.05	22.94	21.36	24.21	26.63
2019	25.77	24.02	21.68	14.08	11.74	10.57	18.76	25.19	25.48	24.60	25.77	28.40
2020	27.60	25.73	23.23	15.13	12.64	11.39	20.12	26.97	27.28	26.35	27.60	30.40
2021	24.65	24.56	22.63	21.92	21.64	21.72	21.84	21.96	22.07	22.71	25.83	25.95
2022	25.42	25.25	24.48	23.54	23.22	23.32	23.44	23.57	23.69	24.23	27.78	28.11
2023	27.39	27.20	25.82	24.62	24.51	24.61	24.75	24.88	25.01	25.56	28.99	29.13
2024	29.01	28.69	27.51	26.13	25.94	26.05	26.19	26.34	26.48	27.04	31.33	31.49
2025	31.02	31.13	29.68	28.71	28.86	28.97	29.14	29.30	29.45	29.63	36.41	36.72
2026	38.12	38.24	35.71	34.22	34.16	34.30	34.50	34.69	34.85	35.30	41.97	41.66
2027	38.89	38.80	37.17	35.15	34.92	35.06	35.03	35.35	35.50	36.00	43.42	43.18
2028	40.43	40.42	39.07	36.57	36.40	36.57	36.42	36.75	37.06	37.76	45.77	44.65
2029	44.23	44.16	41.40	38.91	38.14	38.32	37.88	38.23	38.78	39.51	48.54	48.28
2030	46.80	46.74	44.07	41.82	41.60	41.77	41.81	42.20	42.32	42.88	51.62	51.90
2031	47.78	47.72	44.99	42.70	42.47	42.65	42.69	43.09	43.21	43.78	52.69	52.98
2032	51.38	51.33	48.10	45.71	45.49	45.68	45.76	46.18	46.29	46.89	56.39	56.94
2033	52.77	52.72	49.38	46.93	46.71	46.90	46.99	47.42	47.53	48.14	57.88	58.47
2034	54.12	54.08	50.61	48.10	47.88	48.08	48.17	48.62	48.73	49.35	59.34	59.97
2035	55.66	55.62	52.02	49.46	49.23	49.44	49.54	50.00	50.10	50.74	60.98	61.65
2036	57.04	56.99	53.33	50.72	50.49	50.70	50.80	51.26	51.37	52.02	62.46	63.15
2037	58.43	58.38	54.65	51.99	51.75	51.97	52.06	52.54	52.65	53.32	63.95	64.65
2038	59.88	59.84	56.03	53.32	53.08	53.30	53.40	53.88	54.00	54.67	65.52	66.23
2039	61.13	61.08	57.20	54.44	54.19	54.42	54.52	55.02	55.13	55.82	66.87	67.60
2040	62.75	62.70	58.75	55.93	55.68	55.91	56.01	56.52	56.64	57.34	68.60	69.34
2041	64.04	63.98	59.95	57.08	56.83	57.06	57.17	57.68	57.80	58.52	70.00	70.76

Effective for service  
 on and after October 12, 2016

Portland General Electric Company

Sheet No. 201-10

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3a												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	33.98	33.89	31.96	31.24	30.96	31.05	31.16	31.28	31.39	32.03	35.15	35.27
2022	34.92	34.75	33.98	33.04	32.72	32.82	32.94	33.08	33.20	33.74	37.28	37.61
2023	37.09	36.90	35.52	34.32	34.21	34.31	34.44	34.58	34.71	35.26	38.69	38.83
2024	38.86	38.54	37.36	35.98	35.79	35.90	36.04	36.19	36.32	36.88	41.18	41.33
2025	41.08	41.19	39.73	38.77	38.92	39.03	39.19	39.36	39.51	39.69	46.46	46.78
2026	48.37	48.49	45.97	44.48	44.42	44.56	44.75	44.94	45.10	45.56	52.22	51.91
2027	49.34	49.25	47.62	45.61	45.38	45.51	45.48	45.81	45.95	46.45	53.87	53.63
2028	51.08	51.07	49.72	47.22	47.06	47.22	47.07	47.40	47.72	48.41	56.42	55.31
2029	55.08	55.01	52.26	49.77	48.99	49.17	48.73	49.08	49.63	50.36	59.40	59.13
2030	57.87	57.81	55.14	52.89	52.67	52.84	52.88	53.27	53.39	53.95	62.69	62.97
2031	59.07	59.00	56.28	53.98	53.76	53.93	53.98	54.37	54.49	55.06	63.98	64.26
2032	62.83	62.78	59.56	57.16	56.94	57.13	57.21	57.64	57.75	58.34	67.85	68.39
2033	64.49	64.44	61.09	58.64	58.42	58.62	58.70	59.14	59.25	59.86	69.60	70.18
2034	66.10	66.05	62.58	60.08	59.85	60.05	60.14	60.59	60.70	61.32	71.31	71.94
2035	67.84	67.79	64.20	61.64	61.41	61.62	61.71	62.17	62.28	62.92	73.16	73.83
2036	69.43	69.38	65.72	63.11	62.88	63.09	63.19	63.66	63.77	64.42	74.85	75.54
2037	71.08	71.04	67.30	64.64	64.40	64.62	64.72	65.20	65.31	65.97	76.61	77.31
2038	72.78	72.73	68.93	66.22	65.98	66.20	66.30	66.78	66.90	67.57	78.42	79.13
2039	74.28	74.23	70.35	67.58	67.34	67.56	67.67	68.16	68.28	68.97	80.02	80.75
2040	76.15	76.10	72.15	69.33	69.08	69.31	69.42	69.92	70.04	70.74	82.01	82.75
2041	77.69	77.64	73.61	70.74	70.48	70.72	70.82	71.34	71.46	72.17	83.66	84.41

Effective for service  
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Portland General Electric Company

Sheet No. 201-11

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 3b												
Avoided Costs												
Standard Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

Effective for service  
on and after October 12, 2016

## SCHEDULE 201 (Continued)

## PRICING OPTIONS FOR STANDARD PPA (Continued)

**2) Renewable Fixed Price Option**

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 5%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 5%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

Portland General Electric Company

Sheet No. 201-13

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	115.34	115.32	114.56	115.02	118.22	117.33	117.01	116.89	115.60	114.63	115.47	114.45
2021	117.94	118.18	116.67	117.75	120.59	119.83	119.26	119.77	118.26	117.25	118.55	117.22
2022	120.48	120.36	118.46	120.19	123.17	122.14	121.69	121.65	120.55	119.55	120.98	119.53
2023	123.26	122.83	120.85	122.92	125.37	124.64	124.29	123.92	123.08	121.92	123.63	122.53
2024	124.86	125.01	123.06	125.07	127.80	126.78	126.67	126.41	126.22	123.83	124.83	124.96
2025	127.73	128.05	125.86	128.21	131.66	130.48	129.53	129.66	128.84	126.59	127.76	127.41
2026	130.91	130.58	129.12	131.30	135.76	132.28	132.28	132.69	132.40	129.34	131.17	130.23
2027	133.47	133.03	131.38	133.50	139.48	134.88	134.51	135.95	134.79	131.96	133.26	132.78
2028	135.95	134.91	132.89	136.24	141.79	136.93	137.64	137.65	136.77	134.76	135.84	135.06
2029	138.81	138.57	135.91	139.29	149.30	140.74	140.82	140.82	140.86	137.50	138.32	138.21
2030	141.68	141.39	139.11	142.00	153.18	145.20	143.05	142.93	144.31	140.18	140.75	140.79
2031	144.29	143.79	142.17	145.52	156.10	149.27	145.71	146.65	146.86	143.04	144.15	143.71
2032	146.51	146.00	144.35	147.76	158.51	151.58	147.95	148.91	149.13	145.24	146.37	145.92
2033	149.91	149.40	147.71	151.19	162.18	155.09	151.39	152.37	152.59	148.62	149.77	149.31
2034	152.96	152.43	150.71	154.26	165.46	158.24	154.46	155.46	155.68	151.64	152.81	152.35
2035	155.76	155.22	153.46	157.08	168.50	161.14	157.29	158.31	158.54	154.41	155.60	155.13
2036	158.31	157.76	155.97	159.65	171.26	163.78	159.86	160.90	161.13	156.94	158.15	157.67
2037	161.83	161.27	159.44	163.20	175.07	167.42	163.42	164.48	164.71	160.43	161.67	161.18
2038	164.95	164.38	162.52	166.35	178.45	170.65	166.57	167.65	167.89	163.52	164.79	164.29
2039	168.13	167.55	165.66	169.56	181.89	173.94	169.79	170.89	171.13	166.68	167.97	167.46
2040	171.05	170.46	168.54	172.51	185.04	176.96	172.74	173.85	174.10	169.58	170.89	170.37
2041	174.69	174.08	172.11	176.17	188.98	180.72	176.40	177.55	177.80	173.18	174.52	173.99

Portland General Electric Company

Sheet No. 201-14

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 4b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

Effective for service  
on and after October 12, 2016

Portland General Electric Company

Sheet No. 201-15

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.52	18.77	11.92	11.02	8.77	13.27	20.27	23.27	21.27	20.02	23.02	27.77
2017	26.20	24.45	20.95	17.20	15.70	16.70	24.20	27.20	25.70	23.95	24.95	29.95
2018	27.87	27.27	24.27	18.29	17.44	17.44	26.09	29.53	26.79	24.77	28.02	31.87
2019	30.03	28.04	24.06	19.79	18.09	19.22	27.76	31.17	29.46	27.47	28.61	34.30
2020	75.38	75.37	74.61	75.06	78.26	77.37	77.05	76.93	75.64	74.67	75.51	74.49
2021	77.10	77.33	75.83	76.90	79.75	78.99	78.41	78.92	77.41	76.40	77.70	76.38
2022	78.85	78.72	76.82	78.56	81.53	80.51	80.05	80.02	78.92	77.92	79.34	77.90
2023	80.71	80.27	78.29	80.37	82.82	82.08	81.73	81.37	80.53	79.36	81.08	79.97
2024	81.74	81.89	79.93	81.95	84.68	83.66	83.55	83.28	83.10	80.71	81.71	81.84
2025	83.64	83.97	81.78	84.13	87.57	86.40	85.44	85.57	84.75	82.51	83.68	83.32
2026	85.97	85.64	84.18	86.37	90.82	87.34	87.34	87.75	87.46	84.40	86.23	85.29
2027	87.67	87.23	85.57	87.69	93.67	89.07	88.71	90.15	88.99	86.16	87.45	86.98
2028	89.26	88.22	86.20	89.55	95.10	90.24	90.95	90.96	90.08	88.07	89.15	88.37
2029	91.22	90.98	88.32	91.70	101.72	93.16	93.23	93.23	93.28	89.92	90.73	90.62
2030	93.17	92.88	90.60	93.49	104.67	96.69	94.54	94.42	95.80	91.67	92.24	92.28
2031	94.84	94.34	92.72	96.07	106.65	99.82	96.26	97.20	97.42	93.59	94.70	94.26
2032	96.40	95.90	94.24	97.65	108.40	101.47	97.85	98.80	99.02	95.13	96.26	95.82
2033	98.55	98.03	96.34	99.82	110.81	103.72	100.02	101.00	101.22	97.25	98.40	97.95
2034	100.44	99.91	98.19	101.74	112.94	105.72	101.94	102.94	103.17	99.12	100.29	99.83
2035	102.38	101.85	100.09	103.71	115.13	107.76	103.92	104.93	105.16	101.04	102.23	101.76
2036	104.06	103.51	101.72	105.40	117.01	109.53	105.61	106.65	106.88	102.69	103.90	103.42
2037	106.37	105.81	103.99	107.74	119.61	111.96	107.96	109.02	109.26	104.97	106.21	105.72
2038	108.42	107.86	105.99	109.82	121.92	114.12	110.05	111.12	111.37	107.00	108.26	107.76
2039	110.52	109.94	108.04	111.95	124.27	116.33	112.17	113.27	113.52	109.07	110.36	109.85
2040	112.32	111.73	109.81	113.77	126.31	118.23	114.00	115.12	115.37	110.85	112.16	111.64
2041	114.83	114.23	112.26	116.31	129.12	120.86	116.55	117.69	117.95	113.32	114.66	114.13

Effective for service  
on and after October 12, 2016

Portland General Electric Company

Sheet No. 201-16

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.92	17.02	10.27	7.72	2.62	6.42	12.02	17.27	17.27	17.52	19.77	23.02
2017	21.95	20.45	18.45	11.95	9.95	8.95	15.95	21.45	21.70	20.95	21.95	24.20
2018	22.33	24.28	21.72	15.62	10.84	8.70	15.87	23.20	23.09	21.51	24.36	26.78
2019	25.93	24.18	21.84	14.24	11.90	10.73	18.92	25.35	25.64	24.76	25.93	28.56
2020	58.61	58.87	60.41	59.16	55.77	56.01	56.30	57.46	58.37	59.59	59.40	59.84
2021	60.70	59.92	61.62	60.25	57.35	57.39	58.04	58.39	59.55	61.59	59.15	60.86
2022	61.54	61.21	63.46	61.18	58.14	58.51	60.02	59.04	60.69	62.73	60.11	61.98
2023	62.31	62.36	64.71	62.89	58.45	59.62	61.01	60.46	61.75	64.02	60.99	63.24
2024	62.78	62.84	66.00	62.62	58.71	61.45	60.28	60.65	62.15	64.21	62.95	63.58
2025	64.06	64.04	67.38	63.52	58.61	61.72	61.56	62.56	62.67	65.63	65.12	64.50
2026	64.30	65.20	67.63	63.91	59.20	62.57	62.40	63.10	62.40	66.47	65.20	65.24
2027	66.57	66.55	68.39	65.60	58.95	63.71	64.05	63.42	63.83	68.48	65.93	66.44
2028	67.45	68.07	70.58	67.27	58.26	65.15	65.32	63.99	65.37	68.96	66.65	68.58
2029	67.86	68.68	71.87	68.58	53.33	65.37	66.45	65.08	66.61	69.66	68.69	69.76
2030	68.89	69.80	73.34	68.62	52.98	65.87	67.00	67.17	66.98	70.97	70.34	71.21
2031	70.39	71.58	74.28	68.88	54.05	65.55	68.43	68.59	67.04	72.12	71.95	71.19
2032	71.55	72.76	75.50	70.02	54.94	66.62	69.55	69.72	68.14	73.31	73.13	72.36
2033	73.15	74.38	77.19	71.58	56.17	68.11	71.11	71.27	69.66	74.94	74.76	73.98
2034	74.55	75.81	78.67	72.95	57.24	69.42	72.47	72.64	71.00	76.38	76.20	75.40
2035	76.00	77.28	80.19	74.36	58.35	70.76	73.87	74.05	72.37	77.86	77.67	76.86
2036	77.23	78.54	81.50	75.57	59.30	71.91	75.07	75.25	73.55	79.13	78.94	78.11
2037	78.95	80.29	83.31	77.26	60.62	73.51	76.75	76.93	75.19	80.89	80.70	79.85
2038	80.48	81.84	84.92	78.75	61.79	74.93	78.23	78.41	76.64	82.45	82.26	81.39
2039	82.03	83.42	86.56	80.27	62.99	76.38	79.74	79.93	78.12	84.05	83.85	82.96
2040	83.37	84.77	87.97	81.58	64.01	77.62	81.04	81.23	79.39	85.41	85.21	84.31
2041	85.23	86.67	89.94	83.40	65.44	79.36	82.85	83.05	81.17	87.32	87.12	86.20

Portland General Electric Company

Sheet No. 201-17

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	78.62	78.60	77.84	78.30	81.50	80.60	80.29	80.17	78.88	77.91	78.74	77.73
2021	80.39	80.63	79.12	80.20	83.04	82.28	81.71	82.22	80.71	79.70	81.00	79.67
2022	82.21	82.08	80.18	81.92	84.89	83.87	83.41	83.38	82.27	81.27	82.70	81.25
2023	84.12	83.69	81.71	83.78	86.23	85.50	85.15	84.78	83.94	82.78	84.50	83.39
2024	85.22	85.37	83.41	85.43	88.16	87.14	87.03	86.76	86.58	84.19	85.19	85.32
2025	87.19	87.52	85.33	87.68	91.12	89.95	88.99	89.12	88.30	86.06	87.23	86.87
2026	89.59	89.26	87.80	89.99	94.44	90.96	90.96	91.37	91.08	88.02	89.85	88.91
2027	91.36	90.92	89.26	91.39	97.36	92.76	92.40	93.84	92.68	89.85	91.14	90.67
2028	93.02	91.98	89.96	93.31	98.86	94.00	94.71	94.72	93.84	91.84	92.91	92.13
2029	95.05	94.81	92.15	95.53	105.55	96.99	97.06	97.06	97.11	93.75	94.56	94.45
2030	97.08	96.79	94.51	97.40	108.58	100.60	98.45	98.33	99.71	95.58	96.15	96.19
2031	98.83	98.33	96.70	100.05	110.63	103.81	100.25	101.19	101.40	97.58	98.69	98.25
2032	100.47	99.96	98.30	101.71	112.47	105.53	101.91	102.87	103.08	99.20	100.32	99.88
2033	102.68	102.16	100.47	103.95	114.95	107.86	104.16	105.14	105.36	101.38	102.53	102.08
2034	104.66	104.13	102.41	105.96	117.16	109.94	106.16	107.16	107.38	103.34	104.51	104.05
2035	106.68	106.15	104.39	108.01	119.43	112.06	108.21	109.23	109.46	105.34	106.53	106.06
2036	108.44	107.90	106.11	109.79	121.40	113.91	110.00	111.04	111.27	107.08	108.29	107.81
2037	110.84	110.28	108.46	112.21	124.08	116.43	112.43	113.49	113.73	109.44	110.68	110.19
2038	112.98	112.41	110.55	114.38	126.47	118.68	114.60	115.68	115.92	111.55	112.82	112.32
2039	115.16	114.58	112.68	116.59	128.92	120.97	116.81	117.91	118.16	113.71	115.00	114.49
2040	117.06	116.47	114.54	118.51	131.04	122.96	118.74	119.86	120.11	115.58	116.89	116.37
2041	119.65	119.05	117.07	121.13	133.94	125.68	121.37	122.51	122.76	118.14	119.48	118.95

Effective for service  
on and after October 12, 2016

SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 6b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Solar QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39



## SCHEDULE 201 (Continued)

## WIND INTEGRATION

TABLE 7	
Wind Integration	
Year	Cost
2015	3.77
2016	3.84
2017	3.91
2018	3.99
2019	4.07
2020	4.15
2021	4.23
2022	4.31
2023	4.39
2024	4.47
2025	4.56
2026	4.65
2027	4.74
2028	4.83
2029	4.92
2030	5.02
2031	5.12
2032	5.21
2033	5.31
2034	5.42
2035	5.52
2036	5.63
2037	5.74
2038	5.85
2039	5.96
2040	6.08

Portland General Electric CompanySheet No. 201-20**SCHEDULE 201 (Continued)****MONTHLY SERVICE CHARGE**

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

**INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- 2) Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

**TRANSMISSION AGREEMENTS**

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

**INTERCONNECTION REQUIREMENTS**

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

**SCHEDULE 201 (Continued)****INTERCONNECTION REQUIREMENTS (Continued)**

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA**

A QF will be eligible to receive pricing under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW. A Community-Based or Family-Owned QF is exempt from these restrictions.

**Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**SCHEDULE 201 (Continued)****DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA (Continued)****Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for pricing under the Standard PPA is sought.

**Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

**OTHER DEFINITIONS****Mid-C Index Price**

As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for Average

Portland General Electric Company

Sheet No. 201-23

**SCHEDULE 201 (Continued)****OTHER DEFINITIONS (Continued)**

On-Peak Power and Average Off-Peak Power found on the following website: <https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

**Definition of RPS Attributes**

As used in this schedule, RPS Attributes means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

**Definition of Environmental Attributes**

As used in this schedule, Environmental Attributes shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.

**Definition of Resource Sufficiency Period**

This is the period from the current year through 2020.

**Definition of Resource Deficiency Period**

This is the period from 2021 through 2034.

**Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2019.

**Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

Portland General Electric Company

Sheet No. 201-24

**SCHEDULE 201 (Concluded)**

**DISPUTE RESOLUTION**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to pricing under the Standard PPA.

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

**SPECIAL CONDITIONS**

1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

**TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)	)
BLUE MARMOT VI LLC (UM 1830)	)
BLUE MARMOT VII LLC (UM 1831)	)
BLUE MARMOT VIII LLC (UM 1832)	)
BLUE MARMOT IX LLC (UM 1833)	)
Complainants	)
vs.	)
PORTLAND GENERAL ELECTRIC	)
COMPANY	)
Defendant	)
Pursuant to ORS 756.500.	)
_____	)

**EXHIBIT BLUE MARMOT/906  
BLUE MARMOT FEASIBILITY STUDY**

**January 31, 2020**



**Small Generator Interconnection  
Feasibility Study Report**

Completed for  
**Q0825 Blue Marmot V LLC  
Q0826 Blue Marmot VI LLC  
Q0827 Blue Marmot VII LLC  
Q0828 Blue Marmot VIII LLC  
Q0829 Blue Marmot IX LLC  
Q0830 Blue Marmot XI LLC  
(collectively the “Interconnection Customer”)**

**Proposed Primary Point of Interconnection  
Mile Hi substation**

**Proposed Alternate Point of Interconnection  
Chiloquin – Alturas 115 kV line  
at 42.178563°N, 120.357580°W (same POI as Q0729)**

**Original  
March 15, 2017**

**Revised  
March 21, 2017**





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**Feasibility Study Report**

**1.0 DESCRIPTION OF THE GENERATING FACILITY**

Blue Marmot V LLC, Blue Marmot VI LLC, Blue Marmot VII LLC, Blue Marmot VIII LLC, Blue Marmot IX LLC, Blue Marmot XI LLC (collectively the “Interconnection Customer”) proposed interconnecting the following:

- Q0825 Blue Marmot V LLC: 10 MW
- Q0826 Blue Marmot VI LLC: 10 MW
- Q0827 Blue Marmot VII LLC: 10 MW
- Q0828 Blue Marmot VIII LLC: 13 MW
- Q0829 Blue Marmot IX LLC: 10 MW
- Q0830 Blue Marmot XI LLC: 10 MW

This total of 63 MWs of new generation is proposed to connect to PacifiCorp’s (“Transmission Provider”) Mile Hi substation located in Lake County, Oregon as the **primary** Point of Interconnection. The Interconnection Customer has also proposed interconnecting to Transmission Provider’s Chiloquin – Alturas 115 kV line at 42.178563°N, 120.357580°W (same Point of Interconnection as Q0729) located in Lake County, Oregon as an **alternate** Point of Interconnection.

The Blue Marmot projects (collectively the “Project”) will consist of the following:

Thirty-one (31) 2 MW SMA Sunny Central 2200 inverters and one (1) 1 MW inverter for a total output of 63 MW.

The requested commercial operation date is November 30, 2019.

Interconnection Customer will **NOT** operate this generator as a Qualified Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA).

The Transmission Provider has assigned the projects “Q0825, Q0826, Q0827, Q0828, Q0829, Q0830.”

**2.0 SCOPE OF THE STUDY**

The Interconnection Feasibility Study (“Study”) Report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generating Facilities as proposed:

- preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- preliminary identification of any thermal overload or voltage limit violations resulting from the interconnection; and
- preliminary description and non-binding estimated cost of facilities required to interconnect the Small Generating Facilities to the Transmission Provider’s distribution or transmission system and to address the identified short circuit and power flow issues.



**Feasibility Study Report**

**3.0 DESCRIPTION OF PROPOSED PRIMARY INTERCONNECTION**

The Interconnection Customer’s proposed Small Generating Facilities are to be interconnected to the Mile Hi substation 115 kV bus. Figure 1 below, is a one-line diagram that illustrates the interconnection of the proposed Small Generating Facilities to the Transmission Provider’s system.

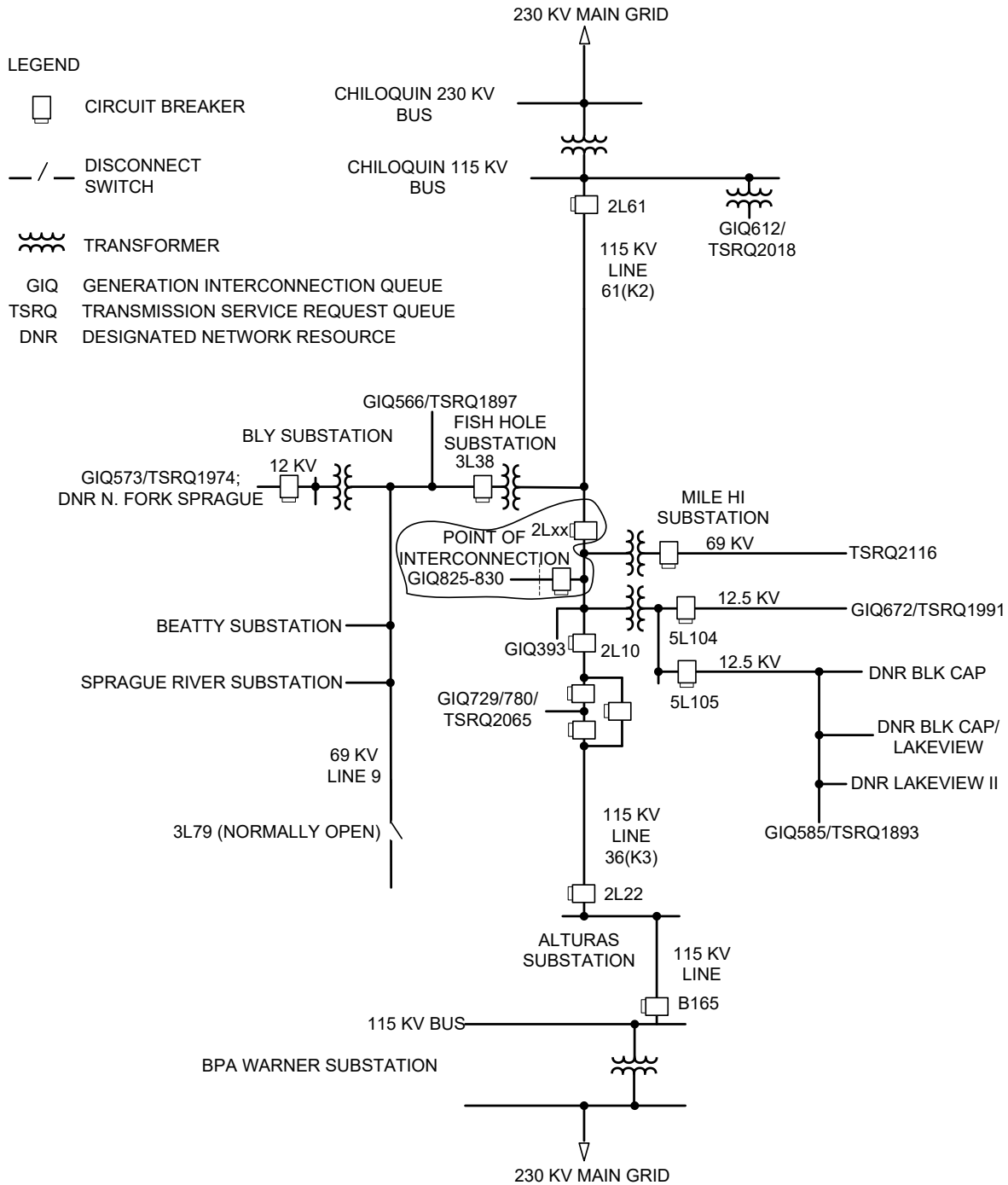


Figure 1: Transmission System One Line Diagram – Primary Point of Interconnection



**3.1 ALTERNATE POINT OF INTERCONNECTION**

The following alternative Point of Interconnection will be considered in this Report:

The Interconnection Customer’s proposed Small Generating Facilities are to be interconnected to the 115 kV bus at the Point of Interconnection substation of higher priority request Q0729.

Figure 2 below, is a one-line diagram that illustrates the interconnection of the proposed Small Generating Facilities to the Transmission Provider’s system at the alternate Point of Interconnection.

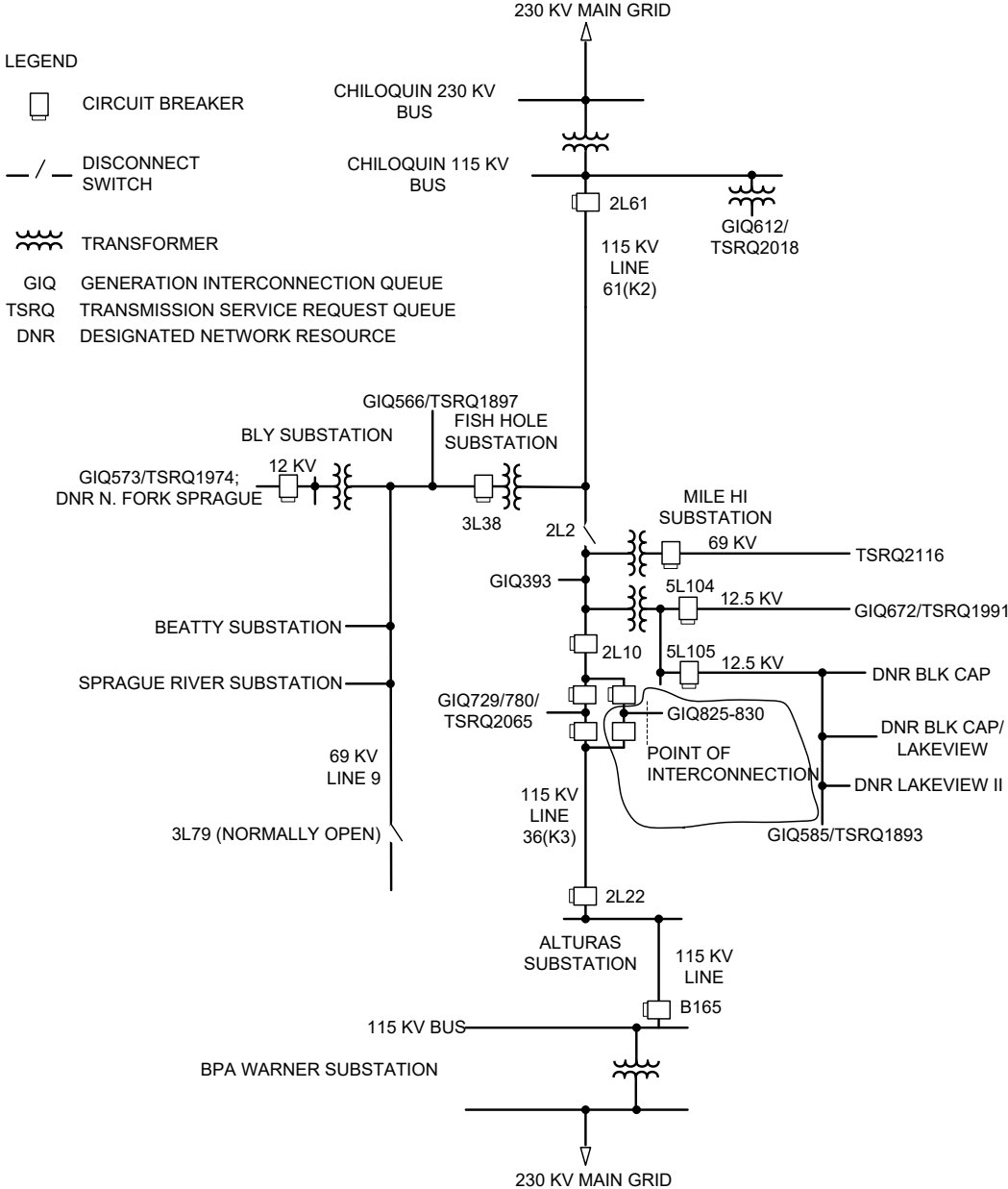


Figure 2: Simplified System One Line Diagram – Alternate circuit



### 3.2 STUDY ASSUMPTIONS

- All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are listed in Appendix 1. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.
- For study purposes there are two separate queues:
  - Transmission Service Queue: to the extent practical, all Network Upgrades that are required to accommodate active transmission service requests will be modeled in this study.
  - Generation Interconnection Queue: Interconnection Facilities associated with higher queue interconnection requests will be modeled in this study.
- The Interconnection Customer's request for interconnection service in and of itself does not convey transmission service.
- This study assumes the Project will be integrated into Transmission Provider's system at the agreed upon and/or proposed Point of Interconnection.
- The Interconnection Customer will construct and own the any facilities required between the Point of Interconnection and the Project unless specifically identified by the Transmission Provider.
- Line reconductor or fiber underbuild required on existing poles will be assumed to follow the most direct path on the Transmission Provider's system. If during detailed design the path must be modified it may result in additional cost and timing delays for the Interconnection Customer's Project.
- Generator tripping may be required for certain outages.
- All facilities will meet or exceed the minimum Western Electricity Coordinating Council ("WECC"), North American Electric Reliability Corporation ("NERC"), and Transmission Provider performance and design standards.
- Contingency transmission configuration for the Transmission Provider's system is defined as any configuration other than the normal transmission configuration.
- Nine case studies were assembled and studied in power flow simulation at the transmission level. Each case was studied under peak loading and light loading conditions. Certain cases were studied for influence by variations in flow on 230/345 kV WECC Path 76 extending from Alturas, California, to Reno, Nevada, which affects flow on 115 kV Lines 61 and 36 at the proposed Q0825-0830 Point of Interconnection when the 115 kV path is closed:
  1. Normal transmission configuration case no. 1: Mile Hi substation and the higher priority generation interconnection request Q0729 POI is supplied by 115 kV from Line 61 (K2) and Line 36 (K3) via a closed path from Chiloquin substation near Chiloquin, Oregon, to Bonneville Power Administration ("BPA") Warner substation in Alturas, California; the Chiloquin substation 230-115 kV transformer is connected to the energized 230 kV transmission grid and supplies power to 115 kV Line 61 (K2); the BPA Warner substation 230-115 kV transformer is connected to the energized 230 kV transmission grid and supplies power to 115 kV Line 36 (K3); all 69 kV loads near Alturas are supplied from Malin substation near Malin, Oregon. In power flow simulation, the transmission system was tested for its response to the interruption of the requested Q0825-0830 power flow.

**Feasibility Study Report**

2. Contingency transmission configuration case no. 2: Same as normal transmission configuration except 115 kV Line 36 (K3) is open from higher priority generation interconnection request Q0729 POI to Davis Creek tap. In power flow simulation, the transmission system was tested for its response to the interruption of the requested Q0825-0830 power flow.
3. Contingency transmission configuration case no. 3: Same as normal transmission configuration except that 115 kV Line 36 (K3) is open from higher priority generation interconnection request Q0729 POI to Mile Hi substation. The Q0729 POI is located on 115 kV Line 36 (K3) approximately 1.1 miles from Mile Hi substation. In power flow simulation, the transmission system was tested for its response to the interruption of the requested Q0825-0830 power flow.
4. Contingency transmission configuration case no. 4: Same as normal transmission configuration except that the BPA Warner substation 230-115 kV transformer is open. In power flow simulation, the transmission system was tested for its response to the interruption of the requested Q0825-0830 power flow.
5. Contingency transmission configuration case no. 5: Same as normal transmission configuration except that the Chiloquin substation 230-115 kV transformer is open. In power flow simulation, the transmission system was tested for its response to the interruption of the requested Q0825-0830 power flow.
6. Contingency transmission configuration case no. 6: Begins in the normal transmission configuration with Q0825-0830 in normal operation; 115 kV Line 36 (K3) then opens between the higher priority generation interconnection request Q0729 POI and Alturas substation, simulating a protective relay trip while Q0825-0830 continues normal operation at full power flow. The test does not interrupt service to Q0825-0830 but it does cause a sudden redirection of power flow from Q0825-0830 resulting in step voltage changes in the transmission system.
7. Contingency transmission configuration case no. 7: Begins in the normal transmission configuration with Q0825-0830 in normal operation; the BPA Warner substation 230-115 kV transformer then opens, simulating a protective relay trip while Q0825-0830 continues normal operation at full power flow. The test does not interrupt service to Q0825-0830 but it does cause a sudden redirection of power flow from Q0825-0830 resulting in step voltage changes in the transmission system.
8. Contingency transmission configuration case no. 8: Begins in the normal transmission configuration with Q0825-0830 in normal operation; the Chiloquin substation 230-115 kV transformer then opens, simulating a protective relay trip while Q0825-0830 continues normal operation at full power flow. The test does not interrupt service to Q0825-0830 but it does cause a sudden redirection of power flow from Q0825-0830 resulting in step voltage changes in the transmission system.
9. Contingency transmission configuration case no. 9: Begins in the normal transmission configuration with Q0825-0830 in normal operation; the 230 kV line between BPA LaPine and Pilot Butte substations near Bend, Oregon then opens, simulating a protective relay trip while Q0825-0830 continues normal operation at full power flow. The test does not interrupt service to Q0825-0830 but it does cause a sudden redirection of power flow from Q0825-0830 resulting in step voltage changes in the transmission system.



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- Summer peak load is defined as the highest load demand that occurs on the Transmission Provider’s power system during the summer season.
- Winter peak load is defined as the highest load demand that occurs on the Transmission Provider’s power system during the winter season.
- Light load is defined as the minimum load demand that occurs on the Transmission Provider’s power system at any time during the year.
- Steady state voltage is defined as the voltage after all voltage regulating devices, both electronic and mechanical, have reached a quiescent state for the power flow and voltage conditions at a specific time.
- Post transient voltage is defined as the voltage measured after high speed switching transients and the effects of generator exciter controls have settled out and before any mechanically operated load tap changing and voltage regulating devices have started to adjust to new system conditions.
- Post transient voltage step is defined as the difference between the voltage before an event and the post transient voltage after the event. The Western Electricity Coordinating Council (“WECC”) limits the post transient voltage step to a maximum of 8.0 percent for infrequent switching events such as the separation of a generating facility from the transmission system. Any post transient voltage step occurring on the transmission system is imposed directly on customers in the region.
- Reactive margin is a volt-ampere measure of power system voltage stability that may be reduced in magnitude by the connection of load or generation operating at constant power factor. Greater magnitude negative reactive margin indicates greater voltage stability. Zero and positive reactive margin indicate impending voltage collapse. The measurement of reactive margin is made in a power flow simulation model.
- “POI” signifies “Point of Interconnection.”
- Remedial Action Scheme (“RAS”) and Special Protection System (“SPS”) is defined by the North American Reliability Corporation (“NERC”) as an automatic protection system designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and MVAR), or system configuration to maintain system stability, acceptable voltage, or power flows.
- The association of transmission service request (“TSR”) to generation interconnection (“GI”) request is as follows:
  - GIQ0825 is associated with TSRQ2111.
  - GIQ0826 is associated with TSRQ2112.
  - GIQ0827 is associated with TSRQ2113.
  - GIQ0828 is associated with TSRQ2132 and TSRQ2133.
  - GIQ0829 is associated with TSRQ2114.
  - GIQ0830 is associated with TSRQ2115.
- The ownership of each of the queue positions discussed in this report are assumed to be with the same Interconnection Customer. If ownership is split between different entities the Transmission Provider may need to install additional equipment and/or control houses at the collector sites to account for the multiple ownership configuration.

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- This report is based on information available at the time of the study. It is the Interconnection Customer's responsibility to check the Transmission Provider's web site regularly for transmission system updates (<http://www.pacificorp.com/tran.html>)

**4.0 REQUIREMENTS – PRIMARY POINT OF INTERCONNECTION****4.1 GENERATING FACILITY MODIFICATIONS**

All interconnecting synchronous and non-synchronous generators are required to design their generating facilities with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.

Add reactive power production and absorption capability to provide generation operation in the range of 0.95 power factor to -0.95 power factor measured at the POI. The power inverter specification provided as part of the Q0825, Q0826, Q0827, Q0828, Q0829 and Q0830 interconnection request states that at full real power output, the inverters have no capability to produce or absorb reactive power.

For synchronous generators, the power factor requirement is to be measured at the POI. For non-synchronous generators, the power factor requirement is to be measured at the high-side of the generator substation. The individual Small Generating Facilities must provide dynamic reactive power to the system in support of both voltage scheduling and contingency events that require transient voltage support, and must be able to provide reactive capability over the full range of real power output.

If the individual Small Generating Facilities are not capable of providing positive reactive support (i.e., supplying reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations, the Small Generating Facilities must be required to add dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

Generators shall be equipped with automatic voltage-control equipment and normally operated with the voltage regulation control mode enabled unless written authorization (or directive) from the Transmission Provider is given to operate in another control mode (e.g. constant power factor control). The control mode of generating units shall be accurately represented in operating studies. The generators shall be capable of operating continuously at their maximum power output at its rated field current within +/- 5% of its rated terminal voltage.

As required by NERC standard VAR-001-1a, the Transmission Provider will provide a voltage schedule for the POI. In general, generating facilities should be operated so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, between 1.00 per unit to 1.04 per unit. The Transmission Provider may also specify a voltage and/or reactive power bandwidth as needed to coordinate with upstream voltage control devices such as on-load tap changers. At the Transmission Provider's discretion, these values





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might be adjusted depending on operating conditions. Generating facilities capable of operating with a voltage droop are required to do so. Voltage droop control enables proportionate reactive power sharing among generating facilities. Studies will be required to coordinate voltage droop settings if there are other facilities in the area. It will be the Interconnection Customer's responsibility to ensure that a voltage coordination study is performed, in coordination with Transmission Provider, and implemented with appropriate coordination settings prior to unit testing.

For areas with multiple generating facilities additional studies may be required to determine whether or not critical interactions, including but not limited to control systems, exist. These studies, to be coordinated with Transmission Provider, will be the responsibility of the Interconnection Customer. If the need for a master controller is identified, the cost and all related installation requirements will be the responsibility of the Interconnection Customer. Participation by the Small Generating Facilities in subsequent interaction/coordination studies will be required pre- and post-commercial operation in order ensure system reliability. All generators must meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.

As the Transmission Provider cannot submit a user written model to WECC for inclusion in base cases, a standard model from the WECC Approved Dynamic Model Library is required 180 days prior to trial operation. The list of approved generator models is continually updated and is available on the <http://www.WECC.biz> website.

### **4.2 TRANSMISSION SYSTEM MODIFICATIONS**

Make the following modifications to the Transmission Provider's system for the addition of Q0825 (10 MW):

- Add equipment necessary for a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 6 (to prevent overload of Chiloquin 230-115 kV transformer), no. 7 (to prevent overload of Chiloquin 230-115 kV transformer) and no. 8 (to prevent overload of 115 kV Line 36 (K3) between Mile Hi and Alturas substations and the BPA Warner 230-115 kV transformer) or any other interruptions of the transmission network path between the Chiloquin 230 kV bus and the NV Energy Hilltop 230 kV bus.
- Add two 115 kV circuit breakers at Mile Hi substation, one protecting the substation bus separately from Line 61 (K2) and one protecting the bus from the Q0825-Q0830 Small Generating Facilities.

Make the following additional modifications to the Transmission Provider's system for the addition of Q0825 and Q0826 (20 MW total):

- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 6 (to prevent overload of the 115 kV Line 61 (K2)).

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Make the following additional modifications to the Transmission Provider's system for the addition of Q0825, Q0826 and Q0827 (30 MW total):

- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 7 (to prevent overload of the 115 kV Line 61 (K2)).

Make the following additional modifications to the Transmission Provider's system for the addition of Q0825, Q0826, Q0827 and Q0828 (43 MW total):

- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 6 (to prevent voltage collapse), and no. 7 (to prevent voltage collapse).

Make the following additional modifications to the Transmission Provider's system for the addition of Q0825, Q0826, Q0827, Q0828 and Q0829 (53 MW total):

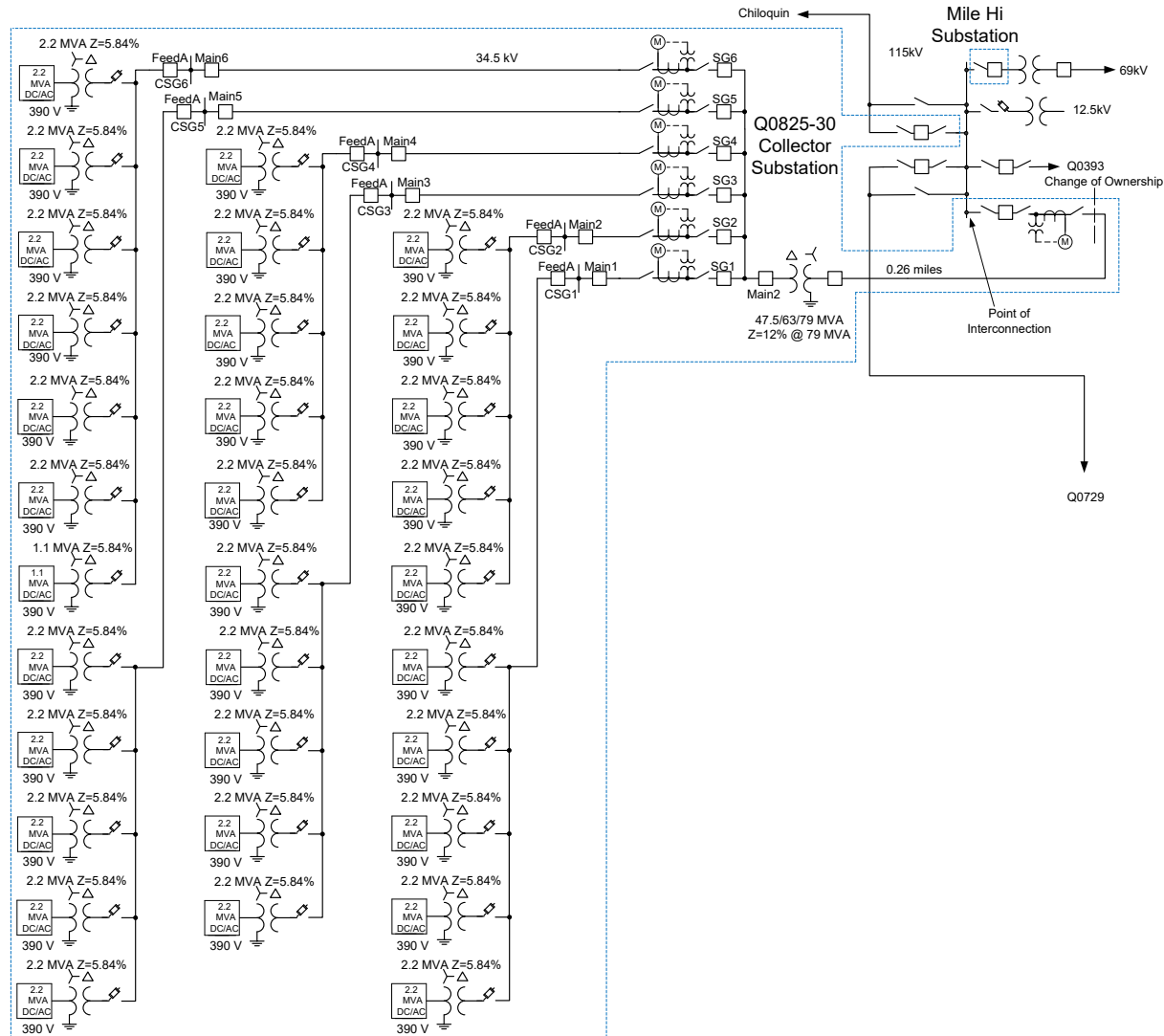
- None.

Make the following additional modifications to the Transmission Provider's system for the addition of Q0825, Q0826, Q0827, Q0828, Q0829 and Q0830 (63 MW total):

- Increase the thermal rating of the Chiloquin 230-115 kV transformer to 110 MVA or greater.
- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 8 (to prevent voltage collapse).



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*Figure 3: System One Line Diagram – Primary Point of Interconnection*

**4.3 EXISTING BREAKER MODIFICATIONS – SHORT-CIRCUIT**

The increase in the fault duty on the system as the result of the addition of the Small Generating Facilities with photovoltaic arrays fed through 36 – 2.2 MVA inverters connected 36 – 34.5 kV – 390 V 2.2 MVA transformers with 5.84% impedance and 1 – 1.1 MVA inverter connected to 1 34.5 kV – 390 V transformer with 5.84% impedance and then through a 115 – 34.5 kV 47.5/63/79 MVA transformer with 12 % impedance at 79 MVA will push the fault duty above the interrupting rating of the 115 kV circuit switcher at Mile Hi substation. Circuit switcher 2L1 will need to be replaced with a circuit switcher with a higher interrupting rating.

**4.4 PROTECTION REQUIREMENTS**

The tie line between Mile Hi substation and the Q0825-Q0830 collector substation will use a line current differential relaying system. An optical fiber cable will need to be installed with the transmission line to support the communication for the line relays. This optical fiber cable



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will also support the communication for the operational data. The Transmission Provider will supply a relay panel to be installed at the Q0825-Q0830 collector substation. This panel will contain relays that are compatible with the relay system to be installed at Mile Hi substation for the tie line. The line relays will be connected to current transformers that are associated with the 115 kV breaker at the collector substation and a three phase set of 115 kV voltage transformers. For faults on the tie line the 115 kV breaker will be tripped.

Elements in the line relays at Mile Hi substation will monitor the voltage magnitude and frequency. If the magnitude or frequency of the voltage is outside of normal range of operation a signal will be sent over the communication system to the collector substation. At the collector substation this signal is to trip open the 34.5 kV Main 2 transformer breaker to disconnect the Small Generating Facilities. By tripping the 34.5 kV breaker instead of the 115 kV breaker the station service to the Small Generating Facilities is maintained to facilitate the restoration of the generation.

A RAS to support the requirements listed earlier in this report will require that line loss detection equipment will be installed at Q0729 POI, Chiloquin, Alturas, BPA's Hilltop and BPA's Warner substations. The line loss detection equipment will communicate with the RAS master which will be located at Mile Hi substation. If any of the following sections of power equipment are disconnected signals will be sent to the Mile Hi substation to cause the tripping of the 115 kV breaker on the tie line to the collector substation: Chiloquin 230 – 115 kV transformer, Warner 230 – 115 kV transformer, Q0729 POI – Alturas 115 kV line, Q0729 POI – Mile Hi 115 kV line, Warner – Hilltop 230 kV line, or the Mile-H – Chiloquin 115 kV line. Breaker failure relaying will be implemented on the 115 kV breaker at Mile Hi substation. If the Mile Hi substation breaker fails to operate the Interconnection Customer's 115 kV transformer breaker will be tripped.

### **4.5 DATA REQUIREMENTS (RTU)**

In addition to the need for operational data and control at Mile Hi substation, data for the operation of the power system data will be needed from the collector substation. This data will be acquired by installing a RTU at the collector substation.

Listed below is the data that will be acquired from the collector substation and the POI substation.

From Mile Hi substation:

#### Analogs:

- Net Generation real power
- Net Generator reactive power
- Interchange energy register



From the Q0825-Q0830 collector substation:

Analogs:

- Real power flow through 34.5 kV line feeder breaker SG1 Q0825
- Reactive power flow through 34.5 kV line feeder breaker SG1 Q0825
- Interchange energy register for Q0825
- Real power flow through 34.5 kV line feeder breaker SG2 Q0826
- Reactive power flow through 34.5 kV line feeder breaker SG2 Q0826
- Interchange energy register for Q0826
- Real power flow through 34.5 kV line feeder breaker SG3 Q0827
- Reactive power flow through 34.5 kV breaker SG3 Q0827
- Interchange energy register for Q0827
- Real power flow through 34.5 kV line feeder breaker SG4 Q0828
- Reactive power flow through 34.5 kV breaker SG4 Q0828
- Interchange energy register for Q0828
- Real power flow through 34.5 kV line feeder breaker SG5 Q0829
- Reactive power flow through 34.5 kV breaker SG3 Q0829
- Interchange energy register for Q0829
- Real power flow through 34.5 kV line feeder breaker SG6 Q0830
- Reactive power flow through 34.5 kV breaker SG6 Q0830
- Interchange energy register for Q0830
- A phase 115 kV transmission voltage
- B phase 115 kV transmission voltage
- C phase 115 kV transmission voltage
- Global Horizontal Irradiance (GHI)
- Average Farm Atmospheric Pressure (Bar)
- Average Farm Temperature (Celsius)

Status:

- 115 kV breaker
- 34.5 kV Main 2 breaker
- 34.5 kV collector circuit breaker SG1
- 34.5 kV collector circuit breaker SG2
- 34.5 kV collector circuit breaker SG3
- 34.5 kV collector circuit breaker SG4
- 34.5 kV collector circuit breaker SG5
- 34.5 kV collector circuit breaker SG6
- Line Relay Alarm

From the CSG1 Switchgear:

Status:

- 34.5 kV Main 1 breaker
- 34.5 kV feeder A breaker



From the CSG2 Switchgear:

Status:

- 34.5 kV Main 2 breaker
- 34.5 kV feeder A breaker

From the CSG3 Switchgear:

Status:

- 34.5 kV Main 3 breaker
- 34.5 kV feeder A breaker

From the CSG4 Switchgear:

Status:

- 34.5 kV Main 4 breaker
- 34.5 kV feeder A breaker

From the CSG5 Switchgear:

Status:

- 34.5 kV Main 5 breaker
- 34.5 kV feeder A breaker

From the CSG6 Switchgear:

Status:

- 34.5 kV Main 6 breaker
- 34.5 kV feeder A breaker

## **5.0 COST ESTIMATE – PRIMARY POINT OF INTERCONNECTION**

The following estimate represents only scopes of work that will be performed by the Transmission Provider. Costs for any work being performed by the Interconnection Customer are not included.

### **Direct Assigned**

Q0825 facilities:

<b>Q0825 Collector substation</b>	\$725,000
<i>Add metering, protection &amp; control, communications and control house</i>	
<b>Mile Hi substation</b>	\$2,650,000
<i>Add new line position and control house</i>	
<b>Alturas substation</b>	\$104,000
<i>Install line loss logic protection</i>	
<b>Chiloquin substation</b>	\$104,000
<i>Install line loss logic protection</i>	
<b>BPA Hilltop substation</b>	\$104,000
<i>Install line loss logic protection</i>	



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**BPA Warner substation** \$104,000  
*Install line loss logic protection*

**Q0729 POI substation** \$104,000  
*Install line loss logic protection*

Q0825 Direct Assigned Total \$3,895,000

Q0826 facilities:

**Q0826 Collector substation** \$132,000  
SCADA upgrades

**Mile Hi substation** \$14,000  
*Modify relay settings*

Q0826 Direct Assigned Total \$146,000

Q0827 facilities:

**Q0827 Collector substation** \$132,000  
SCADA upgrades

**Mile Hi substation** \$14,000  
*Modify relay settings*

Q0827 Direct Assigned Total \$146,000

Q0828 facilities:

**Q0828 Collector substation** \$132,000  
SCADA upgrades

**Mile Hi substation** \$14,000  
*Modify relay settings*

Q0828 Direct Assigned Total \$146,000

Q0829 facilities:

**Q0829 Collector substation** \$132,000  
SCADA upgrades

**Mile Hi substation** \$14,000  
*Modify relay settings*

Q0829 Direct Assigned Total \$146,000

Q0830 facilities:

**Q0830 Collector substation** \$132,000  
SCADA upgrades

**Mile Hi substation** \$14,000  
*Modify relay settings*



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Q0830 Direct Assigned Total \$146,000  
**Direct Assigned Total \$4,625,000**

**Network Upgrade**

Q0825 facilities:

**Mile Hi substation**

\$1,500,000

*Add new circuit breaker for Line 61 protection*

Q0825 Network Upgrade Total \$1,500,000

Q0830 facilities:

**Chiloquin substation**

\$4,471,000

*Replace 230-115 kV transformer with 110 MVA unit*

Q0830 Network Upgrade Total \$4,471,000

**Network Upgrade Total \$5,971,000**

**Grand Total \$10,596,000**

Note: Costs for any excavation, duct installation and easements shall be borne by the Interconnection Customer and are not included in this estimate. This estimate is as accurate as possibly given the level of detailed study that has been completed to date and approximates the costs incurred by Transmission Provider to interconnect this Small Generating Facilities to Transmission Provider’s electrical distribution or transmission system. A more detailed estimate will be calculated during the System Impact Study. The Interconnection Customer will be responsible for all actual costs, regardless of the estimated costs communicated to or approved by the Interconnection Customer.

**6.0 SCHEDULE – PRIMARY POINT OF INTERCONNECTION**

The Transmission Provider estimates it will require approximately 24-36 months to design, procure and construct the facilities described in this Report following the execution of an Interconnection Agreement. The schedule will be further developed and optimized during the System Impact Study.

Please note, the time required to perform the scope of work identified in this Report appears to result in a timeframe that may support the Interconnection Customer’s requested commercial operation date of November 30, 2019.

Modifications to BPA’s system are required for this Project. The Transmission Provider will coordinate this work with BPA but has no authority to require BPA to meet the timelines requested for this Project by the Interconnection Customer.

**7.0 REQUIREMENTS – ALTERNATE POINT OF INTERCONNECTION**

**7.1 GENERATING FACILITY MODIFICATIONS**

All interconnecting synchronous and non-synchronous generators are required to design their Small Generating Facilities with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability



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of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.

Add reactive power production and absorption capability to provide generation operation in the range of 0.95 power factor to -0.95 power factor measured at the POI. The power inverter specification provided as part of the Q0825, Q0826, Q0827, Q0828, Q0829 and Q0830 interconnection request states that at full real power output, the inverters have no capability to produce or absorb reactive power.

For synchronous generators, the power factor requirement is to be measured at the POI. For non-synchronous generators, the power factor requirement is to be measured at the high-side of the generator substation.

The Small Generating Facilities must provide dynamic reactive power to the system in support of both voltage scheduling and contingency events that require transient voltage support, and must be able to provide reactive capability over the full range of real power output. If the Small Generating Facilities is not capable of providing positive reactive support (i.e., supplying reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations, the Small Generating Facilities must be required to add dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

Generators shall be equipped with automatic voltage-control equipment and normally operated with the voltage regulation control mode enabled unless written authorization (or directive) from the Transmission Provider is given to operate in another control mode (e.g. constant power factor control). The control mode of generating units shall be accurately represented in operating studies. The generators shall be capable of operating continuously at their maximum power output at its rated field current within +/- 5% of its rated terminal voltage.

As required by NERC standard VAR-001-1a, the Transmission Provider will provide a voltage schedule for the POI. In general, generating facilities should be operated so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, between 1.00 per unit to 1.04 per unit. The Transmission Provider may also specify a voltage and/or reactive power bandwidth as needed to coordinate with upstream voltage control devices such as on-load tap changers. At the Transmission Provider's discretion, these values might be adjusted depending on operating conditions. Generating facilities capable of operating with a voltage droop are required to do so. Voltage droop control enables proportionate reactive power sharing among generation facilities. Studies will be required to coordinate voltage droop settings if there are other facilities in the area. It will be the Interconnection Customer's responsibility to ensure that a voltage coordination study is performed, in coordination with Transmission Provider, and implemented with appropriate coordination settings prior to unit testing.

For areas with multiple generating facilities additional studies may be required to determine whether or not critical interactions, including but not limited to control systems, exist. These studies, to be coordinated with Transmission Provider, will be the responsibility of the Interconnection Customer. If the need for a master controller is identified, the cost and all related



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installation requirements will be the responsibility of the Interconnection Customer. Participation by the Small Generating Facilities in subsequent interaction/coordination studies will be required pre- and post-commercial operation in order ensure system reliability.

All generators must meet the Federal Energy Regulatory Committee (“FERC”) and WECC low voltage ride-through requirements as specified in the interconnection agreement. As the Transmission Provider cannot submit a user written model to WECC for inclusion in base cases, a standard model from the WECC Approved Dynamic Model Library is required 180 days prior to trial operation. The list of approved generator models is continually updated and is available on the <http://www.WECC.biz> website.

**7.2 TRANSMISSION ADDITIONS**

Make the following modifications to the Transmission Provider’s system for the addition of Q0825 (10 MW):

- Add equipment necessary for a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 6 (to prevent overload of Chiloquin 230-115 kV transformer), no. 7 (to prevent overload of Chiloquin 230-115 kV transformer) and no. 8 (to prevent overload of 115 kV Line 36 (K3) between Mile Hi and Alturas substations and the BPA Warner 230-115 kV transformer) or any other interruptions of the transmission network path between the Chiloquin 230 kV bus and the NV Energy Hilltop 230 kV bus.
- Add one 115 kV circuit breaker to ring bus at higher priority generation interconnection request Q0729 POI substation on Line 36 (K3) to be located approximately one mile south of Mile Hi substation.

Make the following additional modifications to the Transmission Provider’s system for the addition of Q0825 and Q0826 (20 MW total):

- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 6 (to prevent overload of the 115 kV Line 61 (K2)).

Make the following additional modifications to the Transmission Provider’s system for the addition of Q0825, Q0826 and Q0827 (30 MW total):

- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 7 (to prevent overload of the 115 kV Line 61 (K2)).

Make the following additional modifications to the Transmission Provider’s system for the addition of Q0825, Q0826, Q0827 and Q0828 (43 MW total):

- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 6 (to prevent voltage collapse), and no. 7 (to prevent voltage collapse).



Make the following additional modifications to the Transmission Provider's system for the addition of Q0825, Q0826, Q0827, Q0828 and Q0829 (53 MW total):

- None.

Make the following additional modifications to the Transmission Provider's system for the addition of Q0825, Q0826, Q0827, Q0828, Q0829 and Q0830 (63 MW total):

- Increase the thermal rating of the Chiloquin 230-115 kV transformer to 110 MVA or greater.
- Add equipment necessary to participate in a RAS to interrupt the requested transmission flow in response to contingency transmission configuration no. 8 (to prevent voltage collapse).



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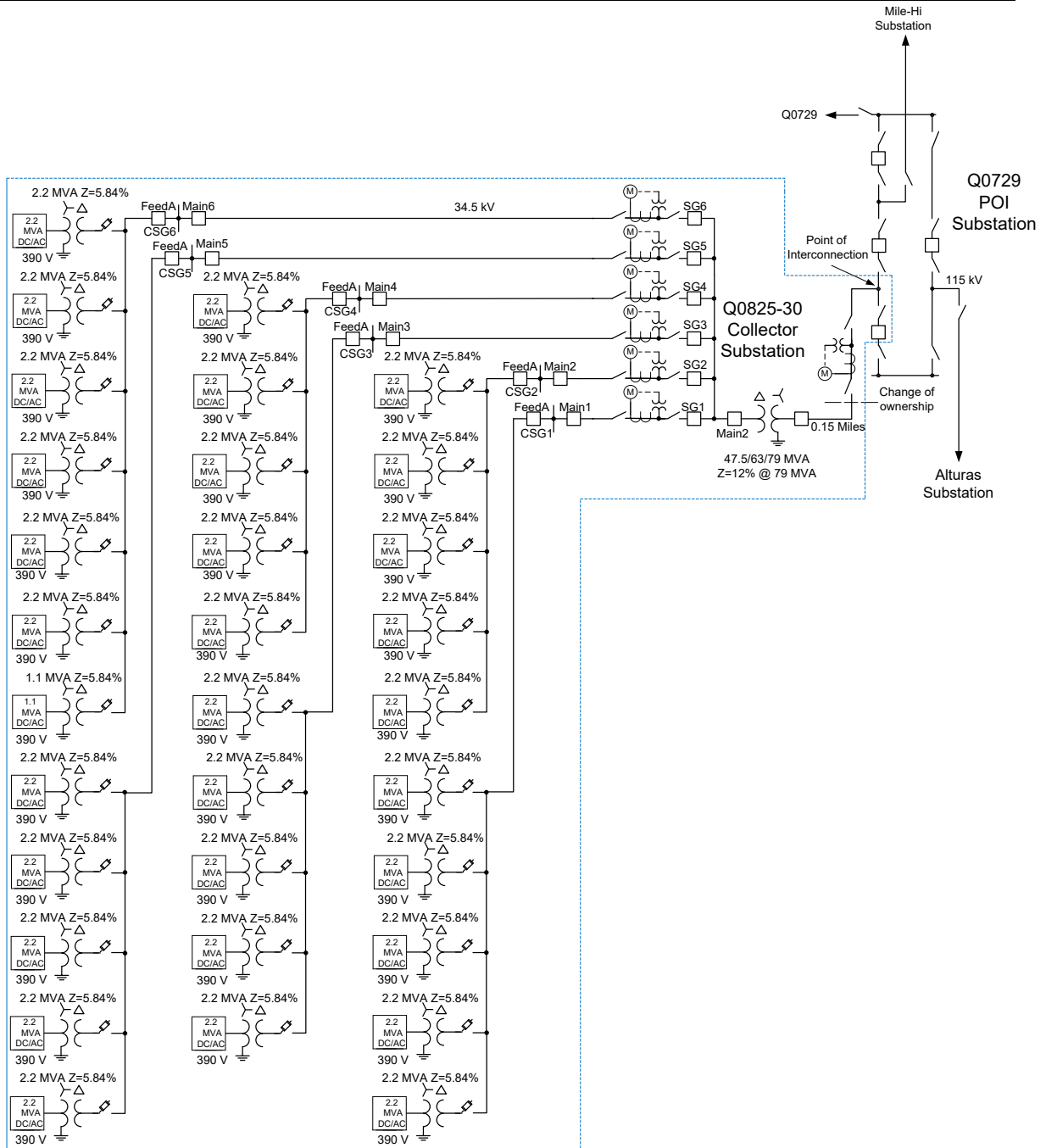


Figure 4: System One Line Diagram – Alternate Point of Interconnection

7.3 EXISTING BREAKER MODIFICATIONS – SHORT-CIRCUIT

The increase in the fault duty on the system as the result of the addition of the Small Generating Facilities with photovoltaic arrays fed through 36 – 2.2 MVA inverters connected 36 – 34.5 kV – 390 V 2.2 MVA transformers with 5.84% impedance and 1 – 1.1 MVA inverter connected to 1 34.5 kV – 390 V transformer with 5.84% impedance and then through a 115 – 34.5 kV 47.5/63/79 MVA transformer with 12 % impedance at 79 MVA will push the fault duty above



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the interrupting rating of the 115 kV circuit switcher at Mile Hi substation. Circuit switcher 2L1 will need to be replaced with a circuit switcher with a higher interrupting rating.

### **7.4 PROTECTION REQUIREMENTS**

The tie line between the Q0729 POI substation and the Q0825-Q0830 collector substation will use a line current differential relaying system. An optical fiber cable will need to be installed with the transmission line to support the communication for the line relays. This optical fiber cable will also support the communication for the operational data. The Transmission Provider will supply a relay panel to be installed at the Q0825-Q0830 collector substation. This panel will contain relays that are compatible with the relay system to be installed at the POI substation for the tie line. The line relays will be connected to current transformers that are associated with the 115 kV breaker at the collector substation and a three phase set of 115 kV voltage transformers. For faults on the tie line the 115 kV breaker will be tripped.

Elements in the line relays at the POI substation will monitor the voltage magnitude and frequency. If the magnitude or frequency of the voltage is outside of normal range of operation a signal will be sent over the communication system to the collector substation. At the collector substation this signal is to trip open the 34.5 kV Main 2 transformer breaker to disconnect the Small Generating Facilities. By tripping the 34.5 kV breaker instead of the 115 kV breaker the station service to the Small Generating Facilities is maintained to facilitate the restoration of the generation.

A RAS to support the requirements listed earlier in this report will require that line loss detection equipment will be installed at Chiloquin, Alturas, Q0729 POI, Mile Hi, BPA's Hilltop, and BPA's Warner substations. The line loss detection equipment will communicate with the RAS master which will be located at the Q0729 POI substation. If any of the following sections of power equipment are disconnected signals will be sent to the Q0729 POI substation to cause the tripping of the 115 kV breakers on the tie line to the collector substation: Chiloquin 230 – 115 kV transformer, Warner 230 – 115 kV transformer, Q0729 POI – Alturas 115 kV line, Q0729 POI – Mile Hi 115 kV line, Warner – Hilltop 230 kV line, or the Mile Hi – Chiloquin 115 kV line. Breaker failure relaying will be implemented on the 115 kV breakers at the Q0729 POI substation. If either of the Q0729 POI breakers fails to operate the Interconnection Customer's 115 kV transformer breaker will be tripped.

### **7.5 DATA REQUIREMENTS (RTU)**

In addition to the need for operational data and control at the POI substation data for the operation of the power system data will be needed from the collector substation. This data will be acquired by installing a RTU at the collector substation.

Listed below is the data that will be acquired from the collector substation and the POI substation.

From Q0729 POI substation:

#### Analogs:

- Net Generation real power



- Net Generator reactive power
- Interchange energy register

From the Q0825-Q0830 collector substation:

Analogs:

- Real power flow through 34.5 kV line feeder breaker SG1 Q0825
- Reactive power flow through 34.5 kV line feeder breaker SG1 Q0825
- Interchange energy register for Q0825
- Real power flow through 34.5 kV line feeder breaker SG2 Q0826
- Reactive power flow through 34.5 kV line feeder breaker SG2 Q0826
- Interchange energy register for Q0826
- Real power flow through 34.5 kV line feeder breaker SG3 Q0827
- Reactive power flow through 34.5 kV breaker SG3 Q0827
- Interchange energy register for Q0827
- Real power flow through 34.5 kV line feeder breaker SG4 Q0828
- Reactive power flow through 34.5 kV breaker SG4 Q0828
- Interchange energy register for Q0828
- Real power flow through 34.5 kV line feeder breaker SG5 Q0829
- Reactive power flow through 34.5 kV breaker SG3 Q0829
- Interchange energy register for Q0829
- Real power flow through 34.5 kV line feeder breaker SG6 Q0830
- Reactive power flow through 34.5 kV breaker SG6 Q0830
- Interchange energy register for Q0830
- A phase 115 kV transmission voltage
- B phase 115 kV transmission voltage
- C phase 115 kV transmission voltage
- Global Horizontal Irradiance (GHI)
- Average Farm Atmospheric Pressure (Bar)
- Average Farm Temperature (Celsius)

Status:

- 115 kV breaker
- 34.5 kV Main 2 breaker
- 34.5 kV collector circuit breaker SG1
- 34.5 kV collector circuit breaker SG2
- 34.5 kV collector circuit breaker SG3
- 34.5 kV collector circuit breaker SG4
- 34.5 kV collector circuit breaker SG5
- 34.5 kV collector circuit breaker SG6
- Line Relay Alarm

From the CSG1 Switchgear:

Status:

- 34.5 kV Main 1 breaker



- 34.5 kV feeder A breaker

From the CSG2 Switchgear:

Status:

- 34.5 kV Main 2 breaker
- 34.5 kV feeder A breaker

From the CSG3 Switchgear:

Status:

- 34.5 kV Main 3 breaker
- 34.5 kV feeder A breaker

From the CSG4 Switchgear:

Status:

- 34.5 kV Main 4 breaker
- 34.5 kV feeder A breaker

From the CSG5 Switchgear:

Status:

- 34.5 kV Main 5 breaker
- 34.5 kV feeder A breaker

From the CSG6 Switchgear:

Status:

- 34.5 kV Main 6 breaker
- 34.5 kV feeder A breaker

## **8.0 COST ESTIMATE – ALTERNATE POINT OF INTERCONNECTION**

The following estimate represents only scopes of work that will be performed by the Transmission Provider. Costs for any work being performed by the Interconnection Customer are not included.

### **Direct Assigned**

#### Q0825 facilities

**Q0825 Collector substation** \$745,000

*Add metering, communications, protection & control and control house*

**Mile Hi substation** \$268,000

*Replace 115 kV circuit switcher and protection & control panel*

**Alturas substation** \$103,000

*Install line loss logic protection*

**Chiloquin substation** \$103,000

*Install line loss logic protection*



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<b>BPA Hilltop substation</b> <i>Install line loss logic protection</i>	\$103,000
<b>BPA Warner substation</b> <i>Install line loss logic protection</i>	\$103,000
<b>Q0729 POI substation</b> <i>Add 115 kV breaker</i>	\$1,527,000
<u>Q0825 Direct Assigned Total \$2,952,000</u>	
<u>Q0826 facilities</u>	
<b>Q0826 Collector substation</b> <i>Add metering and SCADA upgrades</i>	\$132,000
<b>Mile Hi substation</b> <i>Modify relay settings</i>	\$14,000
<u>Q0826 Direct Assigned Total \$146,000</u>	
<u>Q0827 facilities</u>	
<b>Q0827 Collector substation</b> <i>Add metering and SCADA upgrades</i>	\$132,000
<b>Mile Hi substation</b> <i>Modify relay settings</i>	\$14,000
<u>Q0827 Direct Assigned Total \$146,000</u>	
<u>Q0828 facilities</u>	
<b>Q0828 Collector substation</b> <i>Add metering and SCADA upgrades</i>	\$132,000
<b>Mile Hi substation</b> <i>Modify relay settings</i>	\$14,000
<u>Q0828 Direct Assigned Total \$146,000</u>	
<u>Q0829 facilities</u>	
<b>Q0829 Collector substation</b> <i>Add metering and SCADA upgrades</i>	\$132,000
<b>Mile Hi substation</b> <i>Modify relay settings</i>	\$14,000
<u>Q0829 Direct Assigned Total \$146,000</u>	
<u>Q0830 facilities</u>	
<b>Q0830 Collector substation</b> <i>Add metering and SCADA upgrades</i>	\$132,000





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<b>Mile Hi substation</b>	\$14,000
<i>Modify relay settings</i>	

<u>Q0830 Direct Assigned Total</u>	<u>\$146,000</u>
<b><u>Total Direct Assigned</u></b>	<b><u>\$3,682,000</u></b>

**Network Upgrade**

Q0830 facilities

<b>Chiloquin substation</b>	\$4,471,000
<i>Replace 230-115 kV transformer with 110 MVA unit</i>	

<b><u>Total Network Upgrade</u></b>	<b><u>\$4,471,000</u></b>
<b>Grand Total</b>	<b>\$8,153,000</b>

Note: Costs for any excavation, duct installation and easements shall be borne by the Interconnection Customer and are not included in this estimate. This estimate is as accurate as possibly given the level of detailed study that has been completed to date and approximates the costs incurred by Transmission Provider to interconnect this Small Generating Facilities to Transmission Provider’s electrical distribution or transmission system. A more detailed estimate will be calculated during the System Impact Study. The Interconnection Customer will be responsible for all actual costs, regardless of the estimated costs communicated to or approved by the Interconnection Customer.

**9.0 SCHEDULE – ALTERNATE POINT OF INTERCONNECTION**

The Transmission Provider estimates it will require approximately 24-36 months to design, procure and construct the Small Generating Facilities described in this Report following the execution of an Interconnection Agreement. The schedule will be further developed and optimized during the System Impact Study.

Please note, the time required to perform the scope of work identified in this Report appears to result in a timeframe that may support the Interconnection Customer’s requested commercial operation date of November 30, 2019. However, the interconnection of this Project at the alternate Point of Interconnection is contingent on the Q0729 project completing all requirements first. If the Q0729 project is not completed in a timeframe that supports this Project timeline then the Interconnection Customer will either need to wait for the Q0729 project to be complete or assume the cost responsibility for the Network Upgrades currently assigned to Q0729 necessary to allow interconnection of this Project.

Modifications to BPA’s system are required for this Project. The Transmission Provider will coordinate this work with BPA but has no authority to require BPA to meet the timelines requested for this Project by the Interconnection Customer.

**9.1 PARTICIPATION BY AFFECTED SYSTEMS**

Transmission Provider has identified the following as Affected Systems:

- Bonneville Power Administration
- Surprise Valley Electrification Corporation
- NV Energy



A copy of this Report will be shared with each Affected System.

## **10.0 APPENDICES**

Appendix 1: Higher Priority Requests

Appendix 2: Property Requirements

Appendix 3: Study Results

### **10.1 APPENDIX 1: HIGHER PRIORITY REQUESTS**

All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are identified below. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.

GIQ: Generation Interconnection request queue.

TSRQ: Transmission Service request queue.

DNR: Designated Network Resource.

Transmission/Generation Interconnection Queue Requests considered:

Designated Network Resource Black Cap, 2 MW generation, Mile Hi substation

Designated Network Resource Black Cap/Lakeview, 0.363 MW generation, Mile Hi substation

Designated Network Resource Lakeview II, 0.495 MW generation, Mile Hi substation.

Designated Network Resource North Fork Sprague, 1.18 MW generation, Bly substation.

GIQ0393, 27 MW, Mile Hi substation 115 kV bus.

GIQ0573, 5 MW, Bly substation.

TSRQ1974 (AREF 81074553), 5 MW, POI Bly substation.

GIQ0566, 8.5 MW, Fish Hold substation.

TSRQ1897 (AREF 80103182), 8.5 MW, POI Fish Hole substation.

GIQ0585, 8 MW, Mile Hi substation.

TSRQ1893 (AREF 80039313), 8 MW, POI Mile Hi substation.

GIQ0612, 9.9 MW, Chiloquin substation.

TSRQ2018, 9.9 MW, POI Chiloquin substation.

GIQ0672, 10 MW, Mile Hi substation.

TSRQ1991 (AREF 81316106), 10 MW, POI Mile Hi substation.



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TSRQ1727 (AREF 78203844), 50 MW, POI Malin 230 kV bus, POD Redmond 230 kV bus.

TSRQ1728 (AREF 78203844), 150 MW, POI Malin 230 kV bus, POD Redmond 230 kV bus.

GIQ0729, 46 MW, 115 kV Line 36 (K3) near Lakeview, Oregon.

GIQ0780, 1.25 MW, 115 kV Line 36 (K3) near Lakeview, Oregon.

TSRQ2065, 50 MW, POI 115 kV Line 36 (K3) near Lakeview, Oregon.

TSRQ2081, 100 MW, POI Malin 230 kV bus to POD Redmond 230 kV bus.

TSRQ2082, 100 MW, POI Malin 230 kV bus to POD Redmond 230 kV bus.

TSRQ2083, 100 MW, POI Malin 230 kV bus to POD Redmond 230 kV bus.

TSRQ2116, 3.7 MW, POI 69 kV line supplied from Mile Hi substation (considered as a higher priority request in power flow model only when GIQ0828 is simulated in operation, utilizing the transmission services requested in TSRQ2132 and TSRQ2133).

BPA Transmission Agreement RS-368, 200 MW, POI Malin 500 kV, POD Malin 230 kV.

BPA GO545, 200 MW, 230 kV line PAC Malin to BPA Hilltop substation.



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## **10.2 APPENDIX 2: PROPERTY REQUIREMENTS**

### **Property Requirements for Point of Interconnection Substation**

#### **Requirements for rights of way easements**

Rights of way easements will be acquired by the Interconnection Customer in the Transmission Provider's name for the construction, reconstruction, operation, maintenance, repair, replacement and removal of Transmission Provider's Interconnection Facilities that will be owned and operated by Transmission Provider. Interconnection Customer will acquire all necessary permits for the Project and will obtain rights of way easements for the Project on Transmission Provider's easement form.

#### **Real Property Requirements for Point of Interconnection Substation**

Real property for a POI substation will be acquired by an Interconnection Customer to accommodate the Interconnection Customer's Project. The real property must be acceptable to Transmission Provider. Interconnection Customer will acquire fee ownership for interconnection substation unless Transmission Provider determines that other than fee ownership is acceptable; however, the form and instrument of such rights will be at Transmission Provider's sole discretion. Any land rights that Interconnection Customer is planning to retain as part of a fee property conveyance will be identified in advance to Transmission Provider and are subject to the Transmission Provider's approval.

The Interconnection Customer must obtain all permits required by all relevant jurisdictions for the planned use including but not limited to conditional use permits, Certificates of Public Convenience and Necessity, California Environmental Quality Act, as well as all construction permits for the Project.

Interconnection Customer will not be reimbursed through network upgrades for more than the market value of the property.

As a minimum, real property must be environmentally, physically, and operationally acceptable to Transmission Provider. The real property shall be a permitted or able to be permitted use in all zoning districts. The Interconnection Customer shall provide Transmission Provider with a title Report and shall transfer property without any material defects of title or other encumbrances that are not acceptable to Transmission Provider. Property lines shall be surveyed and show all encumbrances, encroachments, and roads.

Examples of potentially unacceptable environmental, physical, or operational conditions could include but are not limited to:

1. Environmental: known contamination of site; evidence of environmental contamination by any dangerous, hazardous or toxic materials as defined by any governmental agency; violation of building, health, safety, environmental, fire, land use, zoning or other such regulation; violation of ordinances or statutes of any governmental entities having jurisdiction over the property; underground or above ground storage tanks in area; known remediation sites on property; ongoing mitigation activities or monitoring activities; asbestos; lead-based paint, etc. A



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phase I environmental study is required for land being acquired in fee by the Transmission Provider unless waived by Transmission Provider.

2. Physical: inadequate site drainage; proximity to flood zone; erosion issues; wetland overlays; threatened and endangered species; archeological or culturally sensitive areas; inadequate sub-surface elements, etc. Transmission Provider may require Interconnection Customer to procure various studies and surveys as determined necessary by Transmission Provider.

Operational: inadequate access for Transmission Provider's equipment and vehicles; existing structures on land that require removal prior to building of substation; ongoing maintenance for landscaping or extensive landscape requirements; ongoing homeowner's or other requirements or restrictions (e.g., Covenants, Codes and Restrictions, deed restrictions, etc.) on property which are not acceptable to the Transmission Provider.



### 10.3 APPENDIX 3: STUDY RESULTS

#### *Summary of Power Flow Simulation*

The primary and alternate points of interconnection are near each other and produce essentially identical power flow conditions, so a single simulation is described below for both points of interconnection. However, the power flow simulations of contingency configuration no. 3 are specifically for the primary POI at Mile Hi substation.

A power flow simulation of addition of Q0825-0830 power flow to the Transmission Provider's system predicted the following:

- The thermal ratings of the Transmission Provider's system is adequate to carry the additional flow from Q0825 to Q0829 (10 MW to 53 MW total) in normal transmission configuration no. 1, however, the addition of 63 MW total from Q0825 to Q0830 would exceed the thermal rating of the Chiloquin 230-115 kV transformer.
- Higher priority generation interconnection and transmission service requests overload the thermal rating of the Chiloquin 230-115 kV transformer in contingency transmission configuration no. 2 and the addition of Q0825 to Q0830 (10 MW to 63 MW total) would further overload it; 115 kV Line 61 (K2) would be overloaded by the addition of Q0825 to Q0830 (10 MW to 63 MW total).
- The transmission system has adequate capacity to operate at any time in contingency transmission configuration no. 3 after the addition of Q0825 to Q0827 (10 MW to 30 MW total) but the Chiloquin 230-115 kV transformer would be overloaded by the further addition of Q0828 to Q0830 (43 MW to 63 MW total); 115 kV Line 61 (K2) could accommodate the addition of Q0825 to Q0829 (10 MW to 53 MW total) but would be overloaded by the addition of Q0830 (63 MW total).
- Higher priority generation interconnection and transmission service requests overload the thermal ratings of the Chiloquin 230-115 kV transformer in contingency transmission configuration no. 4 and the addition of Q0825 to Q0830 (10 MW to 63 MW) would further overload them; 115 kV Line 61 (K2) could accommodate the addition of Q0825 (10 MW) but would be overloaded by the addition of Q0826 to Q0830 (20 MW to 63 MW total).
- Higher priority generation interconnection and transmission service requests overload the thermal rating of the BPA Warner 230-115 kV transformer and 115 kV Line 36 (K3) in contingency transmission configuration no. 5 and the addition of Q0825 to Q0830 (10 MW to 63 MW) would further overload them.
- The Chiloquin 230-115 kV transformer does not have adequate thermal capacity to carry the flow of higher priority generation interconnection and transmission service requests and would be further overloaded by the addition of Q0825-0830 (10 MW to 63 MW total) in contingency transmission configuration no. 6. A RAS must be installed to interrupt Q0825-0830 power flow and certain higher priority transmission customers for contingency transmission configuration no. 6 to prevent overloading and voltage collapse.



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- The Chiloquin 230-115 kV transformer does not have adequate thermal capacity to carry the flow of higher priority generation interconnection and transmission service requests and would be further overloaded by the addition of Q0825-0830 (10 MW to 63 MW total) in contingency transmission configuration no. 7. A RAS must be installed to interrupt Q0825-0830 power flow and certain higher priority transmission customers for contingency transmission configuration no. 7 to prevent overloading and voltage collapse.
- The BPA Warner 230-115 kV transformer and 115 kV Line 36 (K3) do not have adequate thermal capacity to carry the flow of higher priority generation interconnection and transmission service requests and would be further overloaded by the addition of Q0825-0830 (10 MW to 63 MW total) in contingency transmission configuration no. 8. A RAS must be installed to interrupt Q0825-0830 power flow and certain higher priority transmission customers for contingency transmission configuration no. 8 to prevent overloading and voltage collapse.
- Transmission system conditions in the Lakeview, Oregon region during contingency transmission configuration no. 9 are not significantly different from conditions in normal transmission configuration no. 1.
- After the addition of Q0825 to Q0830 (10 MW to 63 MW total), voltage stability is predicted to be acceptable in normal transmission configuration no. 1.
- After the addition of Q0825-0830, voltage collapse is predicted in contingency transmission configuration no. 2, 3, 4, 5, 6, 7 and 8. A RAS must be installed to interrupt Q0825-0830 power flow for contingency transmission configurations no. 6, 7 and 8 in order to prevent voltage collapse on the Transmission Provider's system.
- Power could be accepted from Q0825, Q0826, Q0827, Q0828 and Q0829 (10 MW to 53 MW total) without exceeding the thermal capacity of the transmission system when operating in normal transmission configuration no. 1 and contingency transmission configuration no. 9.
- Power could be accepted from Q0825 to Q0830 (63 MW total) when operating in normal transmission configuration no. 1 and contingency transmission configuration no. 9 if the thermal rating of the Chiloquin substation 230-115 kV transformer is increased to 110 MVA or greater.
- Power cannot be accepted from Q0825 to Q0830 (10 MW to 63 MW total) when the Transmission Provider's system is operating in contingency transmission configurations no. 2, 3, 4, 5, 6, 7 or 8.

#### *Normal Transmission Configuration No. 1*

In normal transmission configuration no. 1, fully defined in Section 3.2 Study Assumptions, Chiloquin and BPA Warner substations supply Mile Hi substation and the Q0825-0830 POI from a networked 115 kV transmission line. In power flow simulation, Q0825-0830 flow was then interrupted.



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**Transmission Line Loading**

The addition of Q0825-0830 (10 MW to 63 MW total) in normal transmission configuration no. 1 would not exceed the conductor rating of 115 kV Line 36 (K3).

When 300 MW is flowing northbound on WECC Path 76 Alturas-Reno, the addition of Q0825-0829 (10 MW to 53 MW total) in normal transmission configuration no. 1 would not exceed the rating of the Chiloquin substation 230-115 kV transformer, however, addition of Q0825-0830 (63 MW total) would exceed the transformer rating. Refer to Appendix 1 Higher Priority Requests and specifically higher priority transmission service request Q2116 which is in service in power flow simulation cases where Q0828 is in service.

**Transmission System Voltages**

Voltages and post transient voltage steps are projected in power flow simulation to remain within permissible limits during the interruption of the Q0825-0830 power flow in the Transmission Provider's normal transmission configuration no.1.

In normal transmission configuration no. 1, reactive margin and voltage stability is predicted in power flow simulation to be acceptable at Mile Hi substation after the addition of Q0825-0830.

*Contingency Transmission Configuration No. 2*

In contingency transmission configuration no. 2, fully defined in Section 3.2 Study Assumptions, 115 kV Line 36 (K3) is open from the higher priority generation interconnection request Q0729 POI to Davis Creek tap. The power flow simulation test began with Q0825-0830 generating, then generation was interrupted.

**Transmission Line Loading**

At light load, the Chiloquin 230-115 kV transformer would be overloaded by higher priority generation and transmission service requests and would be further overloaded by the addition of Q0825 to Q0830.

At light load, 115 kV Line 61 (K2) between Chiloquin and Mile Hi substations would be overloaded by the addition of Q0825 to Q0830.

**Transmission System Voltages**

At summer peak loading, the transmission and distribution voltages would be acceptable for the addition of Q0825 and Q0826 but would collapse under the addition of Q0827 or more in contingency transmission configuration no. 2.

At light load, reactive margin and voltage stability would be reduced to unacceptable levels by the addition of Q0828 to Q0830.

*Contingency Transmission Configuration No. 3*

In contingency transmission configuration no. 3, fully defined in Section 3.2 Study Assumptions, Line 36 (K3) is open between Mile Hi substation and higher priority generation interconnection





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request Q0729 POI. The power flow simulation test began with Q0825-0830 power flowing, then flow was interrupted.

### **Transmission Line Loading**

The transmission system has adequate capacity to operate at any time in contingency transmission configuration no. 3 after the addition of Q0825 to Q0827 (10 MW to 30 MW), however, the addition of Q0828 to Q0830 (43 MW to 63 MW total) would overload the Chiloquin 230-115 kV transformer.

The transmission system has adequate capacity to operate at any time in contingency transmission configuration no. 3 after the addition of Q0825 to Q0829 (10 MW to 53 MW), however, the addition of Q0830 (63 MW total) would overload 115 kV Line 61 (K2).

### **Transmission System Voltages**

Voltages and voltage steps are predicted in power flow simulation to be unacceptable during contingency transmission configuration no. 3 due to excessively large post transient voltage steps and voltage instability.

#### *Contingency Transmission Configuration No. 4*

In contingency transmission configuration no. 4, fully defined in Section 3.2 Study Assumptions, the BPA Warner 230-115 kV transformer is open and all loads on 115 kV Lines 61 (K2) and 36 (K3) are supplied from Chiloquin substation. The power flow simulation test began with Q0825-0830 power flowing, then flow was interrupted.

### **Transmission Line Loading**

Higher priority generation interconnection and transmission service requests overload the Chiloquin substation 230-115 kV transformer and the addition of Q0825 to Q0830 (10 MW to 63 MW total) in contingency transmission configuration no. 4 would further exceed the thermal ratings.

The addition of Q0826 to Q0830 (20 MW to 63 MW total) in contingency transmission configuration no. 4 would exceed the thermal rating of 115 kV Line 61 (K2).

### **Transmission System Voltages**

Reactive margin and voltage stability may be acceptable for the addition of Q0825 and Q0826, but would be unacceptable for the addition of Q0827 to Q0830.

#### *Contingency Transmission Configuration No. 5*

In contingency transmission configuration no. 5, fully defined in Section 3.2 Study Assumptions, the Chiloquin substation 230-115 kV transformer is open and all of the loads on 115 kV Lines 61 (K2) and 36 (K3) are supplied from BPA Warner substation. The power flow simulation test began with Q0825-0830 power flowing, then flow was interrupted.

**Transmission Line Loading**

Higher priority generation interconnection and transmission service requests overload the BPA Warner substation 230-115 kV transformer and Line 36 (K3) between Alturas and Mile Hi substations, and the addition of Q0825 to Q0830 (10 MW to 63 MW total) in contingency transmission configuration no. 4 would further exceed the thermal ratings.

**Transmission System Voltages**

The Transmission Provider's system is predicted to be unstable as indicated by reactive margin in contingency transmission configuration no. 5 after addition of Q0825-0830.

*Contingency Transmission Configuration No. 6*

In contingency transmission configuration no. 6, fully defined in Section 3.2 Study Assumptions, the transmission system begins in the normal configuration with Q0825-0830 operating, after which 115 kV Line 36 (K3) trips open between higher priority request Q0729 POI and Alturas substations as Q0825-0830 continues to operate normally. Contingency transmission configuration no. 6 simulates a protective relay trip of Line 36. Although service to Q0825-0830 is not interrupted, the test does impose a sudden redirection of power flow on the transmission system, resulting in sudden changes in voltage.

**Transmission Line Loading**

Higher priority generation interconnection and transmission service requests overload the Chiloquin 230-115 kV transformer and it will be further overloaded by the addition of Q0825 to Q0830 in contingency transmission configuration no. 6. A RAS must be installed to interrupt Q0825-0830 power flow for contingency transmission configuration no. 6 to prevent overloading.

**Transmission System Voltages**

The addition of Q0825-Q0826 (up to 20 MW total) will produce acceptable voltage conditions in contingency transmission configuration no. 6, but additions above that level will cause excessive post transient voltage steps and voltage instability.

See contingency transmission configuration no. 2 for comments on reactive margin that also exist in contingency transmission configuration no. 6; a RAS must be installed to interrupt Q0825-0830 power flow for contingency transmission configuration no. 6 to prevent voltage collapse.

*Contingency Transmission Configuration No. 7*

In contingency transmission configuration no. 7, fully defined in Section 3.2 Study Assumptions, the transmission system begins in the normal configuration with Q0825-0830 operating, after which the BPA Warner substation 230-115 kV transformer opens as Q0825-0830 continue to operate normally. Contingency transmission configuration no. 7 simulates a protective relay trip of the Warner transformer. Although service to Q0825-0830 is not interrupted, the test does impose a sudden redirection of power flow on the transmission system, resulting in sudden changes in voltage.



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**Transmission Line Loading**

Higher priority generation interconnection and transmission service requests overload the Chiloquin 230-115 kV transformer and it will be further overloaded by the addition of Q0825 to Q0830 in contingency transmission configuration no. 7. A RAS must be installed to interrupt Q0825-0830 power flow for contingency transmission configuration no. 7 to prevent overloading. The addition of Q0826 to Q0830 (20 MW to 63 MW total).

**Transmission System Voltages**

The addition of Q0828 to Q0830 (43 MW to 63 MW total) will produce excessive post transient voltage steps or voltage collapse in contingency transmission configuration no. 7.

See contingency transmission configuration no. 4 for comments on reactive margin indicating voltage instability that also exist in contingency transmission configuration no. 7; a RAS must be installed to interrupt Q0825-0830 power flow for contingency transmission configuration no. 7 to prevent voltage collapse.

*Contingency Transmission Configuration No. 8*

In contingency transmission configuration no. 8, fully defined in Section 3.2 Study Assumptions, the transmission system begins in the normal configuration with Q0825-0830 operating, after which the Chiloquin substation 230-115 kV transformer opens as Q0825-0830 continues to operate normally. Contingency transmission configuration no. 8 simulates a protective relay trip the Chiloquin transformer. Although service to Q0825-0830 is not interrupted, the test does impose a sudden redirection of power flow on the transmission system, resulting in sudden changes in voltage.

**Transmission Line Loading**

The BPA Warner 230-115 kV transformer and 115 kV Line 36 (K3) in contingency transmission configuration no. 8 are overloaded by higher priority generation interconnection and transmission service requests and will be further overloaded by addition of Q0825-0830 (up to 63 MVA total). A RAS is required that will interrupt the flow from Q0825-0830 in response to contingency transmission configuration no. 8 to prevent overloads.

**Transmission System Voltages**

Voltages and voltage steps are predicted in power flow simulation to be acceptable for the addition of Q0825 to Q0828 (10 MW to 43 MW total) but unacceptable or unstable for the addition of Q0829 to Q0830 (53 MW to 63 MW total) during contingency transmission configuration no. 8.

See contingency transmission configuration no. 5 for comments on reactive margin indicating voltage instability that also exist in contingency transmission configuration no. 8. A RAS is required that will interrupt the flow from Q0825-0830 in response to contingency transmission configuration no. 8 to prevent voltage instability.

*Contingency Transmission Configuration No. 9*

In contingency transmission configuration no. 9, fully defined in Section 3.2 Study Assumptions, the transmission system begins in the normal configuration with Q0825-0830 operating, after

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which the Pilot Butte to BPA LaPine 230 kV line opens as Q0825-0830 continues to operate normally. Contingency transmission configuration no. 9 simulates a protective relay trip the Pilot Butte-BPA LaPine line in the Bend, Oregon region. Although service to Q0825-0830 is not interrupted, the test does impose a sudden redirection of power flow on the transmission system, resulting in sudden changes in voltage.

**Transmission Line Loading**

Tripping the Pilot Butte-BPA LaPine 230 kV line does not change the transmission system operating characteristics in the Lakeview, Oregon region significantly from the characteristics measured in normal transmission configuration no. 1.

**Transmission System Voltages**

Tripping the Pilot Butte-BPA LaPine 230 kV line does not change the transmission system operating characteristics in the Lakeview, Oregon region significantly from the characteristics measured in normal transmission configuration no. 1.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)	)
BLUE MARMOT VI LLC (UM 1830)	)
BLUE MARMOT VII LLC (UM 1831)	)
BLUE MARMOT VIII LLC (UM 1832)	)
BLUE MARMOT IX LLC (UM 1833)	)
Complainants	)
vs.	)
PORTLAND GENERAL ELECTRIC	)
COMPANY	)
Defendant	)
Pursuant to ORS 756.500.	)
_____	)

**EXHIBIT BLUE MARMOT/907**

**BLUE MARMOT FACILITIES STUDY RESULTS**

**January 31, 2020**



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**Small Generator Interconnection  
Facilities Study Report**

Completed for  
**Q0825 - Blue Marmot V LLC**  
**Q0826 - Blue Marmot VI LLC**  
**Q0827 - Blue Marmot VII LLC**  
**Q0828 - Blue Marmot VIII LLC**  
**Q0829 - Blue Marmot IX LLC**  
**Q0830 - Blue Marmot XI LLC**  
**("Interconnection Customer")**  
**Blue Marmot projects**

Proposed Point of Interconnection  
**Chiloquin – Alturas 115 kV line**  
**at 42.178563°N, 120.357580°W (same POI as Q0729)**

**December 5, 2017**

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## **Facilities Study Report**

### **1.0 DESCRIPTION OF THE PROJECT**

Blue Marmot V LLC, Blue Marmot VI LLC, Blue Marmot VII LLC, Blue Marmot VIII LLC, Blue Marmot IX LLC, Blue Marmot XI LLC (collectively the “Interconnection Customer”) proposed interconnecting the following:

- Q0825 Blue Marmot V LLC: 10 MW
- Q0826 Blue Marmot VI LLC: 10 MW
- Q0827 Blue Marmot VII LLC: 10 MW
- Q0828 Blue Marmot VIII LLC: 13 MW
- Q0829 Blue Marmot IX LLC: 10 MW
- Q0830 Blue Marmot XI LLC: 10 MW

This total of 63 MWs of new generation is proposed to connect to PacifiCorp’s (“Transmission Provider”) Chilouin – Alturas 115 kV line at 42.178563°N, 120.357580°W (same Point of Interconnection as Q0729) located in Lake County, Oregon. The Blue Marmot projects (collectively the “Project”) will consist of the following: thirty-one (31) 2 MW SMA Sunny Central 2200 inverters and one (1) 1 MW inverter for a total output of 63 MW.

Interconnection Customer will NOT operate this generator as a Qualified Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA).

The Transmission Provider has assigned the Project “Q0825, Q0826, Q0827, Q0828, Q0829, Q0830.”

### **2.0 STUDY SCOPE AND OBJECTIVES**

The objective of the Facilities Study is to:

- Specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).
- Identify:
  - (1) The electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment.
  - (2) The nature and estimated cost of the Transmission Provider’s Interconnection Facilities and Upgrades necessary to accomplish the interconnection.
  - (3) An estimate of the time required to complete the construction and installation of such facilities.

### **3.0 STUDY ASSUMPTIONS**

- All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are listed in Appendix 1. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.
- For study purposes there are two separate queues:





## ***Facilities Study Report***

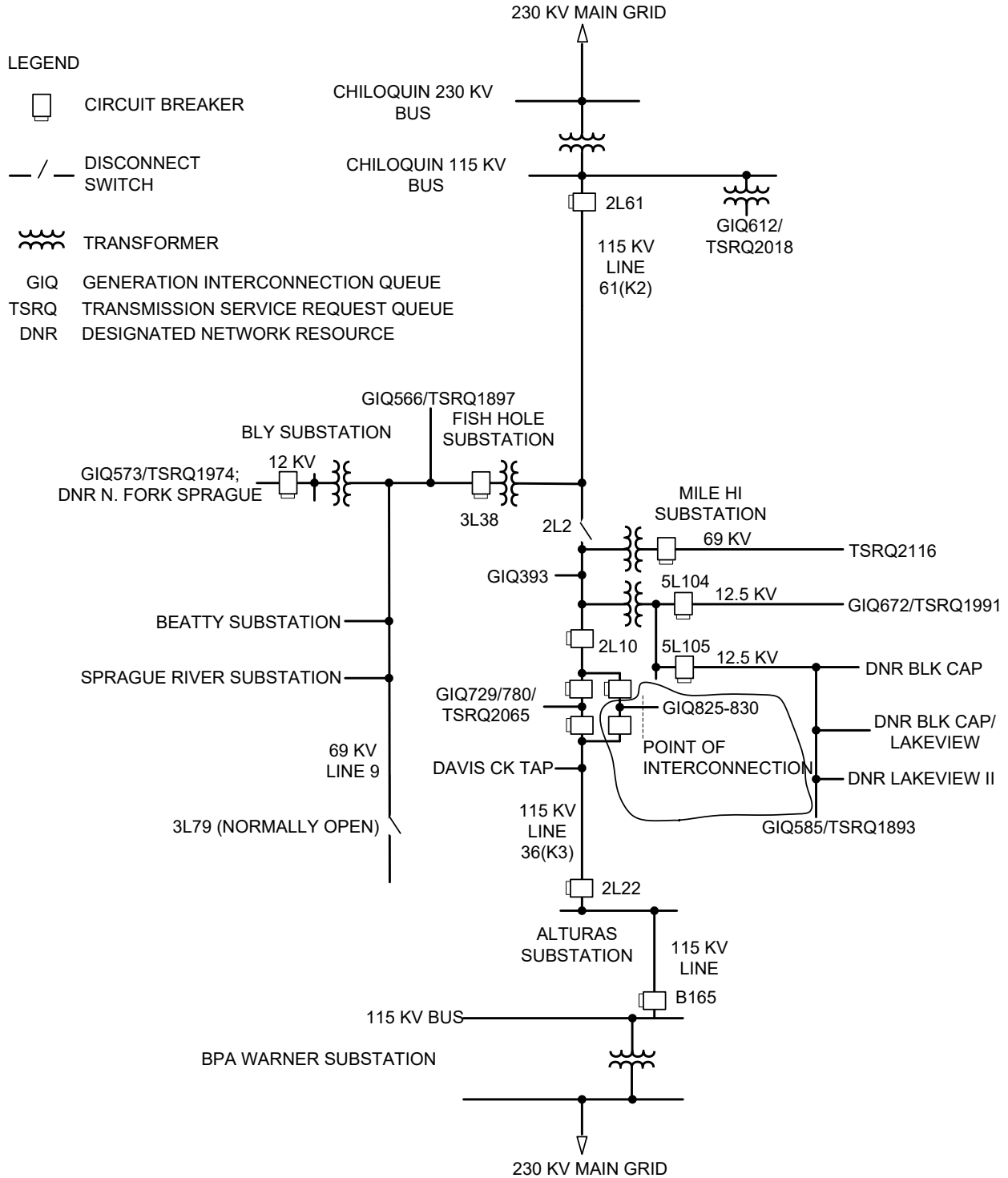
- Transmission Service Queue: to the extent practical, all network upgrades that are required to accommodate active transmission service requests will be modeled in this study.
- Generation Interconnection Queue: Interconnection Facilities associated with higher queue interconnection requests will be modeled in this study.
- The Interconnection Customer's request for interconnection service in and of itself does not convey transmission service.
- This study assumes the Project will be integrated into Transmission Provider's system at the agreed upon and/or proposed Point of Interconnection ("POI").
- The Interconnection Customer will construct and own the any facilities required between the POI and the Project unless specifically identified by the Transmission Provider.
- Line reconductor or fiber underbuild required on existing poles will be assumed to follow the most direct path on the Transmission Provider's system. If during detailed design the path must be modified it may result in additional cost and timing delays for the Interconnection Customer's Project.
- Generator tripping may be required for certain outages.
- All facilities will meet or exceed the minimum Western Electricity Coordinating Council ("WECC"), North American Electric Reliability Corporation ("NERC"), and Transmission Provider performance and design standards
- The new POI substation currently required for higher queued project Q0729 is assumed to be in service and is a contingent facility for this Project. Should the Q0729 project be withdrawn or the Interconnection Customer desires an in-service date prior to completion of the Q0729 project, the substation scope of work will be assigned to this Project.
- All six phases of this Project will be constructed simultaneously. Any deviation to this assumption will require that the Transmission Provider perform restudies to assign the necessary improvements to the individual phases.
- This report is based on information available at the time of the study. It is the Interconnection Customer's responsibility to check the Transmission Provider's web site regularly for transmission system updates (<http://www.pacificorp.com/tran.html>).

### **4.0 PROPOSED POINT OF INTERCONNECTION**

The Interconnection Customer's proposed Small Generating Facilities (collectively the "Small Generating Facility") is to be interconnected through a new line position in the Q0729 POI substation. Figure 1 below, is a one-line diagram that illustrates the interconnection of the proposed Small Generating Facility to the Transmission Provider's system.



**Facilities Study Report**



*Figure 1: System One Line Diagram*



## 5.0 SCOPE OF WORK

### 5.1 Small Generating Facility Modifications

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

#### 5.1.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Design, procure, own and maintain the Small Generating Facility and all associated equipment.
- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the Small Generating Facility and associated collector substation(s).
- Procure, own and maintain a set of relays that will timely (5 cycles or less) detect and clear faults in the Interconnection Customer's transmission tie line. These relays must be coordinated with the other relays in the Transmission Provider's system.
- Design, procure, and install a data concentrator (SEL-2411 or Transmission Provider approved device) to transfer data between the collector substation(s) and the Interconnection Customer tie line substation via an optical fiber communications circuit in DMP3 protocol. The Transmission Provider will input and hold the second level passwords for the SEL-2411 (or Transmission Provider approved device). Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Provide the following data from the Project collector substation to be routed through the Interconnection Customer tie line substation:

From each of the Q0825, Q0826, Q0827, Q0828, Q0829 and Q0830 phases:

Analogs:

- 34.5 kV Real power
- 34.5 kV Reactive Power
- 34.5 kV A phase voltage
- 34.5 kV B phase voltage
- 34.5 kV C phase voltage
- Global Horizontal Irradiance (GHI)
- Average Plant Atmospheric Pressure (Bar)
- Average Plant Temperature (Celsius)

Status:

- 34.5 kV circuit breaker

From the 115kV side of the collector station:

Analogs:

- 115 kV Real power
- 115 kV Reactive Power
- 115 kV A phase voltage
- 115 kV B phase voltage
- 115 kV C phase voltage



## ***Facilities Study Report***

- Global Horizontal Irradiance (GHI)
- Average Plant Atmospheric Pressure (Bar)
- Average Plant Temperature (Celsius)

Status:

- 115 kV circuit breaker
- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation(s) for the Transmission Provider to install its metering equipment. This area will share a fence and ground grid with the associated Small Generating Facility and have separate, unencumbered access for the Transmission Provider.
  - Provide AC station service for the Transmission Provider's control house.
  - Have a CDEGS grounding analysis performed and provide the results to the Transmission Provider.
  - Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the Point of Interconnection or a point determined by the Transmission Provider if necessary. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
  - Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
  - Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
  - Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
  - Operate the Small Generating Facility with a voltage droop.
  - Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
  - Meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
  - Prior to construction, arrange for construction power with the Transmission Provider. The metering shall conform to the Six State Electric Service Requirements manual as the site is within the Transmission Provider's service territory.
  - Arrange bidirectional metering for permanent station service load. Please note that prior to back feed, Interconnection Customer must arrange distribution voltage retail meter service for electricity consumed by the Project and arrange backup station service



## **Facilities Study Report**

- for power that will be drawn from the transmission line when the Project is not generating. Interconnection Customer must call the PCCC Solution Center 1-800-640-2212 to arrange this service. Approval for back feed is contingent upon obtaining station service.
- The Interconnection Customer is responsible for standby station service requirements for their collector and/or generation facilities in the event the transmission source is unavailable. This may require the installation of an on-site generator or connection to a local distribution feeder. Connection to a local feeder will require the Interconnection Customer to make a separate service request through the PCCC Solution Center at 1-800-640-2212.
  - Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.
  - Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.

### **5.1.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, install, own and maintain at the Interconnection Customer's expense, low side 34.5 kV revenue metering for each of the six phases of the Project. This will include revenue metering panels, instrument transformers, H-frame structures, junction boxes, secondary lead conductors, revenue quality meters and test switches.
- Procure and install a control house adjacent to the Interconnection Customer's collector substation.
- Procure and install a backup DC battery system for the Transmission Provider control house.
- Install an Ethernet phone line for retail sales and generation accounting via the MV-90 translation system.
- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.

## **5.2 Tie Line Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line connecting the Interconnection Customer's Small Generating Facility to the Interconnection Customer's Tie Line substation.

### **5.2.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Obtain all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the radial transmission line between the collector substation and tie line substation.
- Design, construct, own and maintain the 115 kV transmission tie line between the Interconnection Customer's collector and tie line substations.
- Design, procure, construct, own and maintain Transmission Provider approved OPGW/ADSS fiber optic cable from the collector substation(s) to the tie line substation.



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- Supply one DNP3 SCADA circuit from the collector substation to the POI substation, through the tie line substation, with all the required SCADA points.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.

### **5.2.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Review and comment on the Interconnection Customer's communications equipment and fiber optic cable to ensure compatibility.

## **5.3 Tie Line Substation Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with Interconnection Customer's tie line substation.

### **5.3.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the new tie line substation.
- Design, procure, construct, own and maintain the Interconnection Customer tie line substation (consisting of a sole 115 kV circuit breaker and associated equipment) within 800' of the POI substation. This includes all radial transmission line relaying to the collector station, breaker failure protection and associated communications. The short line segment between the tie line substation and the POI substation will be considered a bus section and will be protected with a bus differential relay systems. The bus differential relays will be located in the POI substation.
- Provide the output from a set of current transformers to be fed into the bus differential relays with a maximum current transformer ratio matching the maximum CT ratio of the breakers at the POI substation.
- Install facilities capable of detecting and clearing faults on the tie line between the tie line substation and the collector substation in five cycles or less.
- Design the tie line substation such that the ground grid can be connected to the POI substation ground grid to support the installation of a Transmission Provider owned and maintained bus differential scheme. The Interconnect Customer will be responsible to ensure the ground grid design supports safe step and touch potentials.
- All collector and tie line substation status, control, and protection circuit interface to the POI substation will be hard wired to a Transmission Provider owned and maintained marshalling cabinet located just inside the fence of the POI substation. Testing and commissioning of this communication path will be the responsibility of the Interconnection Customer and coordinated with the Transmission Provider.
- The following data points are required from the Interconnection Customer's tie line substation:
  - Status:
    - 115kV breaker
- Conduits (number and size TBD) will be installed to between the Interconnection Customer tie line substation and marshalling cabinet just inside the fence of the POI substation to support copper circuits installed between the facilities.



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- If a structure is required between the POI substation and the tie line substation, design to Transmission Provider's current design and installation standards and coordinate with Transmission Provider to ensure proper clearances.
- Coil conductor, shield wire and OPGW on the tie line substation dead end structure sufficient to make the span to the POI dead end structure.

### **5.3.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the necessary specifications to allow the ground mats of the Interconnection Customer's tie line substation and the POI substation to be tied together.
- Provide the Interconnection Customer the necessary specifications for the bus/line segment of the Interconnection Customer's tie line substation and the POI substation to be connected.
- Provide the design and installation requirements to the Interconnection Customer if a structure(s) is required between the POI substation and the tie line substation.
- Terminate the last bus/line span between the tie line substation and the POI substation dead end structure.

## **5.4 Point of Interconnection**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

### **5.4.1 INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary permits, lands, rights of way and easements required to allow for interconnection of the Project into the POI substation.

### **5.4.2 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, own, install and maintain the necessary equipment to create a line position in the POI substation to allow the Project to interconnection. This will include the following major equipment:
  - 1 – 115 kV circuit breaker
  - 3 – 115 kV disconnect switches
- Design, procure and install bus differential relays for the connection to the Interconnection Customer's tie line substation.
- Procure and install a set of non-pilot step distance relays.
- Procure and install two multifunction relays to monitor voltage magnitude and frequency.
- Install a line loss panel with a redundant programmable logic controller for a Remedial Action Scheme ("RAS") central controller.
- Install panels for the RAS related redundant communication signals equipment.
- Design, procure, install and connect communications equipment for the RAS including a second channel bank, modems and fiber jumpers.
- Add the required data points from the Interconnection Customer's collector substation and tie line substation to the existing POI substation RTU.
- Add the following data points to the existing POI substation RTU:



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- Analogs:
- Net Generation MW
  - Net Generator MVAR
  - Interchange metering kWh
  - Design, procure and install 115 kV metering equipment including two revenue quality meters, test switch, instrument transformers, metering panel, junction box and secondary metering wire.
  - Connect meter Ethernet ports to existing router for MV-90 communications.
  - Route alternate meters to existing channel cards in the POI substation and then over existing systems to Transmission Provider control centers.

### 5.5 Other

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### 5.5.1 TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Alturas substation
  - Design, procure, install and connect communications equipment for the RAS including two channel banks.
  - Procure and construct a self-supporting microwave tower.
  - Install a line loss panel with a redundant programmable logic controller.
  - Replace the existing relays and controls associated with the two 12.5 kV feeder breakers.
- Chiloquin substation
  - Install a new control house.
  - Install a line loss panel with a redundant programmable logic controller.
  - Install a self-supporting microwave tower, radio system, channel bank, and modems.
- Mile Hi substation
  - Replace existing 115 kV transrupter 2L1 with a circuit switcher with a rating of 1200A and an interrupting capacity of 10kA.
  - Install a line loss panel with a redundant programmable logic controller.
  - Design, procure, install and connect communications equipment for the RAS including a second channel bank, modems and fiber jumpers.
  - Procure and construct a new self-supporting microwave tower.
- Klamath substation
  - Cross connect various RAS circuits.
- Sugar Mountain Communication Site
  - Procure and construct a new self-supporting microwave tower and equipment building with generator and propane tank.
- Swan Lake Point Communication Site
  - Cross connect RAS circuit.
- Chiloquin Hill Top communication site
  - Procure and construct a new microwave site including self-supporting tower, generator and propane tank.





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- Install a microwave system to cross connect the RAS to other sites.
- Bonneville Power Administration (“BPA”) Warner substation
  - Install a line loss panel with a redundant programmable logic controller.
  - Design, procure, install and connect communications equipment for the RAS including two channel banks.
  - Contract, at the Interconnection Customer’s expense, with BPA a T1 to either Malin or Captain Jack substation.
- BPA Hilltop substation
  - Coordinate with BPA to install a line loss panel with a redundant programmable logic controller and channelize two RAS circuits.
- Control Centers
- Update databases for the inclusion of this Project as well as the RAS Remedial Action Scheme
  - Design and implement a RAS to trip the Project for contingencies identified in the system impact study report for this Project.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee (“RASRS”).
  -

**6.0 COST ESTIMATE**

The following estimate represents only scopes of work that will be performed by the Transmission Provider. Costs for any work being performed by the Interconnection Customer are not included.

**Direct Assigned**

**Collector substation** \$1,132,000  
*Add metering and control house*

**POI substation** \$1,371,000  
*Install 115kV breaker and line terminal*

**Klamath Falls substation** \$7,000  
*Connect RAS scheme circuits*

**Control centers** \$5,000  
*Update communications systems*

**Total Direct Assigned \$2,515,000**

**Network Upgrade**

**Alturas substation** \$380,000  
*Install microwave communications*

**Chiloquin substation** \$266,000  
*Install microwave communications and RAS scheme*

**Mile Hi substation** \$429,000  
*Install RAS scheme and replace circuit switcher*



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<b>Sugar Mountain communication site</b> <i>Install microwave communications</i>	\$942,000
<b>Swan Lake Point communication site</b> <i>Install microwave communications</i>	\$85,000
<b>Chiloquin Hill Top communication site</b> <i>Install microwave communications</i>	\$1,013,000
<b>BPA Warner substation</b> <i>Install microwave communications</i>	\$224,000
<b>BPA Hilltop substation</b> <i>Install microwave communications and RAS scheme</i>	\$84,000
<b>Total Network Upgrade</b>	<b>\$2,423,000</b>
	<b>Total \$5,938,000</b>

\*Any distribution line modifications identified in this report will require a field visit analysis in order to obtain a more thorough understanding of the specific requirements. The estimate provided above for this work could change substantially based on the results of this analysis. Until this field analysis is performed the Transmission Provider must develop the Project schedule using conservative assumptions. The Interconnection Customer may request that the Transmission Provider perform this field analysis, at the Interconnection Customer's expense, prior to the execution of an Interconnection Agreement in order to obtain more cost and schedule certainty.

Note: Costs for any excavation, duct installation and easements shall be borne by the Interconnection Customer and are not included in this estimate. This estimate is as accurate as possibly given the level of detailed study that has been completed to date and approximates the costs incurred by Transmission Provider to interconnect these Small Generating Facility to Transmission Provider's electrical distribution or transmission system. The Interconnection Customer will be responsible for all actual costs, regardless of the estimated costs communicated to or approved by the Interconnection Customer.

**7.0 SCHEDULE**

Execute Interconnection Agreement	January 15, 2018
Provision of Financial Security	February 12, 2018
Interconnection Customer Design Information Provided	April 9, 2018
*Transmission Provider Engineering & Procurement Commences	May 21, 2018
Interconnection Customer provides signed Drawings for their facility	PacifiCorp provided Design Review 2 date



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Transmission Provider Engineering Design Complete	February 18, 2019
**Energy Imbalance Market Modeling Data Submittal	March 1, 2019
Interconnection Customer Property/Permits/ROW Procured	March 18, 2019
***Q0729 POI substation complete	March 28, 2019
Construction Begins	April 15, 2019
Receive Policy 139 stipulated test plan from Interconnection Customer	September 16, 2019
Interconnection Customer's Facilities Receive Backfeed Power	October 15, 2019
Initial Synchronization/Generation Testing	November 18, 2019
Commercial Operation	November 30, 2019

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering (May 21, 2018) and construction (April 15, 2019) no later than 30 days prior to those dates, respectively.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*The Point of Interconnection substation being constructed as part of the Q0729 project is a contingent facility for this Project. Any delays in the completion of the Q0729 POI substation may result in similar delays for this Project including Commercial Operation.

Please note, the time required to perform the scope of work identified in this report appears to result in a timeframe that does support the Interconnection Customer's requested Commercial Operation date of November 30, 2019.

**8.0 APPENDICES**

Appendix 1: Higher Priority Requests

Appendix 2: Property Requirements



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**8.1 Appendix 2: Higher Priority Requests**

All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are identified below. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.

Transmission/Generation Interconnection Queue Requests considered:

GIQ: Generation Interconnection request queue.

TSRQ: Transmission Service request queue.

DNR: Designated Network Resource.

Transmission/Generation Interconnection Queue Requests considered:

Designated Network Resource Black Cap, 2 MW generation, Mile Hi substation

Designated Network Resource Black Cap/Lakeview, 0.363 MW generation, Mile Hi substation

Designated Network Resource Lakeview II, 0.495 MW generation, Mile Hi substation

Designated Network Resource North Fork Sprague, 1.18 MW generation, Bly substation

TSRQ1727 (AREF 78203844), 50 MW, POR Malin 230 kV bus, POD Redmond 230 kV bus

TSRQ1728 (AREF 78203844), 150 MW, POR Malin 230 kV bus, POD Redmond 230 kV bus

TSRQ1974, 5 MW, POR Bly substation

TSRQ1897, 8.5 MW, POR Fish Hole substation

TSRQ1893, 8 MW, POR Mile Hi substation

TSRQ1991, 10 MW, POR Mile Hi substation

TSRQ2018, 9.9 MW, POR Chiloquin substation

TSRQ2065, 50 MW, POR 115 kV Line 36 (K3) near Lakeview, Oregon



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TSRQ2081, 100 MW, POR Malin 230 kV bus to POD Redmond 230 kV bus

TSRQ2082, 100 MW, POR Malin 230 kV bus to POD Redmond 230 kV bus

TSRQ2083, 100 MW, POR Malin 230 kV bus to POD Redmond 230 kV bus

TSRQ2111, 10 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

TSRQ2112, 10 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

TSRQ2113, 10 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

TSRQ2114, 10 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

TSRQ2115, 10 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

TSRQ2116, 3.7 MW, POR Mile Hi substation 69 kV BPA revenue meter #41 at Lakeview, Oregon

TSRQ2132, 10 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

TSRQ2133, 3 MW, POR 115 kV Line 36 (K3) at Lakeview, Oregon to POD PGE

BPA Transmission Agreement RS-368, 200 MW, POR Malin 500 kV, POD Malin 230 kV



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## 8.2 Appendix 2: Property Requirements

### **Property Requirements for Point of Interconnection Substation**

#### **Requirements for rights of way easements**

Rights of way easements will be acquired by the Interconnection Customer in the Transmission Provider's name for the construction, reconstruction, operation, maintenance, repair, replacement and removal of Transmission Provider's Interconnection Facilities that will be owned and operated by Transmission Provider. Interconnection Customer will acquire all necessary permits for the Project and will obtain rights of way easements for the Project on Transmission Provider's easement form.

#### **Real Property Requirements for Point of Interconnection Substation**

Real property for a POI substation will be acquired by an Interconnection Customer to accommodate the Interconnection Customer's Project. The real property must be acceptable to Transmission Provider. Interconnection Customer will acquire fee ownership for interconnection substation unless Transmission Provider determines that other than fee ownership is acceptable; however, the form and instrument of such rights will be at Transmission Provider's sole discretion. Any land rights that Interconnection Customer is planning to retain as part of a fee property conveyance will be identified in advance to Transmission Provider and are subject to the Transmission Provider's approval.

The Interconnection Customer must obtain all permits required by all relevant jurisdictions for the planned use including but not limited to conditional use permits, Certificates of Public Convenience and Necessity, California Environmental Quality Act, as well as all construction permits for the Project.

Interconnection Customer will not be reimbursed through network upgrades for more than the market value of the property.

As a minimum, real property must be environmentally, physically, and operationally acceptable to Transmission Provider. The real property shall be a permitted or able to be permitted use in all zoning districts. The Interconnection Customer shall provide Transmission Provider with a title report and shall transfer property without any material defects of title or other encumbrances that are not acceptable to Transmission Provider. Property lines shall be surveyed and show all encumbrances, encroachments, and roads.

Examples of potentially unacceptable environmental, physical, or operational conditions could include but are not limited to:

1. Environmental: known contamination of site; evidence of environmental contamination by any dangerous, hazardous or toxic materials as defined by any governmental agency; violation of building, health, safety, environmental, fire, land use, zoning or other such regulation; violation of ordinances or statutes of any governmental entities having jurisdiction over the property; underground or above ground storage tanks in area; known remediation sites on property; ongoing mitigation activities or monitoring activities; asbestos; lead-based paint, etc. A

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phase I environmental study is required for land being acquired in fee by the Transmission Provider unless waived by Transmission Provider.

2. Physical: inadequate site drainage; proximity to flood zone; erosion issues; wetland overlays; threatened and endangered species; archeological or culturally sensitive areas; inadequate sub-surface elements, etc. Transmission Provider may require Interconnection Customer to procure various studies and surveys as determined necessary by Transmission Provider.

Operational: inadequate access for Transmission Provider's equipment and vehicles; existing structures on land that require removal prior to building of substation; ongoing maintenance for landscaping or extensive landscape requirements; ongoing homeowner's or other requirements or restrictions (e.g., Covenants, Codes and Restrictions, deed restrictions, etc.) on property which are not acceptable to the Transmission Provider.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)      )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/908**

**TRANSMISSION SERVICE AGREEMENT NO. 843**

**January 31, 2020**



MAR 29 2017

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 843

TRANSMISSION SERVICES  
PACIFICORP

Form Of Service Agreement For Long-Term Firm Point-To-Point  
Transmission Service

- 1.0 This Service Agreement, dated as of April 3, 2017, is entered into, by and between PacifiCorp ("Transmission Provider"), and EDP Renewables North America LLC ("Transmission Customer") for the provision of Long-Term Firm Point-to-Point Transmission Service.
- 2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 For Long-Term Firm Point-to-Point Transmission Service:
- 3.1 The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
- 3.2 Service under this agreement shall commence on the later of (1) the requested Service commencement date, (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
- 3.3 Service under this agreement shall be in accordance with the attached Specifications.
- 4.0 For Short-Term Firm Point-to-Point Transmission Service:
- 4.1 Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer pursuant to the terms and conditions of the Tariff.

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 843

- 4.2 The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 4.3 The Transmission Customer will provide to the Transmission Provider an Application deposit for Short-Term Firm Point-to-Point Transmission Service in accordance with the provisions of Section 17.3 of the Tariff at the time such service is arranged.
- 4.4 Service under this agreement shall commence and shall be provided as agreed to at the time such service is arranged.
- 5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
- 6.0 Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provider:

US Mail Deliveries: PacifiCorp Transmission Services  
Attn: Central Cashiers Office  
PO Box 2757  
Portland, OR 97208-2757

Other Deliveries: Central Cashiers Office  
Attn: PacifiCorp Transmission Services  
825 NE Multnomah Street, Suite 550  
Portland, OR 97232

Phone Number: 503-813-6774

Transmission Customer:

EDP Renewables North America LLC  
808 Travis Street, Suite 700  
Houston, Texas 77002

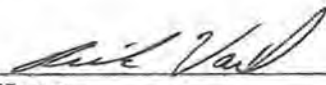
PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 843

713-356-2517


7.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

PacifiCorp:

By:  VP, Transmission 4/3/17  
Name Title Date

Transmission Customer:

By:  Steve Irvin 3/28/17  
Name Title Date  
Executive Vice President,  
Western and Central Regions and Mexico

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 843

Specifications For Long-Term Firm Point-To-Point  
Transmission Service

1.0 Term of Transaction: 5 years

Start Date: June 1, 2019

Termination Date: May 31, 2024

2.0 Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.

Firm capacity and associated energy in the amounts as shown in Section 5.0 shall be transmitted by the Transmission Provider. All capacity and associated energy transmitted under this Service Agreement shall be scheduled pursuant to the scheduling practices of the Tariff.

This transaction originates in the PACW control area and terminates in the PACW control area

3.0 Point(s) of Receipt: PACW

Delivering Party: At or near the Mile Hi Substation on the Chiloquin to Alturas 115 kV transmission line as represented by PACW on Transmission Provider's OASIS

4.0 Point(s) of Delivery: PACW.PGE

Receiving Party: Transmission Provider's interconnection with Portland General Electric as represented by PACW.PGE on Transmission Provider's OASIS

5.0 Maximum amount of capacity and energy to be transmitted (Reserved Capacity): 10 MW

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 843

6.0 Designation of party(ies) subject to reciprocal service obligation; none

7.0 Name(s) of any Intervening Systems providing transmission service; none

8.0 Service under this Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)

8.1 Transmission Charge: The currently effective yearly delivery charge as provided in Schedule 7 of the Tariff.

8.2 System Impact and/or Facilities Study Charge(s): none

8.3 Direct Assignment Facilities Charge: no

8.4 Ancillary Services Charges:

a) Scheduling, System Control and Dispatch Service:

Only to the extent required pursuant to Schedule 1 of the Tariff.

b) Reactive Supply and Voltage Control from Generation Sources Service:

Only to the extent required pursuant to Schedule 2 of the Tariff.

c) Regulation and Frequency Response Service:

Only to the extent required pursuant to Schedule 3 of the Tariff.

d) Generator Regulation and Frequency Response Service

Only to the extent required pursuant to

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 843

Schedule 3A of the Tariff

e) Energy Imbalance Service:

Only to the extent required pursuant to  
Schedule 4 of the Tariff.

f) Operating Reserve - Spinning Reserve  
Service:

Only to the extent required pursuant to  
Schedule 5 of the Tariff.

g) Operating Reserve - Supplemental Reserve  
Service:

Only to the extent required pursuant to  
Schedule 6 of the Tariff.

h) Real Power Losses:

Transmission service under this agreement  
shall be assessed real power losses pursuant  
to Section 15.7 and Schedule 10 of the  
Tariff.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/909**

**TRANSMISSION SERVICE AGREEMENT NO. 844**

**January 31, 2020**

MAR 29 2017

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 844

TRANSMISSION SERVICES  
PACIFICORP

Form Of Service Agreement For Long-Term Firm Point-To-Point  
Transmission Service

- 1.0 This Service Agreement, dated as of April 3, 2017, is entered into, by and between PacifiCorp ("Transmission Provider"), and EDP Renewables North America LLC ("Transmission Customer") for the provision of Long-Term Firm Point-to-Point Transmission Service.
- 2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 For Long-Term Firm Point-to-Point Transmission Service:
  - 3.1 The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
  - 3.2 Service under this agreement shall commence on the later of (1) the requested Service commencement date, (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
  - 3.3 Service under this agreement shall be in accordance with the attached Specifications.
- 4.0 For Short-Term Firm Point-to-Point Transmission Service:
  - 4.1 Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer pursuant to the terms and conditions of the Tariff.



PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 844

- 4.2 The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 4.3 The Transmission Customer will provide to the Transmission Provider an Application deposit for Short-Term Firm Point-to-Point Transmission Service in accordance with the provisions of Section 17.3 of the Tariff at the time such service is arranged.
- 4.4 Service under this agreement shall commence and shall be provided as agreed to at the time such service is arranged.
- 5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
- 6.0 Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provider:

US Mail Deliveries: PacifiCorp Transmission Services  
Attn: Central Cashiers Office  
PO Box 2757  
Portland, OR 97208-2757

Other Deliveries: Central Cashiers Office  
Attn: PacifiCorp Transmission Services  
825 NE Multnomah Street, Suite 550  
Portland, OR 97232

Phone Number: 503-813-6774

Transmission Customer:

EDP Renewables North America LLC  
808 Travis Street, Suite 700  
Houston, Texas 77002

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 844

713-356-2517

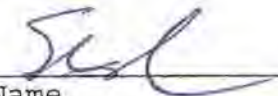
7.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

PacifiCorp:

By:  VP, Transmission 4/3/17  
Name Title Date

Transmission Customer:

By:  Steve Irvin 3/28/17  
Name Title Date  
Executive Vice President,  
Western and Central Regions and Mexico

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 844

Specifications For Long-Term Firm Point-To-Point  
Transmission Service

1.0 Term of Transaction: 5 years

Start Date: June 1, 2019

Termination Date: May 31, 2024

2.0 Description of capacity and energy to be transmitted  
by Transmission Provider including the electric  
Control Area in which the transaction originates.

Firm capacity and associated energy in the amounts as  
shown in Section 5.0 shall be transmitted by the  
Transmission Provider. All capacity and associated  
energy transmitted under this Service Agreement shall  
be scheduled pursuant to the scheduling practices of  
the Tariff.

This transaction originates in the PACW control area  
and terminates in the PACW control area

3.0 Point(s) of Receipt: PACW

Delivering Party: At or near the Mile Hi Substation on  
the Chiloquin to Alturas 115 kV transmission line as  
represented by PACW on Transmission Provider's OASIS

4.0 Point(s) of Delivery: PACW.PGE

Receiving Party: Transmission Provider's  
interconnection with Portland General Electric as  
represented by PACW.PGE on Transmission Provider's  
OASIS

5.0 Maximum amount of capacity and energy to be  
transmitted (Reserved Capacity): 10 MW

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 844

6.0 Designation of party(ies) subject to reciprocal service obligation: none

7.0 Name(s) of any Intervening Systems providing transmission service: none

8.0 Service under this Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)

8.1 Transmission Charge: The currently effective yearly delivery charge as provided in Schedule 7 of the Tariff.

8.2 System Impact and/or Facilities Study Charge(s): none

8.3 Direct Assignment Facilities Charge: no

8.4 Ancillary Services Charges:

a) Scheduling, System Control and Dispatch Service:

Only to the extent required pursuant to Schedule 1 of the Tariff.

b) Reactive Supply and Voltage Control from Generation Sources Service:

Only to the extent required pursuant to Schedule 2 of the Tariff.

c) Regulation and Frequency Response Service:

Only to the extent required pursuant to Schedule 3 of the Tariff.

d) Generator Regulation and Frequency Response Service

Only to the extent required pursuant to

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 844

Schedule 3A of the Tariff.

e) Energy Imbalance Service:

Only to the extent required pursuant to  
Schedule 4 of the Tariff.

f) Operating Reserve - Spinning Reserve  
Service:

Only to the extent required pursuant to  
Schedule 5 of the Tariff.

g) Operating Reserve - Supplemental Reserve  
Service:

Only to the extent required pursuant to  
Schedule 6 of the Tariff.

h) Real Power Losses:

Transmission service under this agreement  
shall be assessed real power losses pursuant  
to Section 15.7 and Schedule 10 of the  
Tariff.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/910**

**TRANSMISSION SERVICE AGREEMENT NO. 852**

**January 31, 2020**

MAY 18 2017

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 852TRANSMISSION SERVICES  
PACIFICORP**Form Of Service Agreement For Long-Term Firm Point-To-Point  
Transmission Service**

- 1.0 This Service Agreement, dated as of May 18, 2017, is entered into, by and between PacifiCorp ("Transmission Provider"), and EDP Renewables North America LLC ("Transmission Customer") for the provision of Long-Term Firm Point-to-Point Transmission Service.
- 2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 For Long-Term Firm Point-to-Point Transmission Service:
- 3.1 The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
- 3.2 Service under this agreement shall commence on the later of (1) the requested Service commencement date, (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
- 3.3 Service under this agreement shall be in accordance with the attached Specifications.
- 4.0 For Short-Term Firm Point-to-Point Transmission Service:
- 4.1 Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer pursuant to the terms and conditions of the Tariff.

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 852

- 4.2 The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 4.3 The Transmission Customer will provide to the Transmission Provider an Application deposit for Short-Term Firm Point-to-Point Transmission Service in accordance with the provisions of Section 17.3 of the Tariff at the time such service is arranged.
- 4.4 Service under this agreement shall commence and shall be provided as agreed to at the time such service is arranged.
- 5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
- 6.0 Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provider:

US Mail Deliveries: PacifiCorp Transmission Services  
Attn: Central Cashiers Office  
PO Box 2757  
Portland, OR 97208-2757

Other Deliveries: Central Cashiers Office  
Attn: PacifiCorp Transmission Services  
825 NE Multnomah Street, Suite 550  
Portland, OR 97232

Phone Number: 503-813-6774

8



PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 852

Transmission Customer:

EDP Renewables North America LLC  
808 Travis Street, Suite 700  
Houston, Texas 77002  
713-356-2517

7.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

PacifiCorp:

By: Phil Vud VP, Transmission 5/18/17  
Name Title Date

Transmission Customer:

By: Steve Irvin Steve Irvin 5/15/2017  
Name Executive Vice President, Western and Central Regions and Mexico Title Date

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 852

**Specifications For Long-Term Firm Point-To-Point  
Transmission Service**

1.0 Term of Transaction: 5 years

Start Date: June 1, 2019

Termination Date: May 31, 2024

2.0 Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.

Firm capacity and associated energy in the amounts as shown in Section 5.0 shall be transmitted by the Transmission Provider. All capacity and associated energy transmitted under this Service Agreement shall be scheduled pursuant to the scheduling practices of the Tariff.

This transaction originates in the PACW control area and terminates in the PACW control area

3.0 Point(s) of Receipt: PACW

Delivering Party: At or near the Mile Hi Substation on the Chiloquin to Alturas 115 kV transmission line as represented by PACW on Transmission Provider's OASIS

4.0 Point(s) of Delivery: PACW.PGE

Receiving Party: Transmission Provider's interconnection with Portland General Electric as represented by PACW.PGE on Transmission Provider's OASIS

5.0 Maximum amount of capacity and energy to be transmitted (Reserved Capacity): 10 MW

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 852

6.0 Designation of party(ies) subject to reciprocal service obligation: none

7.0 Name(s) of any Intervening Systems providing transmission service: none

8.0 Service under this Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)

8.1 Transmission Charge: The currently effective yearly delivery charge as provided in Schedule 7 of the Tariff.

8.2 System Impact and/or Facilities Study Charge(s): none

8.3 Direct Assignment Facilities Charge: no

8.4 Ancillary Services Charges:

a) Scheduling, System Control and Dispatch Service:

Only to the extent required pursuant to Schedule 1 of the Tariff.

b) Reactive Supply and Voltage Control from Generation Sources Service:

Only to the extent required pursuant to Schedule 2 of the Tariff.

c) Regulation and Frequency Response Service:

Only to the extent required pursuant to Schedule 3 of the Tariff.

d) Generator Regulation and Frequency Response Service

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 852

Only to the extent required pursuant to  
Schedule 3A of the Tariff.

e) Energy Imbalance Service:

Only to the extent required pursuant to  
Schedule 4 of the Tariff.

f) Operating Reserve - Spinning Reserve  
Service:

Only to the extent required pursuant to  
Schedule 5 of the Tariff.

g) Operating Reserve - Supplemental Reserve  
Service:

Only to the extent required pursuant to  
Schedule 6 of the Tariff.

h) Real Power Losses:

Transmission service under this agreement  
shall be assessed real power losses pursuant  
to Section 15.7 and Schedule 10 of the  
Tariff.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/911**

**TRANSMISSION SERVICE AGREEMENT NO. 853**

**January 31, 2020**

MAY 18 2017

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 853

TRANSMISSION SERVICES  
PACIFICORP

**Form Of Service Agreement For Long-Term Firm Point-To-Point  
Transmission Service**

- 1.0 This Service Agreement, dated as of May 18, 2017, is entered into, by and between PacifiCorp ("Transmission Provider"), and EDP Renewables North America LLC ("Transmission Customer") for the provision of Long-Term Firm Point-to-Point Transmission Service.
- 2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 For Long-Term Firm Point-to-Point Transmission Service:
  - 3.1 The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
  - 3.2 Service under this agreement shall commence on the later of (1) the requested Service commencement date, (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
  - 3.3 Service under this agreement shall be in accordance with the attached Specifications.
- 4.0 For Short-Term Firm Point-to-Point Transmission Service:
  - 4.1 Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer pursuant to the terms and conditions of the Tariff.

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 853

- 4.2 The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 4.3 The Transmission Customer will provide to the Transmission Provider an Application deposit for Short-Term Firm Point-to-Point Transmission Service in accordance with the provisions of Section 17.3 of the Tariff at the time such service is arranged.
- 4.4 Service under this agreement shall commence and shall be provided as agreed to at the time such service is arranged.
- 5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
- 6.0 Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provider:

US Mail Deliveries: PacifiCorp Transmission Services  
Attn: Central Cashiers Office  
PO Box 2757  
Portland, OR 97208-2757

Other Deliveries: Central Cashiers Office  
Attn: PacifiCorp Transmission Services  
825 NE Multnomah Street, Suite 550  
Portland, OR 97232

Phone Number: 503-813-6774

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 853

Transmission Customer:

EDP Renewables North America LLC  
808 Travis Street, Suite 700  
Houston, Texas 77002  
713-356-2517


7.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

PacifiCorp:

By:  VP, Transmission 5/18/17  
Name Title Date

Transmission Customer:

 Steve Irvin 5/17/2017  
Executive Vice President. Title Date  
BY: Western and Central Regions and Mexico  
Name Title Date



PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 853

**Specifications For Long-Term Firm Point-To-Point  
Transmission Service**

1.0 Term of Transaction: 5 years

Start Date: June 1, 2019

Termination Date: May 31, 2024

2.0 Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.

Firm capacity and associated energy in the amounts as shown in Section 5.0 shall be transmitted by the Transmission Provider. All capacity and associated energy transmitted under this Service Agreement shall be scheduled pursuant to the scheduling practices of the Tariff.

This transaction originates in the PACW control area and terminates in the PACW control area

3.0 Point(s) of Receipt: PACW

Delivering Party: At or near the Mile Hi Substation on the Chiloquin to Alturas 115 kV transmission line as represented by PACW on Transmission Provider's OASIS

4.0 Point(s) of Delivery: PACW.PGE

Receiving Party: Transmission Provider's interconnection with Portland General Electric as represented by PACW.PGE on Transmission Provider's OASIS

5.0 Maximum amount of capacity and energy to be transmitted (Reserved Capacity): 10 MW

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 853

- 6.0 Designation of party(ies) subject to reciprocal service obligation: none
- 7.0 Name(s) of any Intervening Systems providing transmission service: none
- 8.0 Service under this Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)
- 8.1 Transmission Charge: The currently effective yearly delivery charge as provided in Schedule 7 of the Tariff.
- 8.2 System Impact and/or Facilities Study Charge(s): none
- 8.3 Direct Assignment Facilities Charge: no
- 8.4 Ancillary Services Charges:
- a) Scheduling, System Control and Dispatch Service:  
  
Only to the extent required pursuant to Schedule 1 of the Tariff.
  - b) Reactive Supply and Voltage Control from Generation Sources Service:  
  
Only to the extent required pursuant to Schedule 2 of the Tariff.
  - c) Regulation and Frequency Response Service:  
  
Only to the extent required pursuant to Schedule 3 of the Tariff.
  - d) Generator Regulation and Frequency Response Service

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 853

Only to the extent required pursuant to  
Schedule 3A of the Tariff.

e) Energy Imbalance Service:

Only to the extent required pursuant to  
Schedule 4 of the Tariff.

f) Operating Reserve - Spinning Reserve  
Service:

Only to the extent required pursuant to  
Schedule 5 of the Tariff.

g) Operating Reserve - Supplemental Reserve  
Service:

Only to the extent required pursuant to  
Schedule 6 of the Tariff.

h) Real Power Losses:

Transmission service under this agreement  
shall be assessed real power losses pursuant  
to Section 15.7 and Schedule 10 of the  
Tariff.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/912**

**TRANSMISSION SERVICE AGREEMENT NO. 854**

**January 31, 2020**

MAY 18 2017

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 854

TRANSMISSION SERVICES  
PACIFICORP

**Form Of Service Agreement For Long-Term Firm Point-To-Point  
Transmission Service**

- 1.0 This Service Agreement, dated as of May 18, 2017, is entered into, by and between PacifiCorp ("Transmission Provider"), and EDP Renewables North America LLC ("Transmission Customer") for the provision of Long-Term Firm Point-to-Point Transmission Service.
- 2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 For Long-Term Firm Point-to-Point Transmission Service:
  - 3.1 The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
  - 3.2 Service under this agreement shall commence on the later of (1) the requested Service commencement date, (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
  - 3.3 Service under this agreement shall be in accordance with the attached Specifications.
- 4.0 For Short-Term Firm Point-to-Point Transmission Service:
  - 4.1 Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer pursuant to the terms and conditions of the Tariff.

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 854

- 4.2 The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 4.3 The Transmission Customer will provide to the Transmission Provider an Application deposit for Short-Term Firm Point-to-Point Transmission Service in accordance with the provisions of Section 17.3 of the Tariff at the time such service is arranged.
- 4.4 Service under this agreement shall commence and shall be provided as agreed to at the time such service is arranged.
- 5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
- 6.0 Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provider:

US Mail Deliveries: PacifiCorp Transmission Services  
Attn: Central Cashiers Office  
PO Box 2757  
Portland, OR 97208-2757

Other Deliveries: Central Cashiers Office  
Attn: PacifiCorp Transmission Services  
825 NE Multnomah Street, Suite 550  
Portland, OR 97232

Phone Number: 503-813-6774

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 854


Transmission Customer:

EDP Renewables North America LLC  
808 Travis Street, Suite 700  
Houston, Texas 77002  
713-356-2517


7.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

PacifiCorp:

By:  VP, TRANSMISSION 5/18/17  
Name Title Date

Transmission Customer:

By:  Steve Irvin 5/15/2017  
Name Title Date  
Executive Vice President,  
Western and Central Regions and Mexico

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 854

**Specifications For Long-Term Firm Point-To-Point  
Transmission Service**

1.0 Term of Transaction: 5 years

Start Date: June 1, 2019

Termination Date: May 31, 2024

2.0 Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.

Firm capacity and associated energy in the amounts as shown in Section 5.0 shall be transmitted by the Transmission Provider. All capacity and associated energy transmitted under this Service Agreement shall be scheduled pursuant to the scheduling practices of the Tariff.

This transaction originates in the PACW control area and terminates in the PACW control area

3.0 Point(s) of Receipt: PACW

Delivering Party: At or near the Mile Hi Substation on the Chiloquin to Alturas 115 kV transmission line as represented by PACW on Transmission Provider's OASIS

4.0 Point(s) of Delivery: PACW.PGE

Receiving Party: Transmission Provider's interconnection with Portland General Electric as represented by PACW.PGE on Transmission Provider's OASIS

5.0 Maximum amount of capacity and energy to be transmitted (Reserved Capacity): 10 MW



PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 854

- 6.0 Designation of party(ies) subject to reciprocal service obligation: none
- 7.0 Name(s) of any Intervening Systems providing transmission service: none
- 8.0 Service under this Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)
- 8.1 Transmission Charge: The currently effective yearly delivery charge as provided in Schedule 7 of the Tariff.
- 8.2 System Impact and/or Facilities Study Charge(s): none
- 8.3 Direct Assignment Facilities Charge: no
- 8.4 Ancillary Services Charges:
- a) Scheduling, System Control and Dispatch Service:  
  
Only to the extent required pursuant to Schedule 1 of the Tariff.
  - b) Reactive Supply and Voltage Control from Generation Sources Service:  
  
Only to the extent required pursuant to Schedule 2 of the Tariff.
  - c) Regulation and Frequency Response Service:  
  
Only to the extent required pursuant to Schedule 3 of the Tariff.
  - d) Generator Regulation and Frequency Response Service

PacifiCorp  
FERC Electric Tariff  
Service Agreement No. 854

Only to the extent required pursuant to  
Schedule 3A of the Tariff.

- e) Energy Imbalance Service:

Only to the extent required pursuant to  
Schedule 4 of the Tariff.

- f) Operating Reserve - Spinning Reserve  
Service:

Only to the extent required pursuant to  
Schedule 5 of the Tariff.

- g) Operating Reserve - Supplemental Reserve  
Service:

Only to the extent required pursuant to  
Schedule 6 of the Tariff.

- h) Real Power Losses:

Transmission service under this agreement  
shall be assessed real power losses pursuant  
to Section 15.7 and Schedule 10 of the  
Tariff.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)	)
BLUE MARMOT VI LLC (UM 1830)	)
BLUE MARMOT VII LLC (UM 1831)	)
BLUE MARMOT VIII LLC (UM 1832)	)
BLUE MARMOT IX LLC (UM 1833)	)
Complainants	)
vs.	)
PORTLAND GENERAL ELECTRIC	)
COMPANY	)
Defendant	)
Pursuant to ORS 756.500.	)
_____	)

**EXHIBIT BLUE MARMOT/913  
LAKE COUNTY PLANNING COMMUNICATIONS**

**January 31, 2020**

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**From:** Darwin Johnson <djohnson@co.lake.or.us>  
**Sent:** Monday, April 24, 2017 4:16 PM  
**To:** Talbott, Will  
**Cc:** Darwin Johnson  
**Subject:** RE: Couple of questions

See below for answers... Have a great day, and looking forward to continuing our discussions for your, soon to be applying for, projects. Take care.

~Darwin

---

**From:** Talbott, Will [mailto:Will.Talbott@edpr.com]  
**Sent:** Tuesday, April 18, 2017 10:16 AM  
**To:** Darwin Johnson  
**Subject:** Couple of questions

Hi Darwin,

I hope all's well with you. I'm writing with a couple questions for you that have come up as we've continued to prepare our permitting materials:

1. Last time we were in your office we discussed the issue of County-adopted Big Game Winter Range (the hard constraint that ODFW alerted us to); Craig Foster also mentioned "county-adopted wetlands" – is this something you're familiar with, and if so, is this another constraint we need to account for? Could you point us towards where we could find mapping of these areas? Wetlands is very important to the County and State, and as such I use the best available resource tools online at <https://www.fws.gov/wetlands/Data/Mapper.html>. For all land use files now, I print a map from this site and include it in the record. If there are wetlands, the Department of State Lands has a process in which you would have to go through if you were to be allowed to develop on a wetlands site. Mitigation may apply and it may greatly increase the cost of development. I would certainly recommend avoiding areas with wetlands and Big Game Winter Range.
2. On a related note, I came across what looks like an old version of the Lake County website that mentions wetland mapping the County has done (<http://www.lakevieworegon.org/planning/wetland.html>) This is not for the areas you are proposing developing. This is one site specific area and an engineer made this determination as part of an apparent land use application as the applicants findings of fact to support their proposal. If the Wetlands Mapper (see link above) indicates wetlands on any of the properties you are looking at then there will have to be an application filed with the state and reviewed and approved by both the state and the county before development could occur.
  - a. Is any mapping of these areas available? (see link above)
  - b. How do these delineations factor into the permitting process (basically same question as #1 above) (see above)
3. Is the USFWS one of the agencies that you provide notice to after a CUP application is submitted? (As we've mentioned, we like to connect with agencies directly ahead of any kind of notice, so just wondering if we should add them to our list) Not usually, as most of the proposed projects are not in habitat areas for species of concern. For most of our major development applications, the applicants have made some amount of contact with this agency before submitting the land use application for their project.

I also wanted to provide you with a couple updates on our progress. After some thought we've decided to err on the side of waiting longer to submit permit applications in the interest of incorporating more in-depth study work into our applications and preparing both our CUP and Goal 3 materials at the same time. We're aiming to review drafts of those

materials with you in May. In other news, I had good meetings with Dave Berman and Kevin Hock the other day and think we have a clear path towards aligning with the County on a plan for using County ROWs for our collection lines.

Thanks!

Will



**Will Talbott**

EDP Renewables North America LLC  
Development - Western Region  
53 SW Yamhill Street, Portland, OR 97204  
Direct: 503.535.1525 Cell 971.325.6238 Fax 503.222.9404  
[www.edpr.com](http://www.edpr.com)

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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/914**

**BLUE MARMOT V 2018 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

DRAFT

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DRAFT

This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot V, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 825

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### **2.1 Equipment Testing and Inspection**

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and



Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

## 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System

without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

## 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

## **Article 3. Effective Date, Term, Termination, and Disconnection**

### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The

Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.
- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The

Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

##### 5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid

to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid;



however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### 6.1 Billing and Payment Procedures and Final Accounting

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

### 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it

shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

### 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

## 7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such

notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the

Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly



submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### **Article 12. Miscellaneous**

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the

state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

#### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the

subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability

authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**Article 13. Notices**

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

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**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (6% impedance) 390/226 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47/63/79 MVA (12% impedance) 34.5 - 115 kV transformer with high side circuit interrupter. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately .26 miles of tie line from the Small Generating Facility and a tie-line circuit switcher to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at Q729/780 Point of Interconnection substation with appurtenant metering and disconnect facilities. In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. Transmission Provider will also own metering facilities (and associated control houses) to be installed on the feeder tie lines for Q825 in addition to the interchange metering installed in order to measure the output of the all generating facilities separately. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$1,674,700

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$2,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

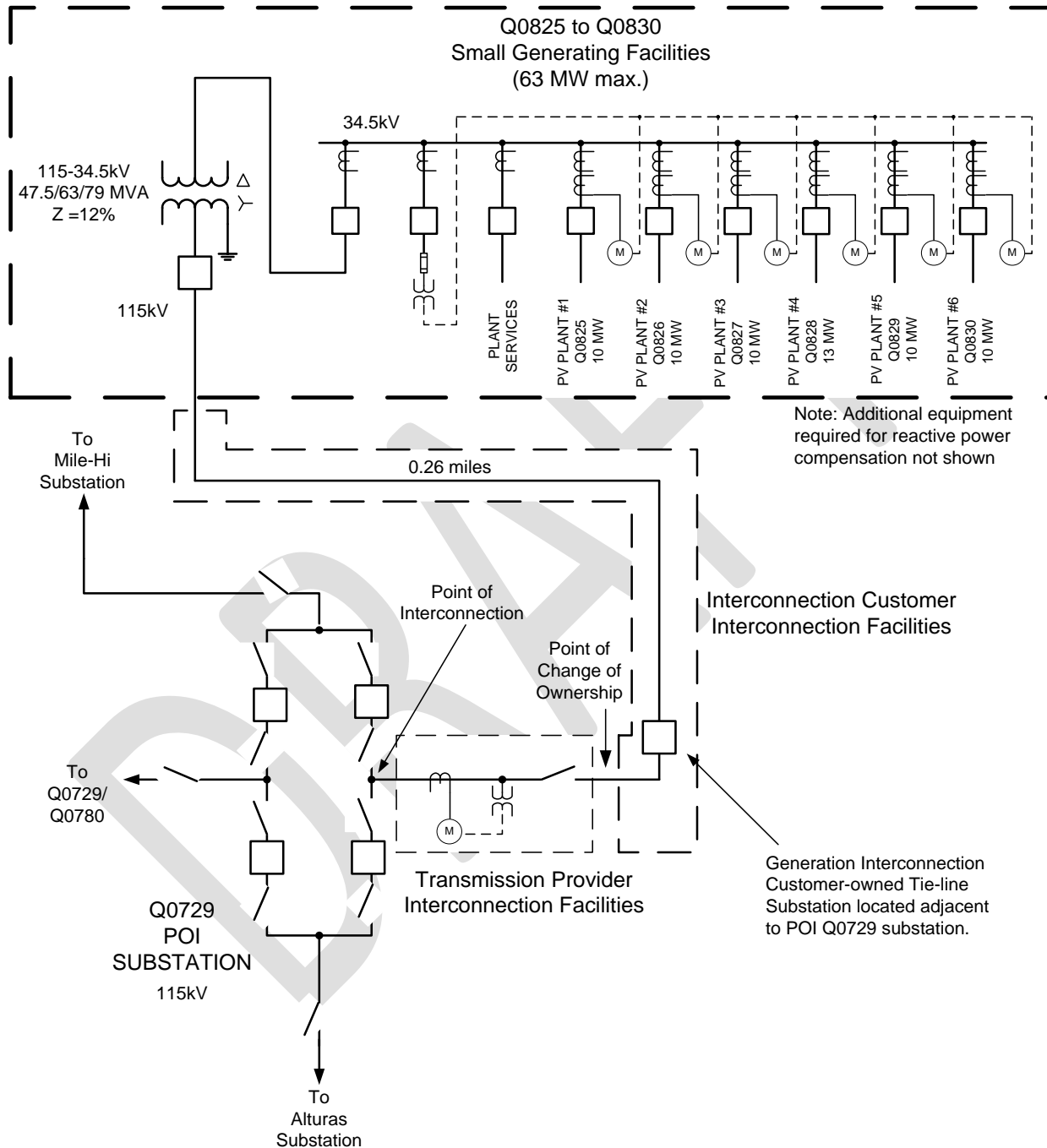
**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at Q729/780 substation in Klamath County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

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Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: December 31, 2019

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> February 15, 2018	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$1,140,000)</u> March 12, 2018	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 9, 2018	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> June 21, 2018	<u>Transmission Provider</u>
(5) <u>Provide signed facility drawings</u> PacifiCorp provided Review 2 date	<u>Interconnection Customer</u>
(6) <u>Provide Energy Imbalance Market data</u> March 1, 2019	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 18, 2019	<u>Transmission Provider</u>
(8) <u>Contingent Facilities complete</u> March 28, 2019	<u>Transmission Provider</u>
(9) <u>Property/permits/ROW procured</u> April 18, 2019	<u>Interconnection Customer</u>
(10) <u>Begin construction</u> May 15, 2019	<u>Transmission Provider</u>
(11) <u>Provide Policy 139 test plan</u> October 16, 2019	<u>Interconnection Customer</u>
(12) <u>Construction complete/backfeed</u> November 15, 2019	<u>Transmission Provider</u>



- (13) Begin generation testing/first sync      Interconnection  
December 18, 2019                                      Customer
- (14) Commercial operations                      Interconnection  
December 31, 2019                                      Customer

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering (May 21, 2018) and construction (April 15, 2019) no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*The Point of Interconnection substation being constructed as part of the Q0729 project is a contingent facility for this Project. Any delays in the completion of the Q0729 POI substation may result in similar delays for this Project including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Public Utility "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Interconnection Customer must allow the Transmission Provider to hold all Level 2 relay passwords for any control and/or protective device within their control at the Point of Interconnection and/or Small Generating Facility which directly impacts the Transmission Provider's distribution and/or transmission systems. Level 2 passwords are those which allow actual modifications to control and/or relay settings. This will ensure the Transmission Provider is aware of and approves any changes being made by the Interconnection Customer. Furthermore; this will ensure there are no negative impacts to the Transmission Provider's distribution system, transmission system, or existing customer base. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None

Network Upgrades: Installation of microwave communications equipment at: Alturas substation, Sugar Mountain communications site, Chiloquin Hill communications site, and BPA's Warner substation. Estimated cost is \$2,644,000

Contingent Facilities. As identified in the System Impact Study for this project dated August 17, 2017 and the Facilities Study dated December 5, 2017 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for Q729/780

If the schedule for completion of these upgrades changes or the Interconnection Customer requires an in-service date prior to the completion of these upgrades, the Public Utility reserves the right to restudy this project to determine any additional requirements to assign to this project necessary to facilitate interconnection of this project by the date required.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Design, procure, own and maintain the Small Generating Facility and all associated equipment.
- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the Small Generating Facility and associated collector substation(s).
- Procure, own and maintain a set of relays that will timely (5 cycles or less) detect and clear faults in the Interconnection Customer's transmission tie line. These relays must be coordinated with the other relays in the Transmission Provider's system.
- Design, procure, and install a data concentrator (SEL-2411 or Transmission Provider approved device) to transfer data between the collector substation(s) and the Interconnection Customer tie line substation via an optical fiber communications circuit in DMP3 protocol. The Transmission Provider will input and hold the second level passwords for the SEL-2411 (or Transmission Provider approved device). Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Provide the following data from the Project collector substation to be routed through the Interconnection Customer tie line substation:

Analogs:

- o 34.5 kV Real power
- o 34.5 kV Reactive Power
- o 34.5 kV A phase voltage
- o 34.5 kV B phase voltage
- o 34.5 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)

Status:

- o 34.5 kV circuit breaker

From the 115kV side of the collector station:

Analogs:

- o 115 kV Real power
- o 115 kV Reactive Power
- o 115 kV A phase voltage
- o 115 kV B phase voltage
- o 115 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)

Status:

- o 115 kV circuit breaker

- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation(s) for the Transmission Provider to install its metering equipment. This area will share a fence and ground grid with the associated Small Generating Facility and have separate, unencumbered access for the Transmission Provider.
- Provide AC station service for the Transmission Provider's control house.
- Have a CDEGS grounding analysis performed and provide the results to the Transmission Provider.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the Point of Interconnection or a point determined by the Transmission Provider if necessary. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Prior to construction, arrange for construction power with the Transmission Provider. The metering shall conform to the Six State Electric Service Requirements manual as the site is within the Transmission Provider's service territory.
- Arrange bidirectional metering for permanent station service load. Please note that prior to back feed, Interconnection Customer must arrange distribution voltage retail meter service for electricity consumed by the Project and arrange backup station service for power that will be drawn from the transmission line when the Project is not generating. Interconnection Customer must call the PCCC Solution Center 1-800-640-2212 to arrange this service. Approval for back feed is contingent upon obtaining station service.
- The Interconnection Customer is responsible for standby station service requirements for their collector and/or generation facilities in the event the transmission source is unavailable. This may require the installation of an on-site generator or connection to a local distribution feeder. Connection to a local feeder will require the Interconnection Customer to make a separate service request through the PCCC Solution Center at 1-800-640-2212.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, install, own and maintain at the Interconnection Customer's expense, low side 34.5 kV revenue metering for the Project. This will include revenue metering panels, instrument transformers, H-frame structures, junction boxes, secondary lead conductors, revenue quality meters and test switches.
- Procure and install a control house adjacent to the Interconnection Customer's collector substation.
- Procure and install a backup DC battery system for the Transmission Provider control house.
- Install an Ethernet phone line for retail sales and generation accounting via the MV-90 translation system.
- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.

**Tie Line Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line connecting the Interconnection Customer's Small Generating Facility to the Interconnection Customer's Tie Line substation.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Obtain all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the radial transmission line between the collector substation and tie line substation.
- Design, construct, own and maintain the 115 kV transmission tie line between the Interconnection Customer's collector and tie line substations.
- Design, procure, construct, own and maintain Transmission Provider approved OPGW/ADSS fiber optic cable from the collector substation(s) to the tie line substation.
- Supply one DNP3 SCADA circuit from the collector substation to the POI substation, through the tie line substation, with all the required SCADA points.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.



**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Review and comment on the Interconnection Customer's communications equipment and fiber optic cable to ensure compatibility.

**Tie Line Substation Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with Interconnection Customer's tie line substation.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the new tie line substation.
- Design, procure, construct, own and maintain the Interconnection Customer tie line substation (consisting of a sole 115 kV circuit breaker and associated equipment) within 800' of the POI substation. This includes all radial transmission line relaying to the collector station, breaker failure protection and associated communications. The short line segment between the tie line substation and the POI substation will be considered a bus section and will be protected with a bus differential relay systems. The bus differential relays will be located in the POI substation.
- Provide the output from a set of current transformers to be fed into the bus differential relays with a maximum current transformer ratio matching the maximum CT ratio of the breakers at the POI substation.
- Install facilities capable of detecting and clearing faults on the tie line between the tie line substation and the collector substation in five cycles or less.
- Design the tie line substation such that the ground grid can be connected to the POI substation ground grid to support the installation of a Transmission Provider owned and maintained bus differential scheme. The Interconnect Customer will be responsible to ensure the ground grid design supports safe step and touch potentials.
- All collector and tie line substation status, control, and protection circuit interface to the POI substation will be hard wired to a Transmission Provider owned and maintained marshalling cabinet located just inside the fence of the POI substation. Testing and commissioning of this communication path will be the responsibility of the Interconnection Customer and coordinated with the Transmission Provider.

- The following data points are required from the Interconnection Customer's tie line substation:  
Status:
  - o 115kV breaker
- Conduits (number and size TBD) will be installed to between the Interconnection Customer tie line substation and marshalling cabinet just inside the fence of the POI substation to support copper circuits installed between the facilities.
- If a structure is required between the POI substation and the tie line substation, design to Transmission Provider's current design and installation standards and coordinate with Transmission Provider to ensure proper clearances.
- Coil conductor, shield wire and OPGW on the tie line substation dead end structure sufficient to make the span to the POI dead end structure.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the necessary specifications to allow the ground mats of the Interconnection Customer's tie line substation and the POI substation to be tied together.
- Provide the Interconnection Customer the necessary specifications for the bus/line segment of the Interconnection Customer's tie line substation and the POI substation to be connected.
- Provide the design and installation requirements to the Interconnection Customer if a structure(s) is required between the POI substation and the tie line substation.
- Terminate the last bus/line span between the tie line substation and the POI substation dead end structure.

**Point of Interconnection**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary permits, lands, rights of way and easements required to allow for interconnection of the Project into the POI substation.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, own, install and maintain the necessary equipment to create a line position in the POI substation

to allow the Project to interconnection. This will include the following major equipment:

- o 1 - 115 kV circuit breaker
- o 3 - 115 kV disconnect switches
- Design, procure and install bus differential relays for the connection to the Interconnection Customer's tie line substation.
- Procure and install a set of non-pilot step distance relays.
- Procure and install two multifunction relays to monitor voltage magnitude and frequency.
- Add the required data points from the Interconnection Customer's collector substation and tie line substation to the existing POI substation RTU.
- Add the following data points to the existing POI substation RTU:  
Analog:
  - o Net Generation MW
  - o Net Generator MVAR
  - o Interchange metering kWh
- Design, procure and install 115 kV metering equipment including two revenue quality meters, test switch, instrument transformers, metering panel, junction box and secondary metering wire.
- Connect meter Ethernet ports to existing router for MV-90 communications.
- Route alternate meters to existing channel cards in the POI substation and then over existing systems to Transmission Provider control centers.

#### **Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Alturas substation
  - o Design, procure, install and connect communications equipment for the RAS including two channel banks.
  - o Procure and construct a self-supporting microwave tower.
  - o Install a line loss panel with a redundant programmable logic controller.
  - o Replace the existing relays and controls associated with the two 12.5 kV feeder breakers.

- Sugar Mountain Communication Site
  - Procure and construct a new self-supporting microwave tower and equipment building with generator and propane tank.
- Chiloquin Hill Top communication site
  - Procure and construct a new microwave site including self-supporting tower, generator and propane tank.
  - Install a microwave system to cross connect the RAS to other sites.
- Bonneville Power Administration ("BPA") Warner substation
  - Install a line loss panel with a redundant programmable logic controller.
  - Design, procure, install and connect communications equipment for the RAS including two channel banks.
  - Contract, at the Interconnection Customer's expense, with BPA a T1 to either Malin or Captain Jack substation.
- Control Centers
- Update databases for the inclusion of this Project as well as the RAS.
  - Design and implement a RAS to trip the Project for contingencies identified in the system impact study report for this Project.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").

**Exhibit 1 to Attachment 5 to SGIA**  
**Transmission Provider's Interconnection Policy**

**(ATTACHED)**

DRAFT

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/915**

**BLUE MARMOT VI 2018 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

**DRAFT**

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DRAFT

This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot VI, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 826

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### **2.1 Equipment Testing and Inspection**

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and



Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

## 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System

without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

## 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

## **Article 3. Effective Date, Term, Termination, and Disconnection**

### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The

Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.
- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The

Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

##### 5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid

to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid;



however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### 6.1 Billing and Payment Procedures and Final Accounting

6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

### 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it

shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

### 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

## 7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such

notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the

Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly



submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### **Article 12. Miscellaneous**

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the

state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

#### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the

subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability

authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

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**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (6% impedance) 390/226 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47/63/79 MVA (12% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately .26 miles of tie line from the Small Generating Facility and a tie-line circuit switcher to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at Q729/780 Point of Interconnection substation with appurtenant metering and disconnect facilities (to be built for Q825). In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. Transmission Provider will also own metering facilities (and associated control houses) to be installed on the feeder tie lines for Q825 in addition to the interchange metering installed in order to measure the output of the all generating facilities separately. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$173,700

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

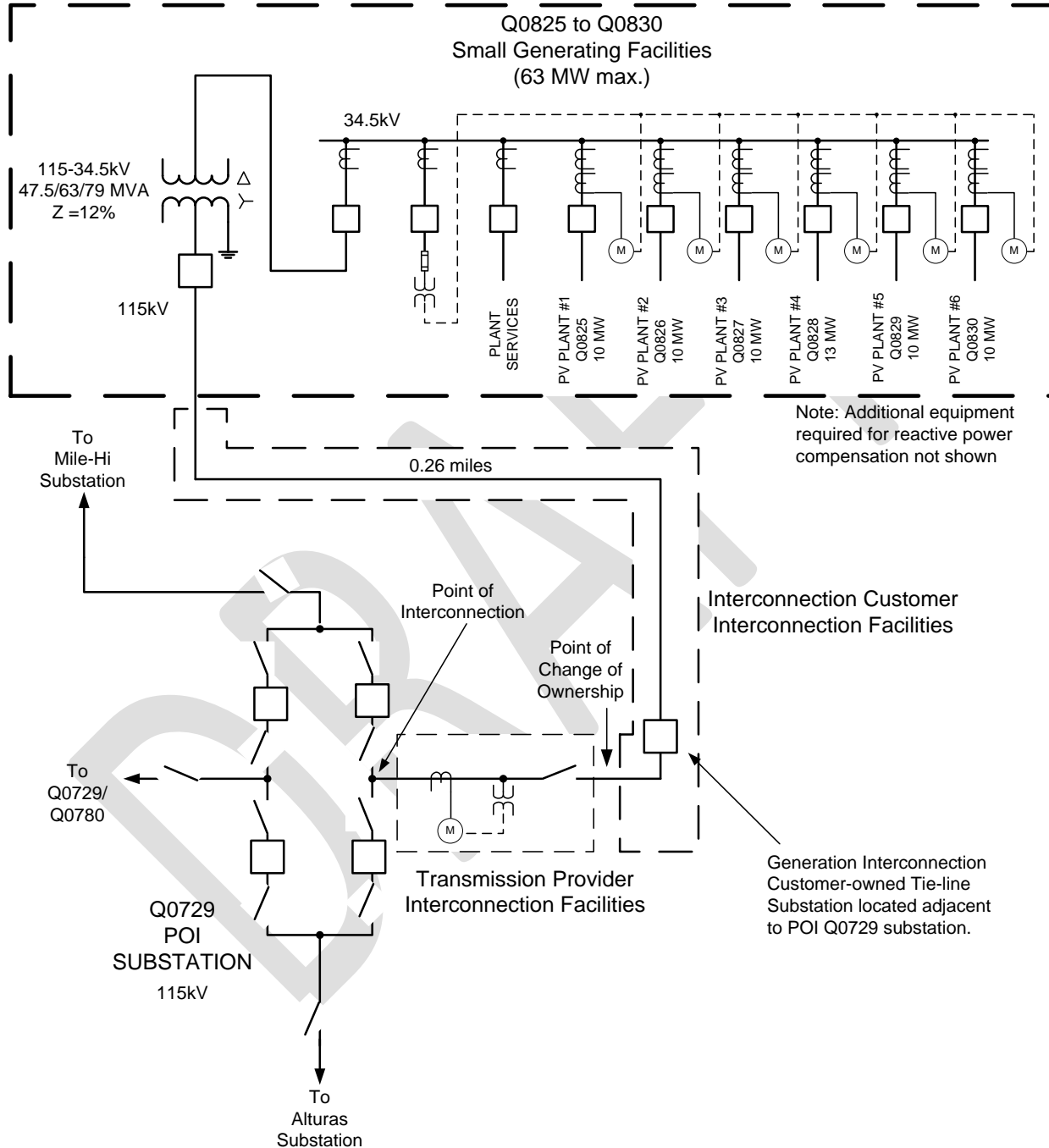
**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at Q729/780 substation in Klamath County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

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Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: December 31, 2019

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> February 15, 2018	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$270,000)</u> March 12, 2018	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 9, 2018	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> June 21, 2018	<u>Transmission Provider</u>
(5) <u>Provide signed facility drawings</u> PacifiCorp provided Review 2 date	<u>Interconnection Customer</u>
(6) <u>Provide Energy Imbalance Market data</u> March 1, 2019	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 18, 2019	<u>Transmission Provider</u>
(8) <u>Contingent Facilities complete</u> March 28, 2019	<u>Transmission Provider</u>
(9) <u>Property/permits/ROW procured</u> April 18, 2019	<u>Interconnection Customer</u>
(10) <u>Begin construction</u> May 15, 2019	<u>Transmission Provider</u>
(11) <u>Provide Policy 139 test plan</u> October 16, 2019	<u>Interconnection Customer</u>
(12) <u>Construction complete/backfeed</u> November 15, 2019	<u>Transmission Provider</u>



(13) Begin generation testing/first sync      Interconnection  
December 18, 2019                                      Customer

(14) Commercial operations                                      Interconnection  
December 31, 2019                                      Customer

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering (May 21, 2018) and construction (April 15, 2019) no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*The Point of Interconnection substation being constructed as part of the Q0729 project is a contingent facility for this Project. Any delays in the completion of the Q0729 POI substation may result in similar delays for this Project including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Public Utility "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Interconnection Customer must allow the Transmission Provider to hold all Level 2 relay passwords for any control and/or protective device within their control at the Point of Interconnection and/or Small Generating Facility which directly impacts the Transmission Provider's distribution and/or transmission systems. Level 2 passwords are those which allow actual modifications to control and/or relay settings. This will ensure the Transmission Provider is aware of and approves any changes being made by the Interconnection Customer. Furthermore; this will ensure there are no negative impacts to the Transmission Provider's distribution system, transmission system, or existing customer base. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None

Network Upgrades: Installation of microwave communications and Remedial Action Scheme equipment at: Klamath Falls substation, Chiloquin substation, Mile Hi substation, Swan lake Communications Site, and BPA's Hilltop substation. Estimated cost is \$864,000

Contingent Facilities. As identified in the System Impact Study for this project dated August 17, 2017 and the Facilities Study dated December 5, 2017 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for Q729/780
- Interconnection Facilities and Network Upgrades to be installed for Q825

If the schedule for completion of these upgrades changes or the Interconnection Customer requires an in-service date prior to the completion of these upgrades, the Public Utility reserves the right to restudy this project to determine any additional requirements to assign to this project necessary to facilitate interconnection of this project by the date required.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Design, procure, own and maintain the Small Generating Facility and all associated equipment.
- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the Small Generating Facility and associated collector substation(s).
- Procure, own and maintain a set of relays that will timely (5 cycles or less) detect and clear faults in the Interconnection Customer's transmission tie line. These relays must be coordinated with the other relays in the Transmission Provider's system.
- Design, procure, and install a data concentrator (SEL-2411 or Transmission Provider approved device) to transfer data between the collector substation(s) and the Interconnection Customer tie line substation via an optical fiber communications circuit in DMP3 protocol. The Transmission Provider will input and hold the second level passwords for the SEL-2411 (or Transmission Provider approved device). Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Provide the following data from the Project collector substation to be routed through the Interconnection Customer tie line substation:

Analogs:

- o 34.5 kV Real power
- o 34.5 kV Reactive Power
- o 34.5 kV A phase voltage
- o 34.5 kV B phase voltage
- o 34.5 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)

Status:

- o 34.5 kV circuit breaker

- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation(s) for the Transmission Provider to install its metering equipment. This area will share a fence and ground grid with the associated Small Generating Facility and have separate, unencumbered access for the Transmission Provider.
- Provide AC station service for the Transmission Provider's control house.
- Have a CDEGS grounding analysis performed and provide the results to the Transmission Provider.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the Point of Interconnection or a point determined by the Transmission Provider if necessary. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.

- Meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Prior to construction, arrange for construction power with the Transmission Provider. The metering shall conform to the Six State Electric Service Requirements manual as the site is within the Transmission Provider's service territory.
- Arrange bidirectional metering for permanent station service load. Please note that prior to back feed, Interconnection Customer must arrange distribution voltage retail meter service for electricity consumed by the Project and arrange backup station service for power that will be drawn from the transmission line when the Project is not generating. Interconnection Customer must call the PCCC Solution Center 1-800-640-2212 to arrange this service. Approval for back feed is contingent upon obtaining station service.
- The Interconnection Customer is responsible for standby station service requirements for their collector and/or generation facilities in the event the transmission source is unavailable. This may require the installation of an on-site generator or connection to a local distribution feeder. Connection to a local feeder will require the Interconnection Customer to make a separate service request through the PCCC Solution Center at 1-800-640-2212.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, install, own and maintain at the Interconnection Customer's expense, low side 34.5 kV revenue metering for the Project. This will include revenue metering panels, instrument transformers, H-frame structures, junction boxes, secondary lead conductors, revenue quality meters and test switches.
- Procure and install a control house adjacent to the Interconnection Customer's collector substation.
- Procure and install a backup DC battery system for the Transmission Provider control house.
- Install an Ethernet phone line for retail sales and generation accounting via the MV-90 translation system.

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.

### **Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Chiloquin substation
  - Install a new control house.
  - Install a line loss panel with a redundant programmable logic controller.
  - Install a self-supporting microwave tower, radio system, channel bank, and modems.
- Mile Hi substation
  - Replace existing 115 kV transrupter 2L1 with a circuit switcher with a rating of 1200A and an interrupting capacity of 10kA.
  - Install a line loss panel with a redundant programmable logic controller.
  - Design, procure, install and connect communications equipment for the RAS including a second channel bank, modems and fiber jumpers.
  - Procure and construct a new self-supporting microwave tower.
- Klamath Falls substation
  - Cross connect various RAS circuits.
- Swan Lake Point Communication Site
  - Cross connect RAS circuit.
- BPA Hilltop substation
  - Coordinate with BPA to install a line loss panel with a redundant programmable logic controller and channelize two RAS circuits.
- Control Centers
- Update databases for the inclusion of this Project as well as the RAS.
  - Design and implement a RAS to trip the Project for contingencies identified in the system impact study report for this Project.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").



**Exhibit 1 to Attachment 5 to SGIA**  
**Transmission Provider's Interconnection Policy**

**(ATTACHED)**

DRAFT

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/916**

**BLUE MARMOT VII 2018 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot VII, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 827

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own



unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### **2.1 Equipment Testing and Inspection**

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and

Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

## 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System

without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

## 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

## **Article 3. Effective Date, Term, Termination, and Disconnection**

### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The

Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.
- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair



The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The

Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

##### 5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid

to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid;

however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### 6.1 Billing and Payment Procedures and Final Accounting

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

### 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it

shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

### 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

## 7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.



7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such

notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the

Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly

submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### **Article 12. Miscellaneous**

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the

state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

#### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the

subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability



authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**Article 13. Notices**

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

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**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (6% impedance) 390/226 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47/63/79 MVA (12% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately .26 miles of tie line from the Small Generating Facility and a tie-line circuit switcher to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at Q729/780 Point of Interconnection substation with appurtenant metering and disconnect facilities (to be built for Q825). In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. Transmission Provider will also own metering facilities (and associated control houses) to be installed on the feeder tie lines for Q825/826 in addition to the interchange metering installed in order to measure the output of the all generating facilities separately. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$166,700

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

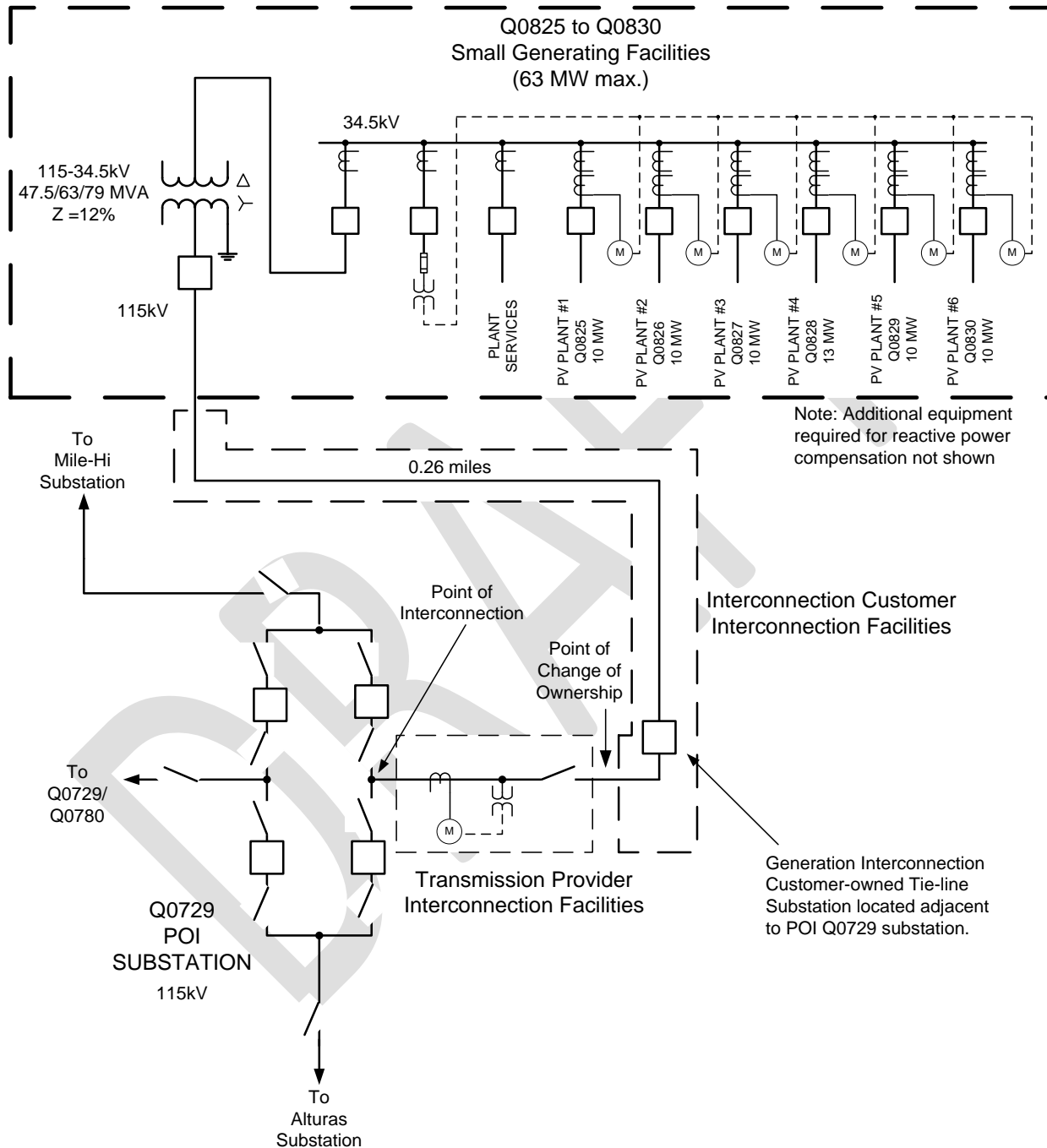
**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at Q729/780 substation in Klamath County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

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Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: December 31, 2019

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> February 15, 2018	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$40,000)</u> March 12, 2018	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 9, 2018	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> June 21, 2018	<u>Transmission Provider</u>
(5) <u>Provide signed facility drawings</u> PacifiCorp provided Review 2 date	<u>Interconnection Customer</u>
(6) <u>Provide Energy Imbalance Market data</u> March 1, 2019	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 18, 2019	<u>Transmission Provider</u>
(8) <u>Contingent Facilities complete</u> March 28, 2019	<u>Transmission Provider</u>
(9) <u>Property/permits/ROW procured</u> April 18, 2019	<u>Interconnection Customer</u>
(10) <u>Begin construction</u> May 15, 2019	<u>Transmission Provider</u>
(11) <u>Provide Policy 139 test plan</u> October 16, 2019	<u>Interconnection Customer</u>
(12) <u>Construction complete/backfeed</u> November 15, 2019	<u>Transmission Provider</u>

(13) Begin generation testing/first sync      Interconnection  
December 18, 2019                                      Customer

(14) Commercial operations                                      Interconnection  
December 31, 2019                                      Customer

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering (May 21, 2018) and construction (April 15, 2019) no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*The Point of Interconnection substation being constructed as part of the Q0729 project is a contingent facility for this Project. Any delays in the completion of the Q0729 POI substation may result in similar delays for this Project including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Public Utility "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Interconnection Customer must allow the Transmission Provider to hold all Level 2 relay passwords for any control and/or protective device within their control at the Point of Interconnection and/or Small Generating Facility which directly impacts the Transmission Provider's distribution and/or transmission systems. Level 2 passwords are those which allow actual modifications to control and/or relay settings. This will ensure the Transmission Provider is aware of and approves any changes being made by the Interconnection Customer. Furthermore; this will ensure there are no negative impacts to the Transmission Provider's distribution system, transmission system, or existing customer base. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None

Network Upgrades: None

Contingent Facilities. As identified in the System Impact Study for this project dated August 17, 2017 and the Facilities Study dated December 5, 2017 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for Q729/780
- Interconnection Facilities and Network Upgrades to be installed for Q825/826

If the schedule for completion of these upgrades changes or the Interconnection Customer requires an in-service date prior to the completion of these upgrades, the Public Utility reserves the right to restudy this project to determine any additional requirements to assign to this project necessary to facilitate interconnection of this project by the date required.



**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Design, procure, own and maintain the Small Generating Facility and all associated equipment.
- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the Small Generating Facility and associated collector substation(s).
- Procure, own and maintain a set of relays that will timely (5 cycles or less) detect and clear faults in the Interconnection Customer's transmission tie line. These relays must be coordinated with the other relays in the Transmission Provider's system.
- Design, procure, and install a data concentrator (SEL-2411 or Transmission Provider approved device) to transfer data between the collector substation(s) and the Interconnection Customer tie line substation via an optical fiber communications circuit in DMP3 protocol. The Transmission Provider will input and hold the second level passwords for the SEL-2411 (or Transmission Provider approved device). Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Provide the following data from the Project collector substation to be routed through the Interconnection Customer tie line substation:

Analogs:

- o 34.5 kV Real power
- o 34.5 kV Reactive Power
- o 34.5 kV A phase voltage
- o 34.5 kV B phase voltage
- o 34.5 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)

Status:

- o 34.5 kV circuit breaker

- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation(s) for the Transmission Provider to install its metering equipment. This area will share a fence and ground grid with the associated Small Generating Facility and have separate, unencumbered access for the Transmission Provider.
- Provide AC station service for the Transmission Provider's control house.
- Have a CDEGS grounding analysis performed and provide the results to the Transmission Provider.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the Point of Interconnection or a point determined by the Transmission Provider if necessary. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.

- Meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Prior to construction, arrange for construction power with the Transmission Provider. The metering shall conform to the Six State Electric Service Requirements manual as the site is within the Transmission Provider's service territory.
- Arrange bidirectional metering for permanent station service load. Please note that prior to back feed, Interconnection Customer must arrange distribution voltage retail meter service for electricity consumed by the Project and arrange backup station service for power that will be drawn from the transmission line when the Project is not generating. Interconnection Customer must call the PCCC Solution Center 1-800-640-2212 to arrange this service. Approval for back feed is contingent upon obtaining station service.
- The Interconnection Customer is responsible for standby station service requirements for their collector and/or generation facilities in the event the transmission source is unavailable. This may require the installation of an on-site generator or connection to a local distribution feeder. Connection to a local feeder will require the Interconnection Customer to make a separate service request through the PCCC Solution Center at 1-800-640-2212.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, install, own and maintain at the Interconnection Customer's expense, low side 34.5 kV revenue metering for the Project. This will include revenue metering panels, instrument transformers, H-frame structures, junction boxes, secondary lead conductors, revenue quality meters and test switches.
- Procure and install a control house adjacent to the Interconnection Customer's collector substation.
- Procure and install a backup DC battery system for the Transmission Provider control house.
- Install an Ethernet phone line for retail sales and generation accounting via the MV-90 translation system.

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.

### **Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Control Centers
- Update databases for the inclusion of this Project as well as the RAS.
  - Design and implement a RAS to trip the Project for contingencies identified in the system impact study report for this Project.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").

**Exhibit 1 to Attachment 5 to SGIA**  
**Transmission Provider's Interconnection Policy**

**(ATTACHED)**

DRAFT

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/917**

**BLUE MARMOT VIII 2018 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

DRAFT

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DRAFT

This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot VIII, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 828

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### **2.1 Equipment Testing and Inspection**

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and



Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

## 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System

without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

## 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

## **Article 3. Effective Date, Term, Termination, and Disconnection**

### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The

Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.
- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The

Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

##### 5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid

to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid;



however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### 6.1 Billing and Payment Procedures and Final Accounting

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

### 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it

shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

### 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

## 7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such

notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the

Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly



submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### **Article 12. Miscellaneous**

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the

state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

#### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the

subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability

authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**Article 13. Notices**

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

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**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 13 MW generating facility consisting of six (6) SMA Sunny Central 2000 kW inverters and one (1) SMA Sunny Central 1000 kW inverter. The inverters are connected individually to 2.2 MVA (6% impedance) 390/226 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47/63/79 MVA (12% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately .26 miles of tie line from the Small Generating Facility and a tie-line circuit switcher to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at Q729/780 Point of Interconnection substation with appurtenant metering and disconnect facilities (to be built for Q825). In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. Transmission Provider will also own metering facilities (and associated control houses) to be installed on the feeder tie lines for Q825-827 in addition to the interchange metering installed in order to measure the output of the all generating facilities separately. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$166,700

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing

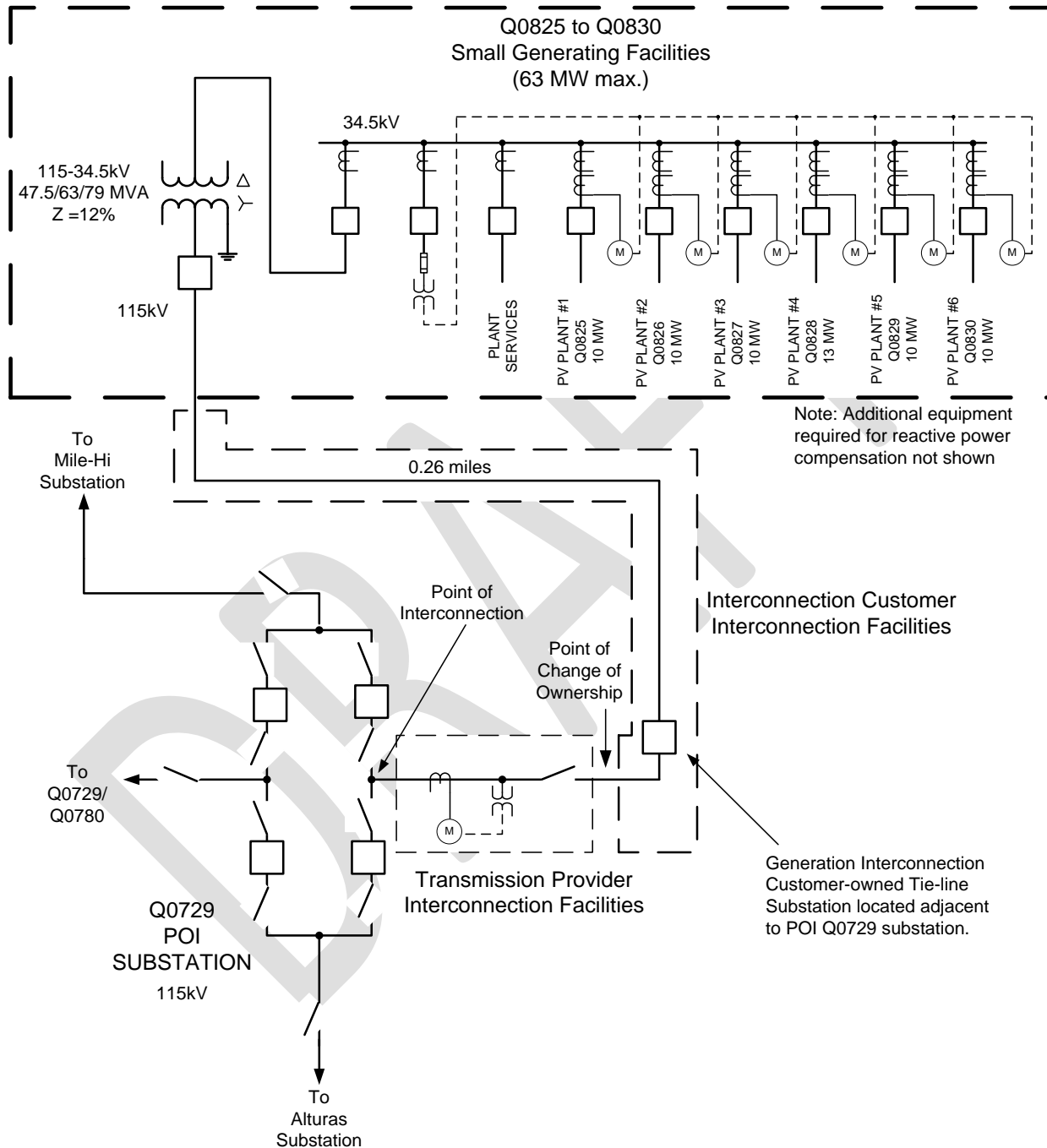
substation bus at Q729/780 substation in Klamath County, Oregon.  
See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

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Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
 Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: December 31, 2019

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> February 15, 2018	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$40,000)</u> March 12, 2018	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 9, 2018	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> June 21, 2018	<u>Transmission Provider</u>
(5) <u>Provide signed facility drawings</u> PacifiCorp provided Review 2 date	<u>Interconnection Customer</u>
(6) <u>Provide Energy Imbalance Market data</u> March 1, 2019	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 18, 2019	<u>Transmission Provider</u>
(8) <u>Contingent Facilities complete</u> March 28, 2019	<u>Transmission Provider</u>
(9) <u>Property/permits/ROW procured</u> April 18, 2019	<u>Interconnection Customer</u>
(10) <u>Begin construction</u> May 15, 2019	<u>Transmission Provider</u>
(11) <u>Provide Policy 139 test plan</u> October 16, 2019	<u>Interconnection Customer</u>
(12) <u>Construction complete/backfeed</u> November 15, 2019	<u>Transmission Provider</u>



- (13) Begin generation testing/first sync      Interconnection  
December 18, 2019                                      Customer
- (14) Commercial operations                                      Interconnection  
December 31, 2019                                      Customer

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering (May 21, 2018) and construction (April 15, 2019) no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*The Point of Interconnection substation being constructed as part of the Q0729 project is a contingent facility for this Project. Any delays in the completion of the Q0729 POI substation may result in similar delays for this Project including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Public Utility "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Interconnection Customer must allow the Transmission Provider to hold all Level 2 relay passwords for any control and/or protective device within their control at the Point of Interconnection and/or Small Generating Facility which directly impacts the Transmission Provider's distribution and/or transmission systems. Level 2 passwords are those which allow actual modifications to control and/or relay settings. This will ensure the Transmission Provider is aware of and approves any changes being made by the Interconnection Customer. Furthermore; this will ensure there are no negative impacts to the Transmission Provider's distribution system, transmission system, or existing customer base. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None

Network Upgrades: None

Contingent Facilities. As identified in the System Impact Study for this project dated August 17, 2017 and the Facilities Study dated December 5, 2017 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for Q729/780
- Interconnection Facilities and Network Upgrades to be installed for Q825-827

If the schedule for completion of these upgrades changes or the Interconnection Customer requires an in-service date prior to the completion of these upgrades, the Public Utility reserves the right to restudy this project to determine any additional requirements to assign to this project necessary to facilitate interconnection of this project by the date required.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Design, procure, own and maintain the Small Generating Facility and all associated equipment.
- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the Small Generating Facility and associated collector substation(s).
- Procure, own and maintain a set of relays that will timely (5 cycles or less) detect and clear faults in the Interconnection Customer's transmission tie line. These relays must be coordinated with the other relays in the Transmission Provider's system.
- Design, procure, and install a data concentrator (SEL-2411 or Transmission Provider approved device) to transfer data between the collector substation(s) and the Interconnection Customer tie line substation via an optical fiber communications circuit in DMP3 protocol. The Transmission Provider will input and hold the second level passwords for the SEL-2411 (or Transmission Provider approved device). Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Provide the following data from the Project collector substation to be routed through the Interconnection Customer tie line substation:

Analogs:

- o 34.5 kV Real power
- o 34.5 kV Reactive Power
- o 34.5 kV A phase voltage
- o 34.5 kV B phase voltage
- o 34.5 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)

Status:

- o 34.5 kV circuit breaker

- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation(s) for the Transmission Provider to install its metering equipment. This area will share a fence and ground grid with the associated Small Generating Facility and have separate, unencumbered access for the Transmission Provider.
- Provide AC station service for the Transmission Provider's control house.
- Have a CDEGS grounding analysis performed and provide the results to the Transmission Provider.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the Point of Interconnection or a point determined by the Transmission Provider if necessary. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.

- Meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Prior to construction, arrange for construction power with the Transmission Provider. The metering shall conform to the Six State Electric Service Requirements manual as the site is within the Transmission Provider's service territory.
- Arrange bidirectional metering for permanent station service load. Please note that prior to back feed, Interconnection Customer must arrange distribution voltage retail meter service for electricity consumed by the Project and arrange backup station service for power that will be drawn from the transmission line when the Project is not generating. Interconnection Customer must call the PCCC Solution Center 1-800-640-2212 to arrange this service. Approval for back feed is contingent upon obtaining station service.
- The Interconnection Customer is responsible for standby station service requirements for their collector and/or generation facilities in the event the transmission source is unavailable. This may require the installation of an on-site generator or connection to a local distribution feeder. Connection to a local feeder will require the Interconnection Customer to make a separate service request through the PCCC Solution Center at 1-800-640-2212.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, install, own and maintain at the Interconnection Customer's expense, low side 34.5 kV revenue metering for the Project. This will include revenue metering panels, instrument transformers, H-frame structures, junction boxes, secondary lead conductors, revenue quality meters and test switches.
- Procure and install a control house adjacent to the Interconnection Customer's collector substation.
- Procure and install a backup DC battery system for the Transmission Provider control house.
- Install an Ethernet phone line for retail sales and generation accounting via the MV-90 translation system.

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.

### **Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Control Centers
- Update databases for the inclusion of this Project as well as the RAS.
  - Design and implement a RAS to trip the Project for contingencies identified in the system impact study report for this Project.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").



**Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy**

**(ATTACHED)**

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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)	)
BLUE MARMOT VI LLC (UM 1830)	)
BLUE MARMOT VII LLC (UM 1831)	)
BLUE MARMOT VIII LLC (UM 1832)	)
BLUE MARMOT IX LLC (UM 1833)	)
Complainants	)
vs.	)
PORTLAND GENERAL ELECTRIC	)
COMPANY	)
Defendant	)
Pursuant to ORS 756.500.	)
_____	)

**EXHIBIT BLUE MARMOT/918**

**BLUE MARMOT IX 2018 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

**DRAFT**

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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot IX, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 829

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own



unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and

Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

## 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System

without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

## 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

## **Article 3. Effective Date, Term, Termination, and Disconnection**

### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The

Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.
- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair



The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The

Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

##### 5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid

to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid;

however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### 6.1 Billing and Payment Procedures and Final Accounting

6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

### 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it

shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

### 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

## 7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.



7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such

notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the

Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly

submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### **Article 12. Miscellaneous**

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the

state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

#### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the

subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability



authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**Article 13. Notices**

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

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**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (6% impedance) 390/226 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47/63/79 MVA (12% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately .26 miles of tie line from the Small Generating Facility and a tie-line circuit switcher to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at Q729/780 Point of Interconnection substation with appurtenant metering and disconnect facilities (to be built for Q825). In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. Transmission Provider will also own metering facilities (and associated control houses) to be installed on the feeder tie lines for Q825-828 in addition to the interchange metering installed in order to measure the output of the all generating facilities separately. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$166,700

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

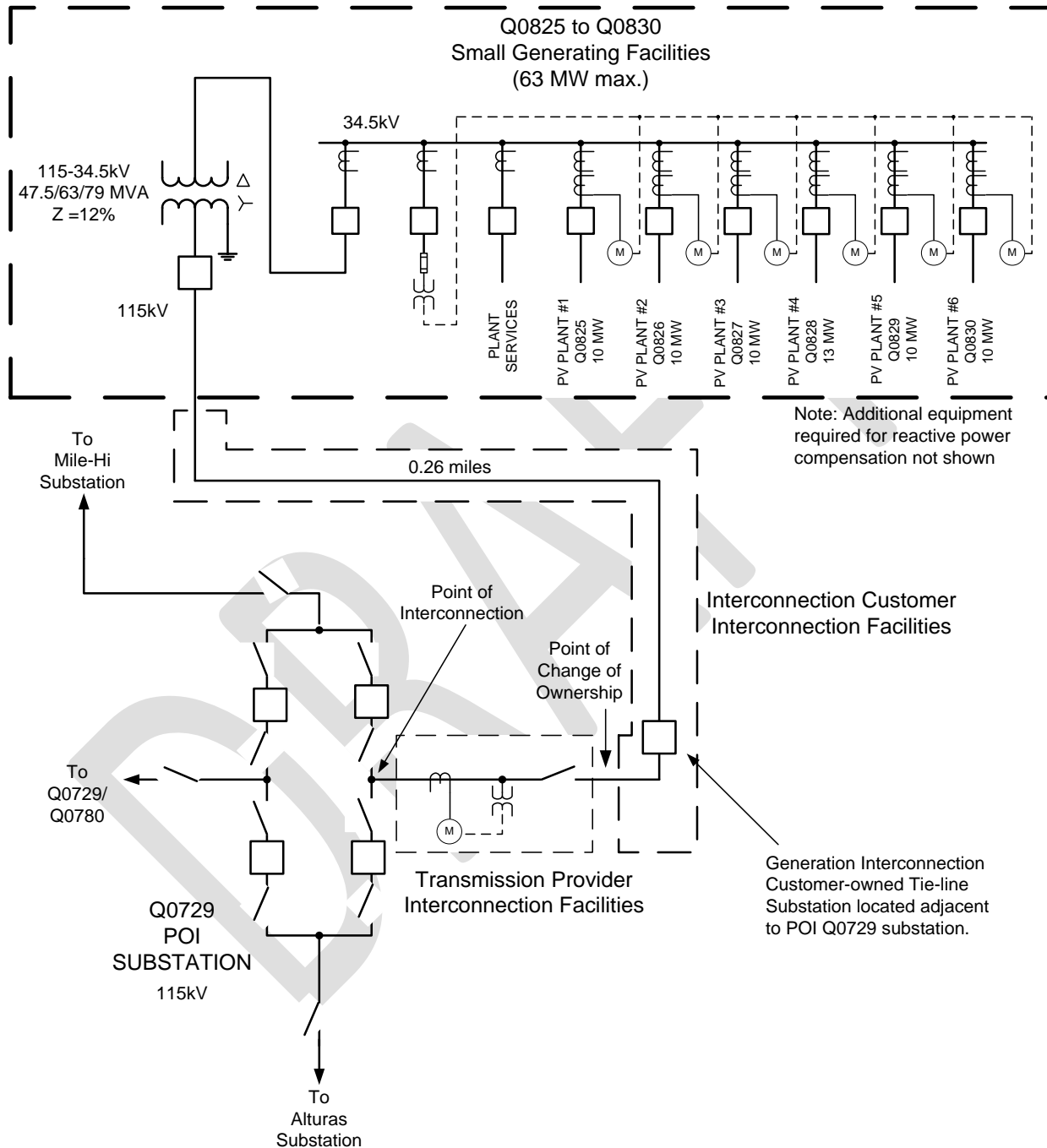
**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at Q729/780 substation in Klamath County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

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Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: December 31, 2019

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> <u>February 15, 2018</u>	<u>Interconnection</u> <u>Customer</u>
(2) <u>Provide Financial Security (\$40,000)</u> <u>March 12, 2018</u>	<u>Interconnection</u> <u>Customer</u>
(3) <u>Design information provided</u> <u>May 9, 2018</u>	<u>Interconnection</u> <u>Customer</u>
(4) <u>Commence engineering and procurement</u> <u>June 21, 2018</u>	<u>Transmission</u> <u>Provider</u>
(5) <u>Provide signed facility drawings</u> <u>PacifiCorp provided Review 2 date</u>	<u>Interconnection</u> <u>Customer</u>
(6) <u>Provide Energy Imbalance Market data</u> <u>March 1, 2019</u>	<u>Interconnection</u> <u>Customer</u>
(7) <u>Design complete</u> <u>March 18, 2019</u>	<u>Transmission Provider</u>
(8) <u>Contingent Facilities complete</u> <u>March 28, 2019</u>	<u>Transmission Provider</u>
(9) <u>Property/permits/ROW procured</u> <u>April 18, 2019</u>	<u>Interconnection</u> <u>Customer</u>
(10) <u>Begin construction</u> <u>May 15, 2019</u>	<u>Transmission Provider</u>
(11) <u>Provide Policy 139 test plan</u> <u>October 16, 2019</u>	<u>Interconnection</u> <u>Customer</u>
(12) <u>Construction complete/backfeed</u> <u>November 15, 2019</u>	<u>Transmission Provider</u>

- (13) Begin generation testing/first sync      Interconnection  
December 18, 2019                                      Customer
- (14) Commercial operations                                      Interconnection  
December 31, 2019                                      Customer

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering (May 21, 2018) and construction (April 15, 2019) no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*The Point of Interconnection substation being constructed as part of the Q0729 project is a contingent facility for this Project. Any delays in the completion of the Q0729 POI substation may result in similar delays for this Project including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Public Utility "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Interconnection Customer must allow the Transmission Provider to hold all Level 2 relay passwords for any control and/or protective device within their control at the Point of Interconnection and/or Small Generating Facility which directly impacts the Transmission Provider's distribution and/or transmission systems. Level 2 passwords are those which allow actual modifications to control and/or relay settings. This will ensure the Transmission Provider is aware of and approves any changes being made by the Interconnection Customer. Furthermore; this will ensure there are no negative impacts to the Transmission Provider's distribution system, transmission system, or existing customer base. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None

Contingent Facilities. As identified in the System Impact Study for this project dated August 17, 2017 and the Facilities Study dated December 5, 2017 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for Q729/780
- Interconnection Facilities and Network Upgrades to be installed for Q825-828

If the schedule for completion of these upgrades changes or the Interconnection Customer requires an in-service date prior to the completion of these upgrades, the Public Utility reserves the right to restudy this project to determine any additional requirements to assign to this project necessary to facilitate interconnection of this project by the date required.



**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Design, procure, own and maintain the Small Generating Facility and all associated equipment.
- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the Small Generating Facility and associated collector substation(s).
- Procure, own and maintain a set of relays that will timely (5 cycles or less) detect and clear faults in the Interconnection Customer's transmission tie line. These relays must be coordinated with the other relays in the Transmission Provider's system.
- Design, procure, and install a data concentrator (SEL-2411 or Transmission Provider approved device) to transfer data between the collector substation(s) and the Interconnection Customer tie line substation via an optical fiber communications circuit in DMP3 protocol. The Transmission Provider will input and hold the second level passwords for the SEL-2411 (or Transmission Provider approved device). Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Provide the following data from the Project collector substation to be routed through the Interconnection Customer tie line substation:

Analogs:

- o 34.5 kV Real power
- o 34.5 kV Reactive Power
- o 34.5 kV A phase voltage
- o 34.5 kV B phase voltage
- o 34.5 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)

Status:

- o 34.5 kV circuit breaker

- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation(s) for the Transmission Provider to install its metering equipment. This area will share a fence and ground grid with the associated Small Generating Facility and have separate, unencumbered access for the Transmission Provider.
- Provide AC station service for the Transmission Provider's control house.
- Have a CDEGS grounding analysis performed and provide the results to the Transmission Provider.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the Point of Interconnection or a point determined by the Transmission Provider if necessary. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.

- Meet the Federal Energy Regulatory Committee ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Prior to construction, arrange for construction power with the Transmission Provider. The metering shall conform to the Six State Electric Service Requirements manual as the site is within the Transmission Provider's service territory.
- Arrange bidirectional metering for permanent station service load. Please note that prior to back feed, Interconnection Customer must arrange distribution voltage retail meter service for electricity consumed by the Project and arrange backup station service for power that will be drawn from the transmission line when the Project is not generating. Interconnection Customer must call the PCCC Solution Center 1-800-640-2212 to arrange this service. Approval for back feed is contingent upon obtaining station service.
- The Interconnection Customer is responsible for standby station service requirements for their collector and/or generation facilities in the event the transmission source is unavailable. This may require the installation of an on-site generator or connection to a local distribution feeder. Connection to a local feeder will require the Interconnection Customer to make a separate service request through the PCCC Solution Center at 1-800-640-2212.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure, install, own and maintain at the Interconnection Customer's expense, low side 34.5 kV revenue metering for the Project. This will include revenue metering panels, instrument transformers, H-frame structures, junction boxes, secondary lead conductors, revenue quality meters and test switches.
- Procure and install a control house adjacent to the Interconnection Customer's collector substation.
- Procure and install a backup DC battery system for the Transmission Provider control house.
- Install an Ethernet phone line for retail sales and generation accounting via the MV-90 translation system.

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.

### **Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Control Centers
- Update databases for the inclusion of this Project as well as the RAS.
  - Design and implement a RAS to trip the Project for contingencies identified in the system impact study report for this Project.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

DRAFT

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829) )  
BLUE MARMOT VI LLC (UM 1830) )  
BLUE MARMOT VII LLC (UM 1831) )  
BLUE MARMOT VIII LLC (UM 1832) )  
BLUE MARMOT IX LLC (UM 1833) )  
Complainants )  
vs. )  
PORTLAND GENERAL ELECTRIC )  
COMPANY )  
Defendant )  
Pursuant to ORS 756.500. )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/919  
PAC RESTUDY COMMUNICATION**

**January 31, 2020**

---

**From:** Moore, Robin <Robin.Moore@pacificcorp.com>  
**Sent:** Tuesday, July 3, 2018 12:18 PM  
**To:** Talbott, William  
**Cc:** Maccia, Ilana; Defo Toguem, Cedric; Raghoo, Dev; Tzartzev, Rouslan; Benitez, Alberto  
**Subject:** RE: Alternative configurations for Q825-Q830

We will perform a restudy with your requested Alternative Configuration #3. I will let you know if we need any additional tech data.

Thank you,

*Robin Moore*

Ph: 503-813-6419

**From:** Talbott, William [mailto:William.Talbott@edpr.com]  
**Sent:** Tuesday, June 26, 2018 10:08 AM  
**To:** Moore, Robin <Robin.Moore@pacificcorp.com>  
**Cc:** Maccia, Ilana <Ilana.Maccia@edpr.com>; Defo Toguem, Cedric <Cedric.DefoToguem@edpr.com>; Raghoo, Dev <Dev.Raghoo@edpr.com>; Tzartzev, Rouslan <Rouslan.Tzartzev@edpr.com>; Benitez, Alberto <Alberto.Benitez@edpr.com>  
**Subject:** [INTERNET] RE: Alternative configurations for Q825-Q830

**\*\* STOP. THINK. External Email \*\***

---

Robin,  
We'd like to proceed with Alternative Configuration #3 below. Can you please clarify what additional technical data you would need for any required restudy?  
Thanks,  
Will



**Will Talbott**  
EDP Renewables North America LLC  
Development - Western Region  
53 SW Yamhill Street, Portland, OR 97204  
Direct: 503.535.1525 Cell 971.325.6238 Fax 503.222.9404

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---

**From:** Moore, Robin [mailto:Robin.Moore@pacificcorp.com]  
**Sent:** Friday, June 15, 2018 12:17 PM  
**To:** Talbott, William <William.Talbott@edpr.com>  
**Cc:** Maccia, Ilana <Ilana.Maccia@edpr.com>; Defo Toguem, Cedric <Cedric.DefoToguem@edpr.com>; Raghoo, Dev <Dev.Raghoo@edpr.com>; Tzartzev, Rouslan <Rouslan.Tzartzev@edpr.com>; Benitez, Alberto <Alberto.Benitez@edpr.com>  
**Subject:** RE: Alternative configurations for Q825-Q830  
Hi Will,

We have reviewed your proposed alternative configurations. We can allow Alternative 2 or Alternative 3, but Alternative 4 is not allowed. If you are going to proceed with Alternative 2 or Alternative 3, please confirm and provide any additional technical data required for the required restudy.

If you are not choosing to proceed with either of these alternative configurations, please confirm and I will get revised executable versions of the existing interconnection agreements sent for signature.

We need these projects to make progress in the queue, one way or the other, please respond how you wish to proceed.

Thank you,

*Robin Moore*

Ph: 503-813-6419

---

**From:** Talbot, William [<mailto:William.Talbot@edpr.com>]

**Sent:** Tuesday, June 12, 2018 7:11 PM

**To:** Moore, Robin <[Robin.Moore@pacifcorp.com](mailto:Robin.Moore@pacifcorp.com)>

**Cc:** Maccia, Ilana <[Ilana.Maccia@edpr.com](mailto:Ilana.Maccia@edpr.com)>; Defo Toguem, Cedric <[Cedric.DefoToguem@edpr.com](mailto:Cedric.DefoToguem@edpr.com)>; Raghoo, Dev <[Dev.Raghoo@edpr.com](mailto:Dev.Raghoo@edpr.com)>; Tzartzev, Rouslan <[Rouslan.Tzartzev@edpr.com](mailto:Rouslan.Tzartzev@edpr.com)>; Benitez, Alberto <[Alberto.Benitez@edpr.com](mailto:Alberto.Benitez@edpr.com)>

**Subject:** [INTERNET] RE: Alternative configurations for Q825-Q830

**\*\* STOP. THINK. External Email \*\***

---

Robin,

See below (note that map is same as for Configuration #3). Thanks

**Alternative Configuration #4**

- 60MW of generation at area in white
- Project substation (referred to as collector substation in SGIA's) shown in yellow, moved to on-site location
- 3 x 34.5kv collection circuits, not shown, each carrying 20MW, running from PV blocks to on-site project substation
- Meter and switchgear for each 20MW circuit at the low side of project substation
- For the transformer at the project substation, the preference is for Y-D-Y
- Breaker on high side of 34.5/115kv transformer
- 115kv gen-tie, shown in red, running ~7 miles to POI





**Will Talbot**

EDP Renewables North America LLC  
Development - Western Region  
53 SW Yamhill Street, Portland, OR 97204  
Direct: 503.535.1525 Cell 971.325.6238 Fax 503.222.9404

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**From:** Moore, Robin [<mailto:Robin.Moore@pacificorp.com>]  
**Sent:** Tuesday, June 12, 2018 2:43 PM  
**To:** Talbot, William <[William.Talbot@edpr.com](mailto:William.Talbot@edpr.com)>  
**Cc:** Maccia, Ilana <[Ilana.Maccia@edpr.com](mailto:Ilana.Maccia@edpr.com)>; Defo Toguem, Cedric <[Cedric.DefoToguem@edpr.com](mailto:Cedric.DefoToguem@edpr.com)>; Raghoo, Dev <[Dev.Raghoo@edpr.com](mailto:Dev.Raghoo@edpr.com)>; Tzartzev, Rouslan <[Rouslan.Tzartzev@edpr.com](mailto:Rouslan.Tzartzev@edpr.com)>; Benitez, Alberto

<[Alberto.Benitez@edpr.com](mailto:Alberto.Benitez@edpr.com)>

**Subject:** RE: Alternative configurations for Q825-Q830

Do you have a description and map for Alt 4, as you do for the other two alternatives below?

*Robin Moore*

Ph: 503-813-6419

---

**From:** Talbott, William [<mailto:William.Talbott@edpr.com>]

**Sent:** Monday, June 11, 2018 7:10 PM

**To:** Moore, Robin <[Robin.Moore@pacificorp.com](mailto:Robin.Moore@pacificorp.com)>

**Cc:** Maccia, Ilana <[Ilana.Maccia@edpr.com](mailto:Ilana.Maccia@edpr.com)>; Defo Toguem, Cedric <[Cedric.DefoToguem@edpr.com](mailto:Cedric.DefoToguem@edpr.com)>; Raghoo, Dev <[Dev.Raghoo@edpr.com](mailto:Dev.Raghoo@edpr.com)>; Tzartzev, Rouslan <[Rouslan.Tzartzev@edpr.com](mailto:Rouslan.Tzartzev@edpr.com)>; Benitez, Alberto <[Alberto.Benitez@edpr.com](mailto:Alberto.Benitez@edpr.com)>

**Subject:** [INTERNET] RE: Alternative configurations for Q825-Q830

**\*\* STOP. THINK. External Email \*\***

---

Robin,

Please see attached for SLD's reflecting three alternative configurations for PacifiCorp's review.

Thanks,

Will



**Will Talbott**

EDP Renewables North America LLC

Development - Western Region

53 SW Yamhill Street, Portland, OR 97204

Direct: 503.535.1525 Cell 971.325.6238 Fax 503.222.9404

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**From:** Moore, Robin [<mailto:Robin.Moore@pacificorp.com>]

**Sent:** Thursday, June 07, 2018 7:24 AM

**To:** Talbott, William <[William.Talbott@edpr.com](mailto:William.Talbott@edpr.com)>

**Cc:** Maccia, Ilana <[Ilana.Maccia@edpr.com](mailto:Ilana.Maccia@edpr.com)>; Defo Toguem, Cedric <[Cedric.DefoToguem@edpr.com](mailto:Cedric.DefoToguem@edpr.com)>; Raghoo, Dev <[Dev.Raghoo@edpr.com](mailto:Dev.Raghoo@edpr.com)>; Tzartzev, Rouslan <[Rouslan.Tzartzev@edpr.com](mailto:Rouslan.Tzartzev@edpr.com)>; Benitez, Alberto <[Alberto.Benitez@edpr.com](mailto:Alberto.Benitez@edpr.com)>

**Subject:** RE: Alternative configurations for Q825-Q830

Hi Will,

I would really prefer to wait until we have One Lines to review. When do you expect they would be available?

*Robin Moore*

Ph: 503-813-6419

---

**From:** Talbott, William [<mailto:William.Talbott@edpr.com>]

**Sent:** Wednesday, June 06, 2018 10:11 PM

**To:** Moore, Robin <[Robin.Moore@pacificorp.com](mailto:Robin.Moore@pacificorp.com)>

**Cc:** Maccia, Ilana <[Ilana.Maccia@edpr.com](mailto:Ilana.Maccia@edpr.com)>; Defo Toguem, Cedric <[Cedric.DefoToguem@edpr.com](mailto:Cedric.DefoToguem@edpr.com)>; Raghoo, Dev

<[Dev.Raghoo@edpr.com](mailto:Dev.Raghoo@edpr.com)>; Tzartzev, Rouslan <[Rouslan.Tzartzev@edpr.com](mailto:Rouslan.Tzartzev@edpr.com)>; Benitez, Alberto <[Alberto.Benitez@edpr.com](mailto:Alberto.Benitez@edpr.com)>

**Subject:** [INTERNET] Alternative configurations for Q825-Q830

**\*\* STOP. THINK. External Email \*\***

---

Robin,

Following up on our call last week, please see below for summaries of the alternative configurations for the Q825-Q830 projects that we discussed. Can you please review and let us know whether or not each of these would be considered a material modification? Note, we are in the process of creating single line diagrams capturing these configurations and will send along as soon as they are available, but didn't want to delay further in sending the below.

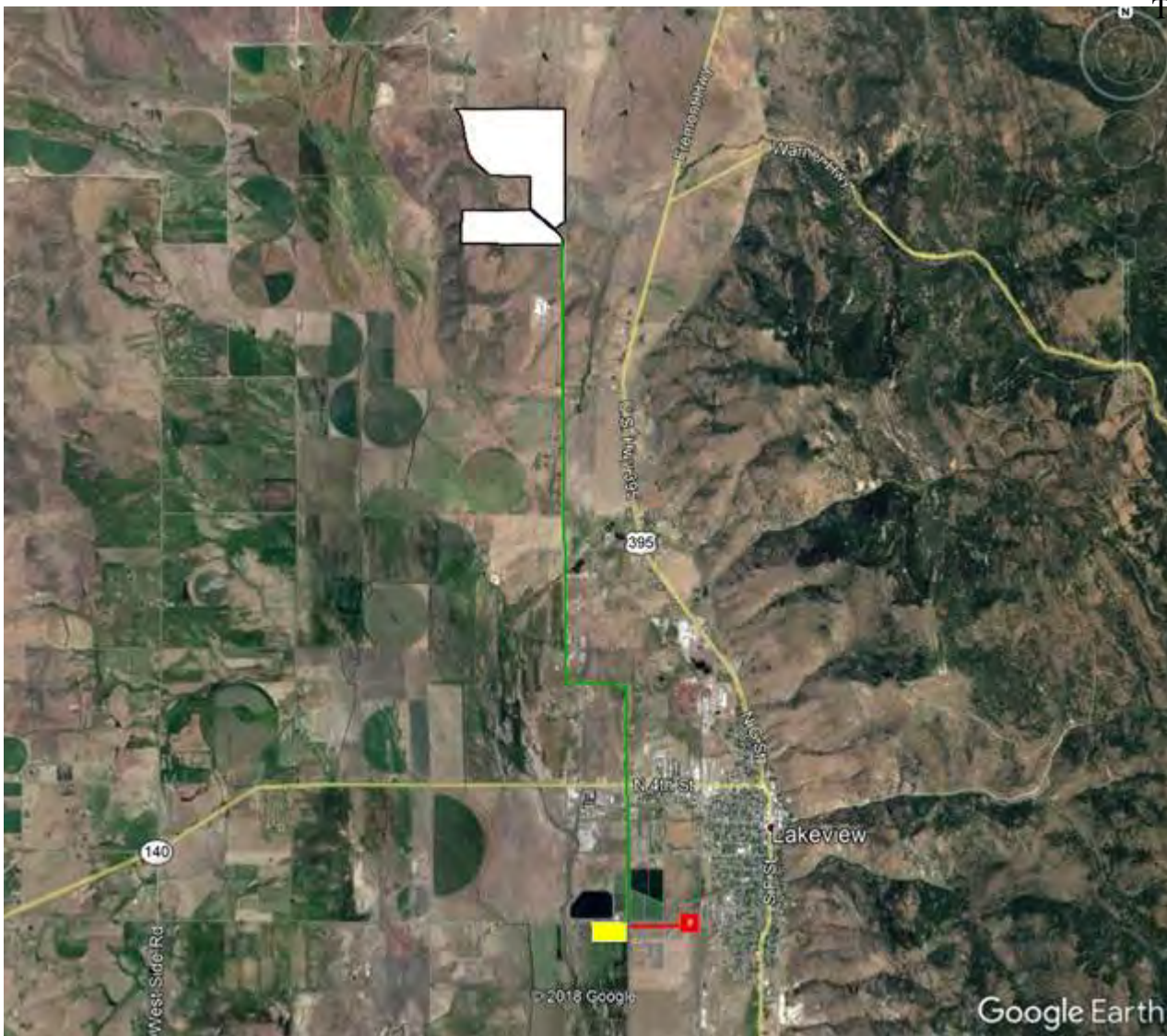
Please feel free to call me anytime with any questions.

Thanks,

Will

#### **Alternative Configuration #2**

- 60MW of generation at area in white
- 6 x 34.5kv collection circuits, shown in green, each carrying 10MW, running from generation facility to project substation, ~6 miles
- Meter and switchgear for each 10MW circuit at the low side of project substation
- Project substation (referred to as collector substation in SGIA's) shown in yellow, in same position as originally contemplated
- For the transformer at the project substation, the preference is for Y-D-Y
- Breaker on high side of 34.5/115kv transformer
- 115kv gen-tie, shown in red, running 0.5 miles East to POI, as originally contemplated



### Alternative Configuration #3

- 60MW of generation at area in white
- Project substation (referred to as collector substation in SGIA's) shown in yellow, moved to on-site location
- 6 x 34.5kv collection circuits, not shown, each carrying 10MW, running from PV blocks to on-site project substation
- Meter and switchgear for each 10MW circuit at the low side of project substation
- For the transformer at the project substation, the preference is for Y-D-Y
- Breaker on high side of 34.5/115kv transformer
- 115kv gen-tie, shown in red, running ~7 miles to POI



**Will Talbott**  
EDP Renewables North America LLC  
Development - Western Region  
53 SW Yamhill Street, Portland, OR 97204  
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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                 )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                 )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/920**

**BLUE MARMOT V 2019 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot V, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

Interconnection Customer Application No: 825

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer

will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the

facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
  
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of

the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair,

and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power and Primary Frequency Response

1.8.1 Power Factor Design Criteria

1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination

of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.8.4 Primary Frequency Response
- Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power

control with the ability to sense changes in system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and



1.8.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection

Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

1.8.4.3 Exemptions.

Small Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the

electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such

non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the



Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and

conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.



## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any

other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the



remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

With copy to:

(Primary)

Interconnection Customer: Blue Marmot V, LLC  
Attention: General Counsel  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

(Secondary)

Interconnection Customer: Blue Marmot V, LLC  
Attention: Executive Vice President for West and Central Regions and Mexico  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Email: will.talbott@edpr.com

Transmission Provider: PacifiCorp  
Attention: Central Cashiers

Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St

City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

**Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_  
Rick Vail  
Title: VP, Transmission  
Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.



**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer with high side circuit interrupter. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker substation to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at the Point of Interconnection substation with appurtenant metering and disconnect facilities. In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$357,000

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$2,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

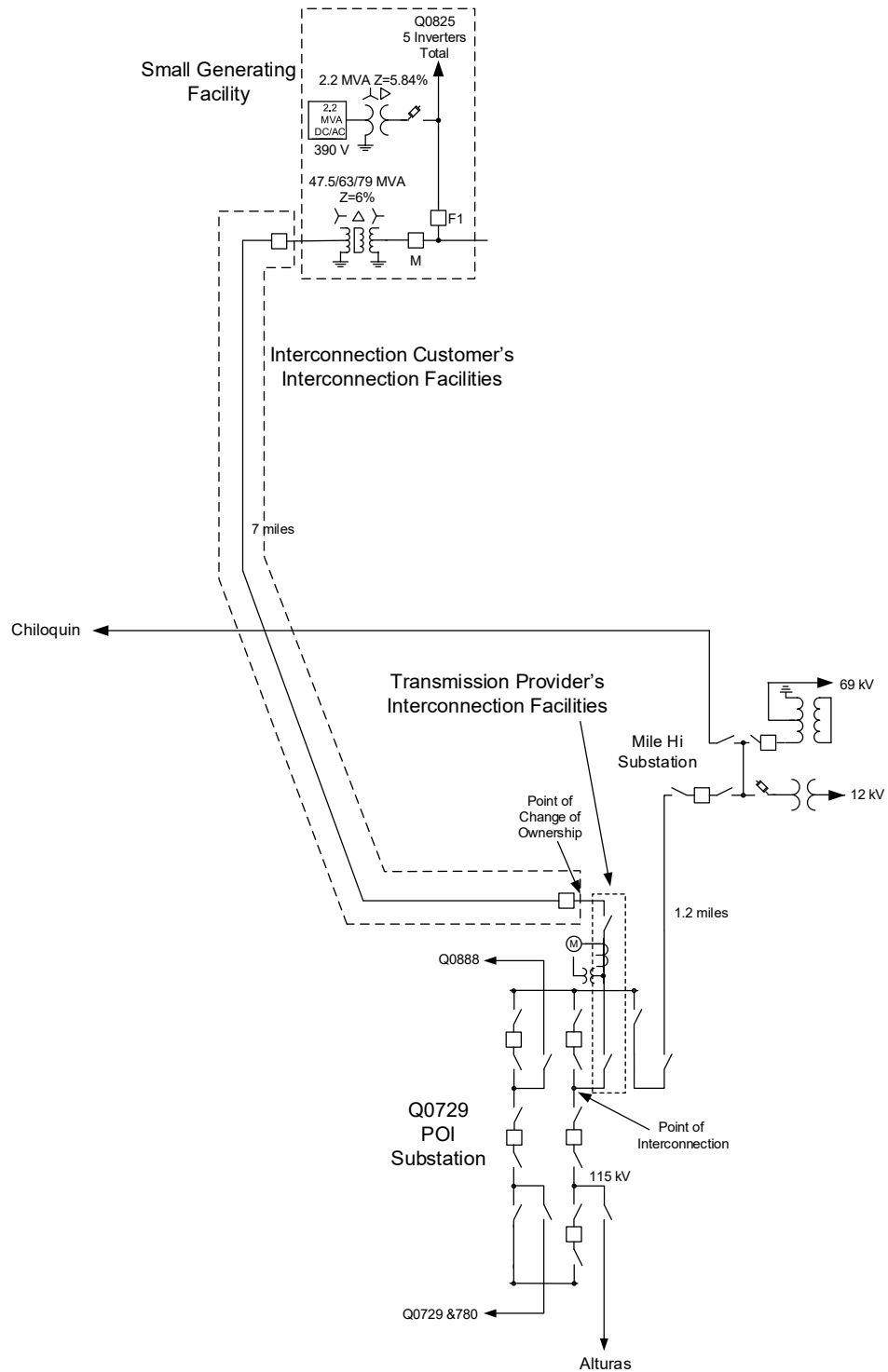
**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to

the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: October 31, 2021

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> August 15, 2019	<u>Interconnection</u> <u>Customer</u>
(2) <u>Provide Financial Security (\$960,000)</u> August 25, 2019	<u>Interconnection</u> <u>Customer</u>
(3) <u>Design information provided</u> September 15, 2019	<u>Interconnection</u> <u>Customer</u>
(5) <u>Commence engineering and procurement</u> *October 24, 2019	<u>Transmission</u> <u>Provider</u>
(6) <u>Provide Energy Imbalance Market data</u> **March 4, 2020	<u>Interconnection</u> <u>Customer</u>
(6) <u>All design work by BPA and NV Energy</u> <u>Complete</u> May 15, 2020	<u>Interconnection</u> <u>Customer</u>
(7) <u>Design complete</u> July 23, 2020	<u>Transmission Provider</u>
(8) <u>Property/permits/ROW procured</u> July 23, 2020	<u>Interconnection</u> <u>Customer</u>
(9) <u>Property/permits/ROW procured</u> November 12, 2020	<u>Transmission Provider</u>
(10) <u>Begin construction</u> February 10, 2021	<u>Transmission Provider</u>
(10) <u>All BPA and NV Energy Construction</u> <u>Complete</u> July 12, 2021	<u>Interconnection</u> <u>Customer</u>
(11) <u>Construction complete</u>	<u>Transmission Provider</u>

August 5, 2021

- |  |   |
|--|---|
| (12) <u>Commissioning complete</u><br>September 17, 2021                           | <u>Transmission Provider</u>              |
| (13) <u>Commissioning document review</u><br><u>complete</u><br>September 24, 2021 | <u>Transmission Provider</u>              |
| (14) <u>Backfeed</u><br>September 25, 2021   | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Begin generation testing/first sync</u><br>October 1, 2021                 | <u>Interconnection</u><br><u>Customer</u> |
| (16) <u>Commercial operations</u><br>October 31, 2021                              | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing



permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: A new 115 kV circuit breaker and associated bus work at the Point of Interconnection substation. New microwave communication sites at Sugar Mountain and Chiloquin Hilltop. New microwave communications and Remedial Action Scheme ("RAS") equipment at Alturas, Mile Hi, Chiloquin, Klamath, NV Energy Hilltop and BPA Warner substations as well as Spodue Mountain, Grizzly Mountain and Swan Lake communications sites. Estimated cost is \$5,258,000.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete October 2019.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA****Scope of Work****Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule

to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.

- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Procure, install, own and maintain a set of line relays that will detect and clear all faults on the tie line between the Interconnection Customer's collector and tie line substations in 5 cycles or less.
- Design, procure, and install a Transmission Provider approved data concentrator to capture the required Interconnection Customer device data points. The Transmission Provider will input and hold the second level passwords for the data concentrator. Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Design, procure and install conduit and control cabling and hard wire the Interconnection Customer's source devices to the data concentrator. Replicated values are not acceptable.
- Provide the following points which are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:

Analogs:

- o 115 kV A phase voltage
- o 115 kV B phase voltage
- o 115 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)
- o Circuit F1 Real Power MW

- o Circuit F1 Reactive Power MVAR
- Status:
- o 34.5 kV circuit breaker F1
- o 115 kV transformer circuit breaker
- o 34.5 kV transformer circuit breaker M
- Install fiber optic cable from the data concentrator to a splice point on the transmission tie line.
- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.

**Interconnection Customer Tie Line Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line connecting the Interconnection Customer's Small Generating Facility to the Interconnection Customer's tie line substation.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, property rights and/or rights of way for the new transmission line between the Interconnection Customer's collector substation and tie line substation. Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with its transmission tie line facilities.
- Design, construct, own and maintain the 115 kV transmission tie line between the Interconnection Customer's collector and tie line substations.
- Design, procure, install, own and maintain Transmission Provider standard OPGW fiber optic cable on the

transmission tie line. Splice to the fiber running from the data concentrator.

### **Interconnection Customer Tie Line Substation Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with Interconnection Customer's tie line substation.

#### **INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the new tie line substation.
- Design, procure, construct, own and maintain the Interconnection Customer's tie line substation (consisting of a sole 115 kV circuit breaker and associated equipment) adjacent to the POI substation. The deadend structures in the tie line substation and POI substation must be less than 800' from each other. The tie line substation shall include all radial transmission line relaying to the collector substation, breaker failure protection and associated communications. The short line/bus segment between the tie line substation and the POI substation will be considered a bus section and will be protected with redundant bus differential relay systems.
- Provide and install a set of current transformers to be fed into the bus differential relays with a maximum current transformer ratio matching the maximum CT ratio of the breakers at the POI substation. Provide and install conduit and cabling to the POI substation marshalling cabinet with these outputs.
- Design and construct the tie line substation such that the ground grid can be connected to the POI substation ground grid to support the installation of a Transmission Provider owned and maintained bus differential scheme. The Interconnection Customer is responsible to ensure the ground grid design supports safe step and touch potentials.
- The following data points are required from the Interconnection Customer's tie line substation:  
Status:
  - o 115 kV breaker
- Provide and install conduits (number and size TBD) and control cabling between the Interconnection Customer tie line substation and the marshalling cabinet just inside the fence of the POI substation to support copper circuits installed between the facilities. Hard wire all tie line

substation status, control, and protection circuit interface to the POI substation to the marshalling cabinet.

- If a transmission structure is required between the POI substation and the tie line substation, construct to Transmission Provider's current design and installation standards.
- Provide and install conductor, fiber, shield wire and line hardware in sufficient quantities to allow the Transmission Provider to terminate the tie line into POI substation dead-end structure.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the necessary specifications to allow the ground grids of the Interconnection Customer's tie line substation and the POI substation to be tied together.
- Provide the Interconnection Customer the necessary specifications for the last bus/line segment of the Interconnection Customer's tie line substation and the new POI substation to be connected.

**Point of Interconnection (Bullard Substation)**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Test and commission the communication path from Interconnection Customer's data concentrator to the POI substation.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure and construct the necessary infrastructure to create a line position for the Interconnection Customer's tie line including the installation of the following major equipment:
  - o (1) - 115kV circuit breaker
  - o (3) - 115kV disconnect switches
- Terminate the last span/bus from the tie line substation into the POI substation deadend structure.
- Procure and install a marshalling cabinet on the edge of the POI substation near the Interconnection Customer's tie line substation.
- Design, procure and install a bus differential relay for the connection to the Interconnection Customer's tie line substation.

- Procure and install a set of non-pilot step distance relays.
- Modify protective relay elements in the existing line relays to monitor voltage and frequency of the Interconnection Customer's Small Generating Facility.
- Install fiber from the substation control building to the Interconnection Customer tie line dead end structure and splice to the fiber provided by the Interconnection Customer.
- Install necessary communications equipment to tie the Interconnection Customer's communications path to a communications rack in the POI substation.
- Observe the Interconnection Customer's test of the communications system running from the collector substation to the POI substation and provide acceptance of functionality.
- The following data points from the POI substation will be acquired through the POI substation RTU:  
Analogs:
  - o Net Generation MW
  - o Net Generator MVAR
  - o Interchange metering kWh
- Design, procure and install 115 kV revenue metering equipment for the Project including two (2) revenue quality meters, test switch, instrument transformers, metering panels, junction box and secondary metering wire.
- Provide and install an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.
- Procure and install fiber optic cable from the POI substation control building to a splice point on the transmission line running from Mile-Hi substation. Splice the fiber to the fiber installed on the transmission line.
- Procure and install the necessary communications equipment to tie in the fiber running from Mile-Hi substation.
- Procure and install a microwave system including a self-supporting tower and a backup power system.
- Install communications equipment to support the remedial action scheme ("RAS") required for the Project including channel bank, modems, fiber jumpers and a RAS controller.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.



**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Execute any necessary agreements with Bonneville Power Administration to facilitate the upgrades required in BPA's Hilltop substation and in NV Energy's Warner substation.
- Execute any necessary agreements with NV Energy to facilitate the upgrades required in NV's Warner substation.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Bullard-Mile Hi Transmission Line
  - Install fiber optic cable between the two substations and splice to fiber running from each substation control building.
- Mile Hi substation
  - Procure any necessary permits and/or property rights to allow for the installation of the required equipment at this site.
  - Procure and install a new 1200 A circuit switcher to replace the existing 2L1 circuit switcher.
  - Procure and install fiber optic cable from the substation control building to a splice point on the transmission line running from Bullard substation. Splice the fiber to the fiber installed on the transmission line.
  - Procure and install the necessary communications equipment to tie in the fiber running from Bullard substation.
  - Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
- Alturas substation
  - Procure any necessary permits and/or property rights to allow for the installation of the required equipment at this site.
  - Construct a new microwave system including self-supporting tower.
  - Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
  - Perform a GPR study.
- Chiloquin substation
  - Procure any necessary permits and/or property rights to allow for the installation of the required equipment at this site.

- o Construct a new microwave system including self-supporting tower.
- o Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
  
- Klamath substation
  - o Install communications equipment to channelize and cross connect the diverse communications circuits interfacing with the substation.
  - o Perform a GPR study.
  
- Swan Lake communications site
  - o Install the necessary equipment to create a communications connection to support RAS requirements.
  
- Grizzly Mountain communications site
  - o Install the necessary equipment to create a communications connection to support RAS requirements. This may include the installation of a new tower.
  
- Spodue Mountain communications site
  - o Install the necessary equipment to create a communications connection to support RAS requirements.
  
- Sugar Mountain #3 communications site
  - o Procure any necessary permits, property rights and/or rights-of-way to allow for the construction of a new communications site.
  - o Construct a new communications site which will include the following major equipment:
    - (1) - 60' Self Supporting Tower
    - (1) - Control Building
    - (1) - Microwave Communications System
    - (1) - Generator
    - (1) - Propane Tank
  - o Arrange for permanent power to the new facility.
  
- Chiloquin Hilltop communications site
  - o Procure any necessary permits, property rights and/or rights-of-way to allow for the construction of a new communications site.
  - o Construct a new communications site which will include the following major equipment:
    - (1) - 60' Self Supporting Tower
    - (1) - Control Building

- (1) - Microwave Communications System
  - (1) - Generator
  - (1) - Propane Tank
  - Arrange for permanent power to the new facility.
- NV Energy Hilltop Substation
  - Ensure all agreements are in place between the Interconnection Customer, NV Energy and BPA prior to the commencement of design activities.
  - Coordinate with BPA and NV Energy to confirm and schedule any work necessary within the substation to support RAS requirements.
  - Install communications equipment to channelize the diverse communications circuits interfacing with the substation for RAS.
- Bonneville Power Administration Warner Substation
  - Ensure all agreements are in place between the Interconnection Customer and BPA prior to the commencement of design activities.
  - Coordinate with BPA to confirm and schedule any work necessary within BPA's substation to support the Project.
  - Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
- System Operations Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.
- Remedial Action Scheme.
  - Design and implement a new RAS to trip the Interconnection Customer's Small Generating Facilities offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer
    - Outage of the Q0729 POI-Alturas 115 kV transmission line
    - Outage of the Q0729 POI-Mile-Hi 115 kV transmission line
    - Outage of the Warner-Hilltop 230 kV transmission line

- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- Coordinate with BPA on the final RAS design.
- Procure a contract with BPA for use of BPA's existing communications system between BPA's Hilltop substation and either Malin or Captain Jack substation. Final determination of which substation will be determined during final design and in coordination with BPA.
- Procure a T1 lease between Alturas and Klamath substations.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                        )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/921**

**BLUE MARMOT VI 2019 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot VI, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 826

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.8.4 Primary Frequency Response
- Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in

system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency



response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such

non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the



Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and

conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.



## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any

other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the



remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

With copy to:

(Primary)

Interconnection Customer: Blue Marmot VI, LLC  
Attention: General Counsel  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

(Secondary)

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Executive Vice President for West and Central Regions  
and Mexico  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

With copy to:

(Primary)

Interconnection Customer: Blue Marmot V, LLC  
Attention: General Counsel  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

(Secondary)

Interconnection Customer: Blue Marmot V, LLC

Attention: Executive Vice President for West and Central Regions  
and Mexico  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

## **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_  
Rick Vail  
Title: VP, Transmission  
Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.



**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$497,000

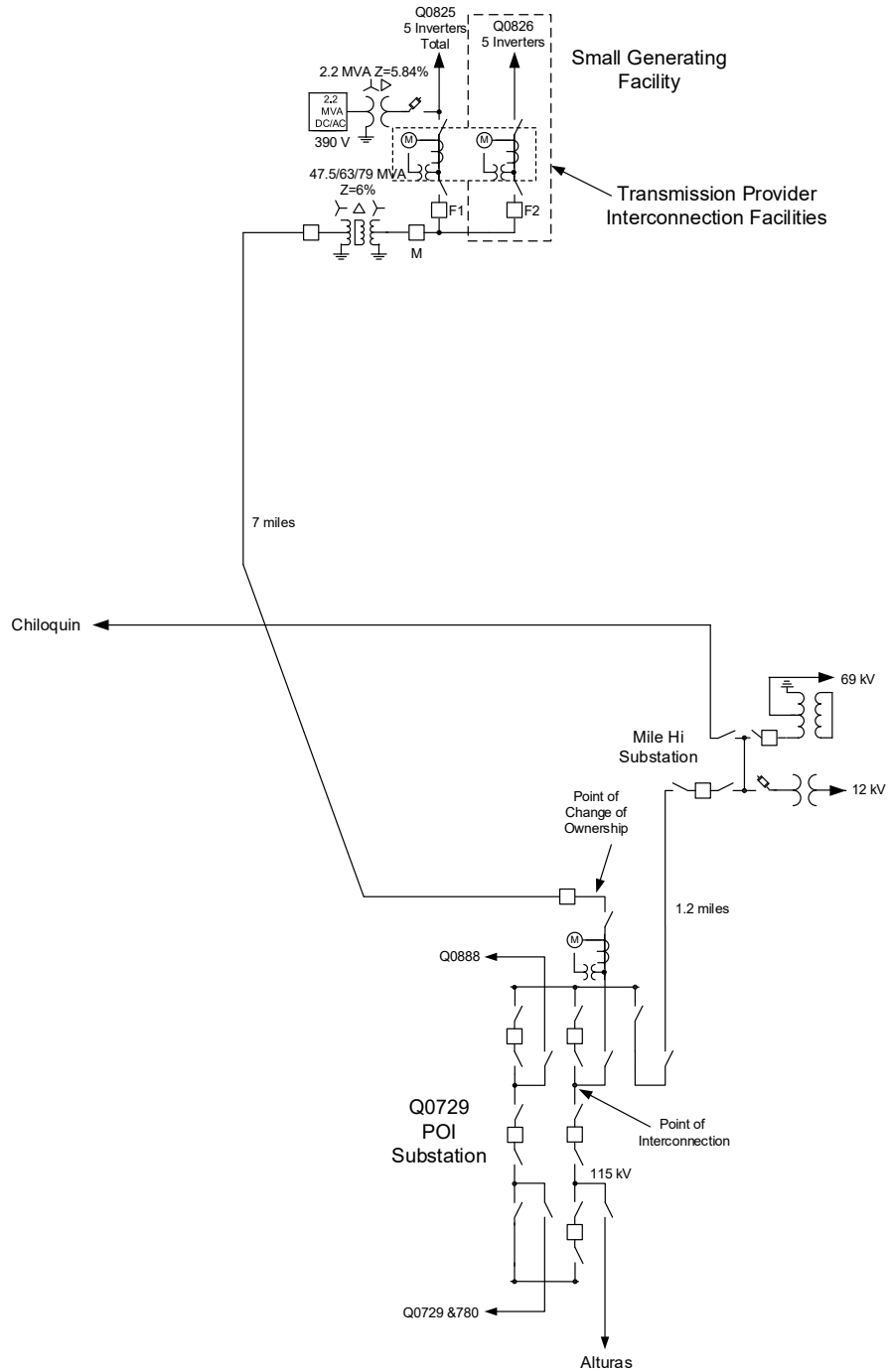
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: October 31, 2021

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> August 15, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$40,000)</u> August 25, 2019	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> September 25, 2019	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> *October 24, 2019	<u>Transmission Provider</u>
(5) <u>Provide Energy Imbalance Market data</u> **March 4, 2020	<u>Interconnection Customer</u>
(6) <u>Design complete</u> July 23, 2020	<u>Transmission Provider</u>
(7) <u>Property/permits/ROW procured</u> July 23, 2020	<u>Interconnection Customer</u>
(8) <u>Property/permits/ROW procured</u> November 12, 2020	<u>Transmission Provider</u>
(9) <u>Begin construction</u> February 10, 2021	<u>Transmission Provider</u>
(10) <u>Construction complete</u> ***August 5, 2021	<u>Transmission Provider</u>
(11) <u>Commissioning complete</u> September 17, 2021	<u>Transmission Provider</u>
(12) <u>Commissioning document review complete</u> September 24, 2021	<u>Transmission Provider</u>

- |  |   |
|--|---|
| (13) <u>Backfeed</u><br>September 25, 2021                         | <u>Interconnection</u><br><u>Customer</u> |
| (14) <u>Begin generation testing/first sync</u><br>October 1, 2021 | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Commercial operations</u><br>October 31, 2021              | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.



**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation

control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.

- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:

Analogs:

- o Circuit F2 Real Power MW
- o Circuit F2 Reactive Power MVAR

Status:

- o 34.5 kV circuit breaker F2
- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's shared collector substation for the Transmission Provider to install a control building. The control building will share a fence and ground grid with the collector substation and have separate, unencumbered access for the Transmission Provider. Fencing, gates and road access shall meet Transmission Provider standards.
- Perform a CDEGS grounding analysis for the Transmission Provider control building site and provide the results to the Transmission Provider.

- Procure, install, own and maintain Transmission Provider approved fiber optic cable from the data concentrator to the Transmission Provider's collector substation control building. Provide sufficient cable to allow the Transmission Provider to terminate in the building.
- Procure, install, own and maintain Transmission Provider approved fiber optic cable from the Transmission Provider's collector substation control building to a splice point on the Q0825 transmission tie line. Provide sufficient cable to allow the Transmission Provider to terminate in the building.
- Provide permanent AC power to the Transmission Provider's control building.
- Procure and install Transmission Provider approved H-Frame structures for both sets of the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from both sets of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's instrument transformers.
- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Procure and install a control building on the property prepared by the Interconnection Customer.
- Procure and install a backup DC battery system for the Transmission Provider control building.
- Procure and install a communications rack and associated communications equipment in the Transmission Provider's control building and coordinate the termination of the fiber to be installed by the Interconnection Customer.

- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of both the Interconnection Customer's main step up transformer and the low side of the main step up transformer of the Q0825 generator.
- Design, procure and install two sets of 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.
- Establish an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.

#### **Q0825 Tie Line Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line constructed as part of the Interconnection Request assigned queue position Q0825 which connects the Interconnection Customer's Small Generating Facility to the Q0825 tie line substation.

#### **INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Transmission Provider to utilize a portion of the fiber optic cable owned by the Q0825 Interconnection Customer for the provision of data.
- Provide at least one buffer tube with 12 strands of fiber for the Transmission Provider's sole use.
- Splice the fiber running from the Transmission Provider's collector substation control building the Transmission Provider's sole use fiber optic cable on the transmission tie line.

#### **Point of Interconnection (Bullard Substation)**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Test and commission the communication path from Interconnection Customer's data concentrator, through the Transmission Provider collector substation control building to the POI substation.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Modify the communications path as necessary to include the Transmission Provider's sole use fiber running from the collector substation.
- Observe the Interconnection Customer's test of the communications system running from the collector substation to the POI substation and provide acceptance of functionality.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer
    - Outage of the POI-Alturas 115 kV transmission line
    - Outage of the POI-Mile-Hi 115 kV transmission line
    - Outage of the Warner-Hilltop 230 kV transmission line
    - Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

**Exhibit 1 to Attachment 5 to SGIA**  
**Transmission Provider's Interconnection Policy**

**(ATTACHED)**

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829) )  
BLUE MARMOT VI LLC (UM 1830) )  
BLUE MARMOT VII LLC (UM 1831) )  
BLUE MARMOT VIII LLC (UM 1832) )  
BLUE MARMOT IX LLC (UM 1833) )  
Complainants )  
vs. )  
PORTLAND GENERAL ELECTRIC )  
COMPANY )  
Defendant )  
Pursuant to ORS 756.500. )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/922**

**BLUE MARMOT VII 2019 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**



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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot VII, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 827

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.8.4 Primary Frequency Response

Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in



system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such



non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and



conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any



other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

#### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_  
Rick Vail  
Title: VP, Transmission  
Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's



Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$121,000

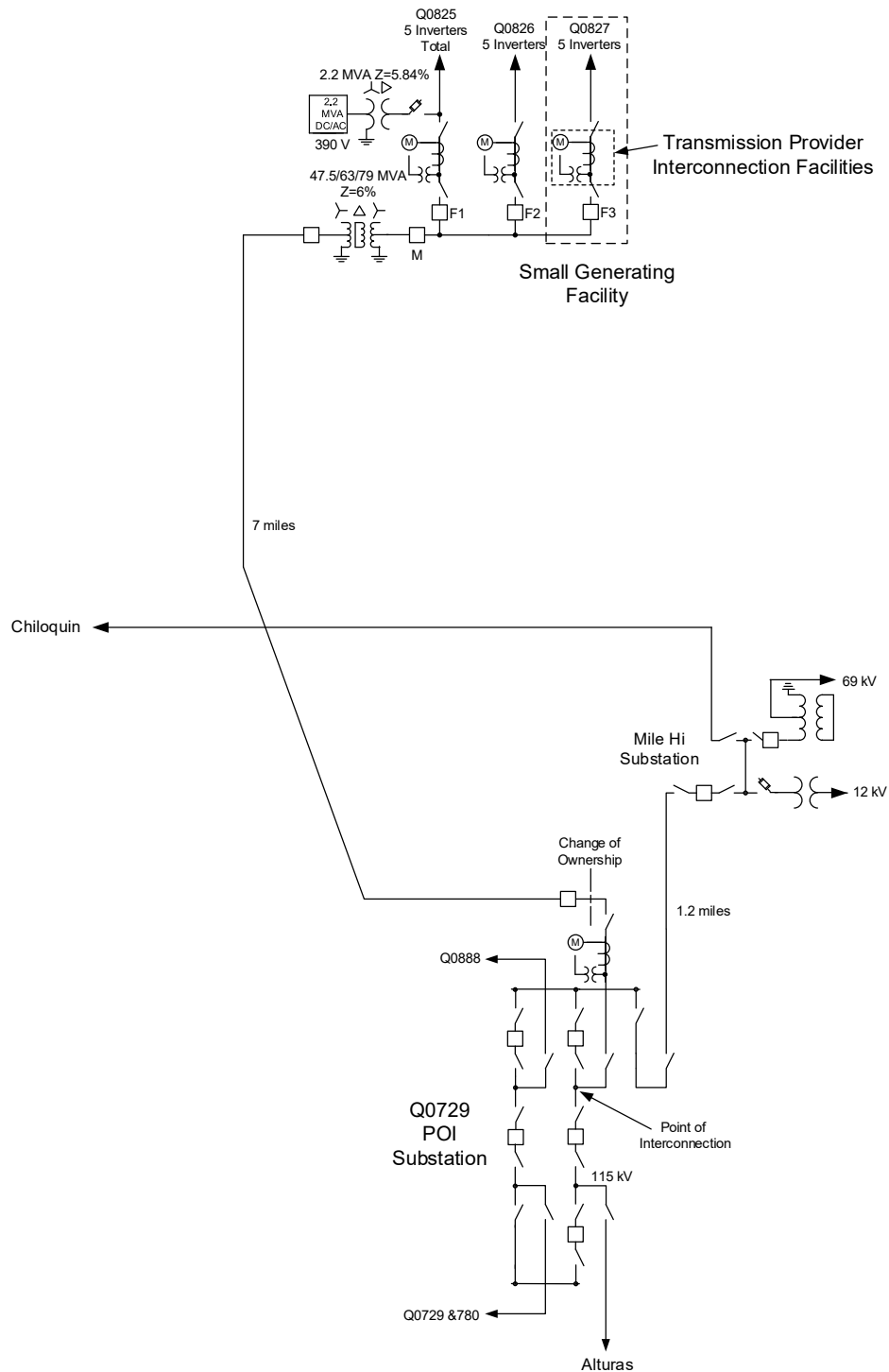
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: October 31, 2021

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> August 15, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$40,000)</u> August 25, 2019	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> September 15, 2019	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> *October 24, 2019	<u>Transmission Provider</u>
(5) <u>Provide Energy Imbalance Market data</u> **March 4, 2020	<u>Interconnection Customer</u>
(6) <u>Design complete</u> July 23, 2020	<u>Transmission Provider</u>
(7) <u>Property/permits/ROW procured</u> July 23, 2020	<u>Interconnection Customer</u>
(8) <u>Property/permits/ROW procured</u> November 12, 2020	<u>Transmission Provider</u>
(9) <u>Begin construction</u> February 10, 2021	<u>Transmission Provider</u>
(10) <u>Construction complete</u> ***August 5, 2021	<u>Transmission Provider</u>
(11) <u>Commissioning complete</u> September 17, 2021	<u>Transmission Provider</u>
(12) <u>Commissioning document review complete</u> September 24, 2021	<u>Transmission Provider</u>

- |  |   |
|--|---|
| (13) <u>Backfeed</u><br>September 25, 2021                         | <u>Interconnection</u><br><u>Customer</u> |
| (14) <u>Begin generation testing/first sync</u><br>October 1, 2021 | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Commercial operations</u><br>October 31, 2021              | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.



**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.
- All Interconnection Facilities required for Interconnection Request Q0826 must be complete. This includes the installation of a control building and communications equipment at the generating facility collector substation.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation

- control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
  - Operate the Small Generating Facility with a voltage droop.
  - Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
  - Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
  - Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
  - Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
  - Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:  
Analogs:
    - o Circuit F3 Real Power MW
    - o Circuit F3 Reactive Power MVARStatus:
    - o 34.5 kV circuit breaker F3
  - Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
  - Install complete conduit and control cable provided by the Transmission Provider from the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
  - Provide Transmission Provider unfettered and maintained access to the Transmission Provider's CT/VT instrument transformers.

- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of Interconnection Customer's main step up transformer.
- Design, procure and install 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer

- Outage of the POI-Alturas 115 kV transmission line
- Outage of the POI-Mile-Hi 115 kV transmission line
- Outage of the Warner-Hilltop 230 kV transmission line
- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

**Exhibit 1 to Attachment 5 to SGIA**  
**Transmission Provider's Interconnection Policy**

**(ATTACHED)**

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829) )  
BLUE MARMOT VI LLC (UM 1830) )  
BLUE MARMOT VII LLC (UM 1831) )  
BLUE MARMOT VIII LLC (UM 1832) )  
BLUE MARMOT IX LLC (UM 1833) )  
Complainants )  
vs. )  
PORTLAND GENERAL ELECTRIC )  
COMPANY )  
Defendant )  
Pursuant to ORS 756.500. )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/923**

**BLUE MARMOT VIII 2019 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**



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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot VIII, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 828

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.8.4 Primary Frequency Response
- Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in



system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

- 1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such



non-terminating Party otherwise is responsible for these costs under this SGIA.

3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and



conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any



other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

#### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_  
Rick Vail  
Title: VP, Transmission  
Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's



Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of six (5) SMA Sunny Central 2000 kW inverters and one (1) SMA Sunny Central 1000 kW inverter. The inverters are connected individually to 2.2 MVA (5.84% impedance) (or a 1.1 MVA) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$121,000

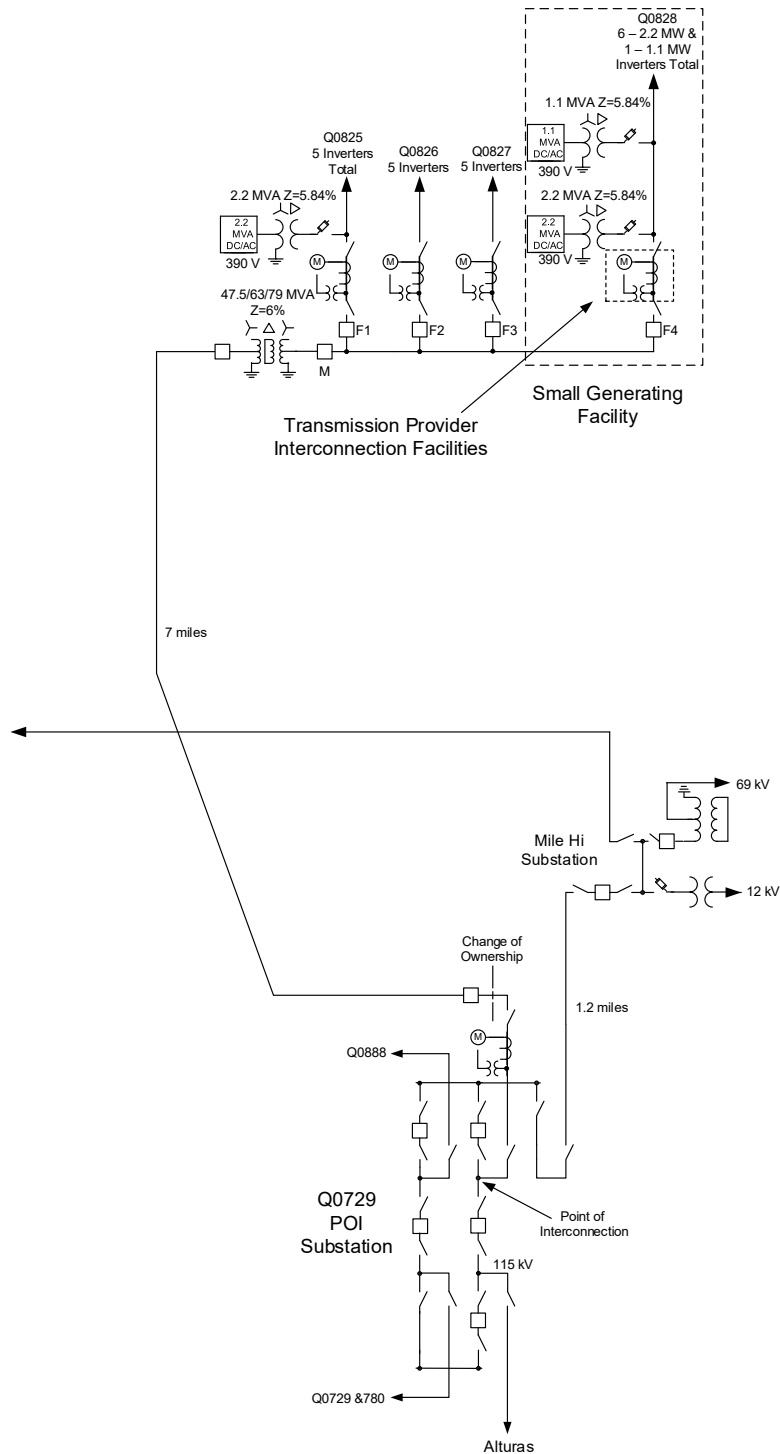
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: October 31, 2021

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> August 15, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$130,000)</u> August 25, 2019	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> September 15, 2019	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> *October 24, 2019	<u>Transmission Provider</u>
(5) <u>Provide Energy Imbalance Market data</u> **March 4, 2020	<u>Interconnection Customer</u>
(6) <u>Design complete</u> July 23, 2020	<u>Transmission Provider</u>
(7) <u>Property/permits/ROW procured</u> July 23, 2020	<u>Interconnection Customer</u>
(8) <u>Property/permits/ROW procured</u> November 12, 2020	<u>Transmission Provider</u>
(9) <u>Begin construction</u> February 10, 2021	<u>Transmission Provider</u>
(10) <u>Construction complete</u> ***August 5, 2021	<u>Transmission Provider</u>
(11) <u>Commissioning complete</u> September 17, 2021	<u>Transmission Provider</u>
(12) <u>Commissioning document review complete</u> September 24, 2021	<u>Transmission Provider</u>

- |  |   |
|--|---|
| (13) <u>Backfeed</u><br>September 25, 2021                         | <u>Interconnection</u><br><u>Customer</u> |
| (14) <u>Begin generation testing/first sync</u><br>October 1, 2021 | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Commercial operations</u><br>October 31, 2021              | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.



**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.
- All Interconnection Facilities required for Interconnection Request Q0826 must be complete. This includes the installation of a control building and communications equipment at the generating facility collector substation.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA****Scope of Work****Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:
  - Analogs:
    - o Circuit F4 Real Power MW
    - o Circuit F4 Reactive Power MVAR
  - Status:
    - o 34.5 kV circuit breaker F4
- Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from both sets of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.

- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's CT/VT instrument transformers.
- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of Interconnection Customer's main step up transformer.
- Design, procure and install 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:

- Outage of the Chiloquin substation 230-115 kV transformer
- Outage of the Warner substation 230-115 kV transformer
- Outage of the POI-Alturas 115 kV transmission line
- Outage of the POI-Mile-Hi 115 kV transmission line
- Outage of the Warner-Hilltop 230 kV transmission line
- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)         )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/924**

**BLUE MARMOT IX 2019 SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**



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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by PacifiCorp ("Transmission Provider"), and Blue Marmot IX, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 829

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.8.4 Primary Frequency Response
- Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in



system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such



non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and



conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any



other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

#### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: \_\_\_\_\_  
Rick Vail  
Title: VP, Transmission  
Date: \_\_\_\_\_

For the Interconnection Customer

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's



Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$121,000

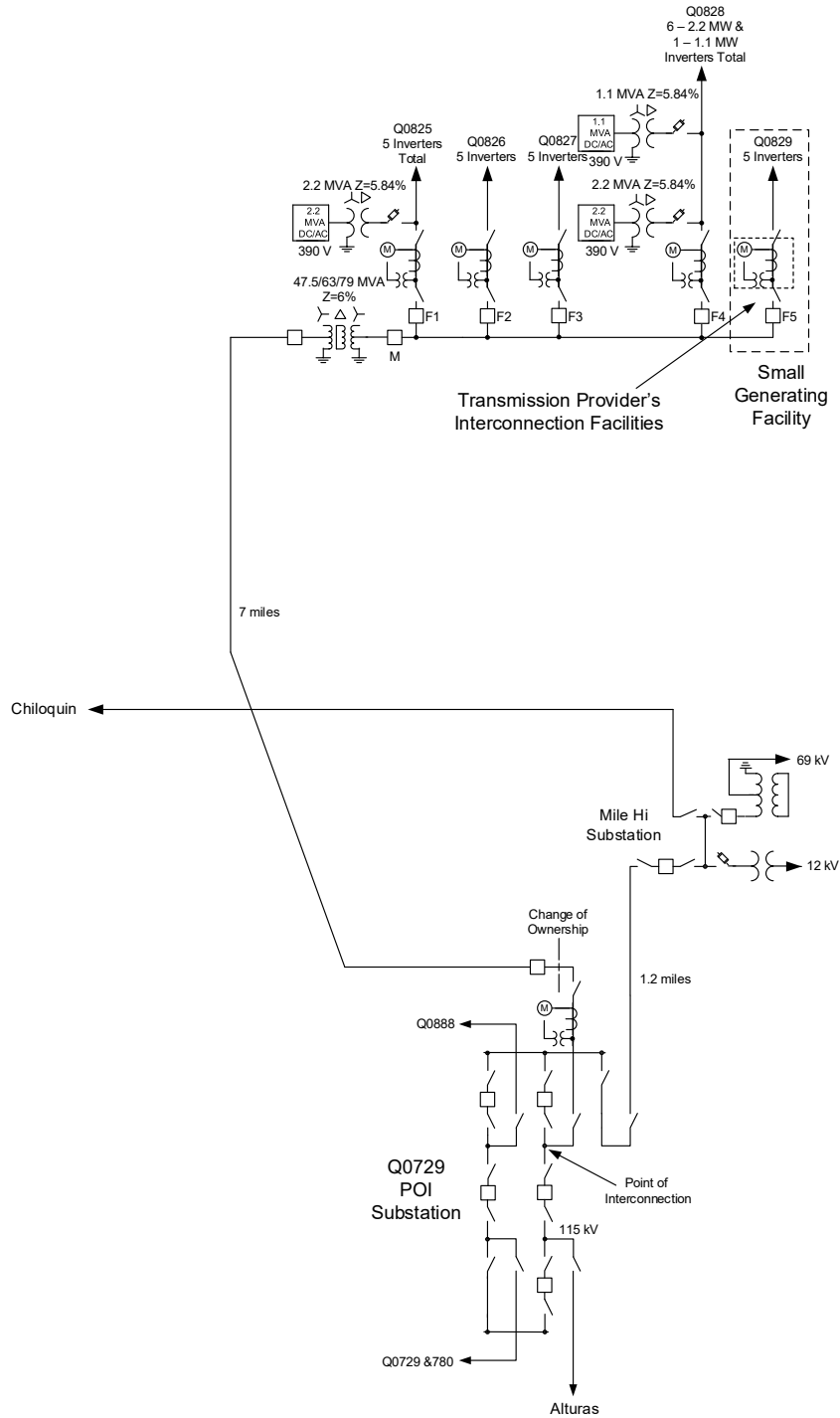
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: October 31, 2021

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> August 15, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$40,000)</u> August 25, 2019	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> September 15, 2019	<u>Interconnection Customer</u>
(4) <u>Commence engineering and procurement</u> *October 24, 2019	<u>Transmission Provider</u>
(5) <u>Provide Energy Imbalance Market data</u> **March 4, 2020	<u>Interconnection Customer</u>
(6) <u>Design complete</u> July 23, 2020	<u>Transmission Provider</u>
(7) <u>Property/permits/ROW procured</u> July 23, 2020	<u>Interconnection Customer</u>
(8) <u>Property/permits/ROW procured</u> November 12, 2020	<u>Transmission Provider</u>
(9) <u>Begin construction</u> February 10, 2021	<u>Transmission Provider</u>
(10) <u>Construction complete</u> ***August 5, 2021	<u>Transmission Provider</u>
(11) <u>Commissioning complete</u> September 17, 2021	<u>Transmission Provider</u>
(12) <u>Commissioning document review complete</u> September 24, 2021	<u>Transmission Provider</u>

- |  |   |
|--|---|
| (13) <u>Backfeed</u><br>September 25, 2021                         | <u>Interconnection</u><br><u>Customer</u> |
| (14) <u>Begin generation testing/first sync</u><br>October 1, 2021 | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Commercial operations</u><br>October 31, 2021              | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.



**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.
- All Interconnection Facilities required for Interconnection Request Q0826 must be complete. This includes the installation of a control building and communications equipment at the generating facility collector substation.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation

control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.

- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:

Analogs:

- o Circuit F5 Real Power MW
- o Circuit F5 Reactive Power MVAR

Status:

- o 34.5 kV circuit breaker F5
- Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from both sets of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's CT/VT instrument transformers.

- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of Interconnection Customer's main step up transformer.
- Design, procure and install 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer

- Outage of the POI-Alturas 115 kV transmission line
- Outage of the POI-Mile-Hi 115 kV transmission line
- Outage of the Warner-Hilltop 230 kV transmission line
- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/925**

**BLUE MARMOT V EXECUTED SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)



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This Interconnection Agreement ("Agreement") is made and entered into this 1st day of October, 2019, by PacifiCorp ("Transmission Provider"), and Blue Marmot V, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

Interconnection Customer Application No: 825

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer

will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the

facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
  
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of

the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair,

and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power and Primary Frequency Response

1.8.1 Power Factor Design Criteria

1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination

of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.8.4 Primary Frequency Response
- Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power



control with the ability to sense changes in system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and

1.8.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection

Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

1.8.4.3 Exemptions.

Small Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the

electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such



non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and



conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any



other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

With copy to:

(Primary)

Interconnection Customer: Blue Marmot V, LLC  
Attention: General Counsel  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

(Secondary)

Interconnection Customer: Blue Marmot V, LLC  
Attention: Executive Vice President for West and Central Regions and Mexico  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Email: will.talbott@edpr.com

Transmission Provider: PacifiCorp  
Attention: Central Cashiers

Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot V, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St

City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbot@edpr.com

13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

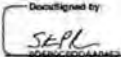
**Article 14. Signatures**

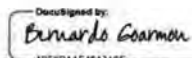
IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: **Rick Vail** Digitally signed by Rick Vail  
Date: 2019.10.01 11:20:19 -07'00'  
Rick Vail  
Title: VP, Transmission  
Date: 10/01/2019

For the Interconnection Customer

Name:   
Title: Executive Vice President Western and Central Region and Mexico  
Date: September 27, 2019

Name:   
Title: EVP Finance  
Date: September 27, 2019



**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's



Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer with high side circuit interrupter. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker substation to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** A new breaker position located at the Point of Interconnection substation with appurtenant metering and disconnect facilities. In addition Interconnection Customer will need to coordinate with Transmission Provider for communications facilities located at the Small Generating Facility. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$357,000

**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$2,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

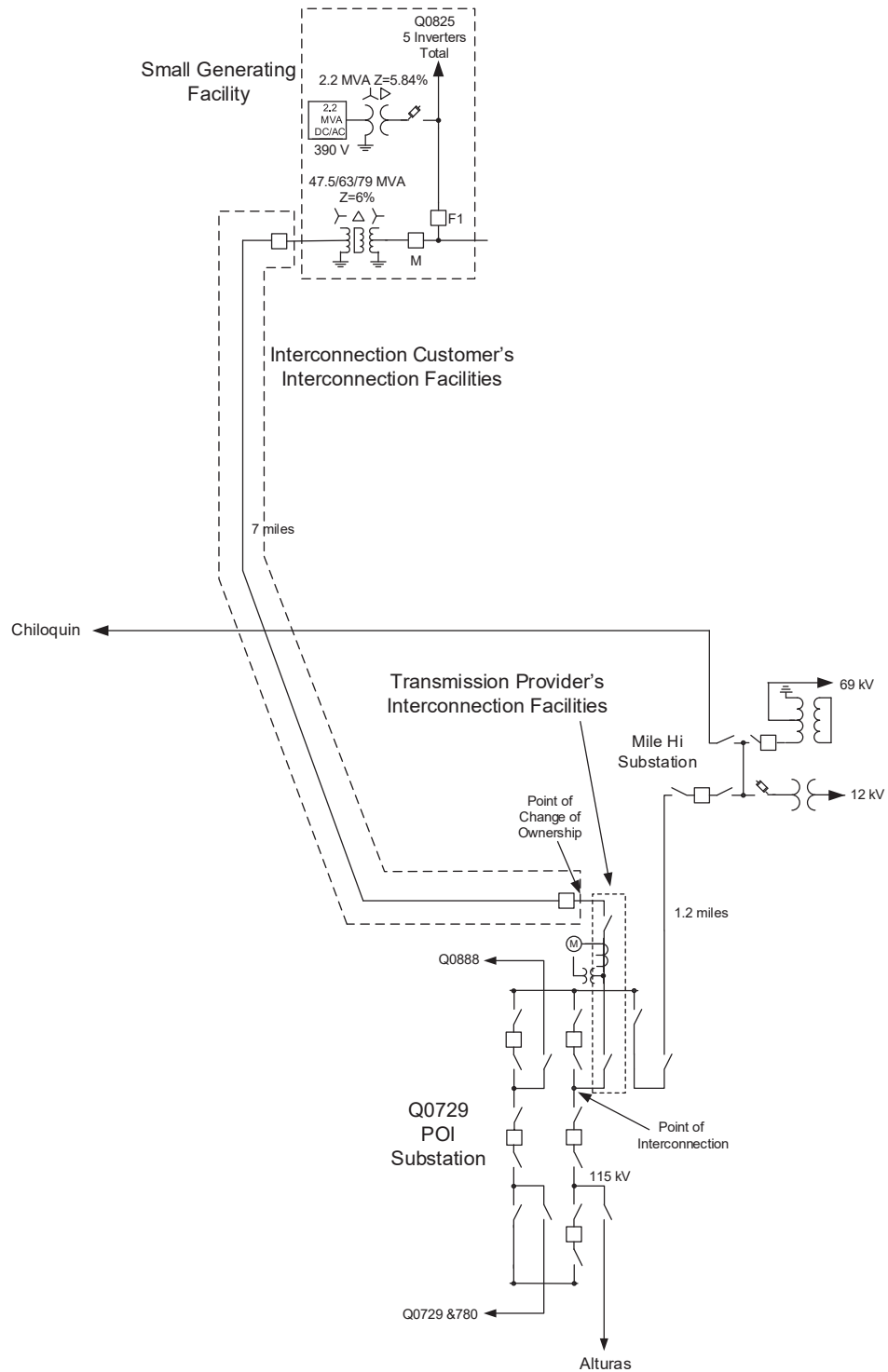
**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to

the Transmission Provider's Interconnection Facilities. See  
Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



Attachment 4 to SGIA

**Milestones**

In-Service Date: June 30, 2022

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> September 27, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$960,000)</u> April 25, 2020	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 15, 2020	<u>Interconnection Customer</u>
(5) <u>Commence engineering and procurement</u> *May 24, 2020	<u>Transmission Provider</u>
(6) <u>Provide Energy Imbalance Market data</u> **December 4, 2020	<u>Interconnection Customer</u>
(6) <u>All design work by BPA and NV Energy Complete</u> January 15, 2021	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 23, 2021	<u>Transmission Provider</u>
(8) <u>Property/permits/ROW procured</u> March 23, 2021	<u>Interconnection Customer</u>
(9) <u>Property/permits/ROW procured</u> July 12, 2021	<u>Transmission Provider</u>
(10) <u>Begin construction</u> November 10, 2021	<u>Transmission Provider</u>
(10) <u>All BPA and NV Energy Construction Complete</u> March 12, 2022	<u>Interconnection Customer</u>

- |  |   |
|--|---|
| (11) <u>Construction complete</u><br>April 5, 2022                                   | <u>Transmission Provider</u>              |
| (12) <u>Commissioning complete</u><br>May 17, 2022                                   | <u>Transmission Provider</u>              |
| (13) <u>Commissioning document review</u><br><u>complete</u><br>May 24, 2022         | <u>Transmission Provider</u>              |
| (14) <u>Backfeed</u><br>May 25, 2022   | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Begin generation testing/first sync</u><br>June 1, 2022                      | <u>Interconnection</u><br><u>Customer</u> |
| (16) <u>Provide NERC Generator Owner/<br/>Operator registration</u><br>June 14, 2022 | <u>Interconnection</u><br><u>Customer</u> |
| (17) <u>Commercial operations</u><br>June 30, 2022                                   | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_



**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: A new 115 kV circuit breaker and associated bus work at the Point of Interconnection substation. New microwave communication sites at Sugar Mountain and Chiloquin Hilltop. New microwave communications and Remedial Action Scheme ("RAS") equipment at Alturas, Mile Hi, Chiloquin, Klamath, NV Energy Hilltop and BPA Warner substations as well as Spodue Mountain, Grizzly Mountain and Swan Lake communications sites. Estimated cost is \$5,258,000.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete October 2019.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule

to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.

- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Procure, install, own and maintain a set of line relays that will detect and clear all faults on the tie line between the Interconnection Customer's collector and tie line substations in 5 cycles or less.
- Design, procure, and install a Transmission Provider approved data concentrator to capture the required Interconnection Customer device data points. The Transmission Provider will input and hold the second level passwords for the data concentrator. Password control ensures the Transmission Provider is aware of and is accepting of the changes being requested by the Interconnection Customer.
- Design, procure and install conduit and control cabling and hard wire the Interconnection Customer's source devices to the data concentrator. Replicated values are not acceptable.
- Provide the following points which are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:

Analogs:

- o 115 kV A phase voltage
- o 115 kV B phase voltage
- o 115 kV C phase voltage
- o Global Horizontal Irradiance (GHI)
- o Average Plant Atmospheric Pressure (Bar)
- o Average Plant Temperature (Celsius)
- o Circuit F1 Real Power MW

- o Circuit F1 Reactive Power MVAR
- Status:
- o 34.5 kV circuit breaker F1
- o 115 kV transformer circuit breaker
- o 34.5 kV transformer circuit breaker M
- Install fiber optic cable from the data concentrator to a splice point on the transmission tie line.
- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.
- Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with their facilities.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.

**Interconnection Customer Tie Line Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line connecting the Interconnection Customer's Small Generating Facility to the Interconnection Customer's tie line substation.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, property rights and/or rights of way for the new transmission line between the Interconnection Customer's collector substation and tie line substation. Interconnection Customer will be responsible for all required regulatory or compliance reporting associated with its transmission tie line facilities.
- Design, construct, own and maintain the 115 kV transmission tie line between the Interconnection Customer's collector and tie line substations.
- Design, procure, install, own and maintain Transmission Provider standard OPGW fiber optic cable on the

transmission tie line. Splice to the fiber running from the data concentrator.

### **Interconnection Customer Tie Line Substation Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with Interconnection Customer's tie line substation.

#### **INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure all necessary permits, property rights and/or the rights of way to allow for the construction of the new tie line substation.
- Design, procure, construct, own and maintain the Interconnection Customer's tie line substation (consisting of a sole 115 kV circuit breaker and associated equipment) adjacent to the POI substation. The deadend structures in the tie line substation and POI substation must be less than 800' from each other. The tie line substation shall include all radial transmission line relaying to the collector substation, breaker failure protection and associated communications. The short line/bus segment between the tie line substation and the POI substation will be considered a bus section and will be protected with redundant bus differential relay systems.
- Provide and install a set of current transformers to be fed into the bus differential relays with a maximum current transformer ratio matching the maximum CT ratio of the breakers at the POI substation. Provide and install conduit and cabling to the POI substation marshalling cabinet with these outputs.
- Design and construct the tie line substation such that the ground grid can be connected to the POI substation ground grid to support the installation of a Transmission Provider owned and maintained bus differential scheme. The Interconnection Customer is responsible to ensure the ground grid design supports safe step and touch potentials.
- The following data points are required from the Interconnection Customer's tie line substation:  
Status:
  - o 115 kV breaker
- Provide and install conduits (number and size TBD) and control cabling between the Interconnection Customer tie line substation and the marshalling cabinet just inside the fence of the POI substation to support copper circuits installed between the facilities. Hard wire all tie line

substation status, control, and protection circuit interface to the POI substation to the marshalling cabinet.

- If a transmission structure is required between the POI substation and the tie line substation, construct to Transmission Provider's current design and installation standards.
- Provide and install conductor, fiber, shield wire and line hardware in sufficient quantities to allow the Transmission Provider to terminate the tie line into POI substation dead-end structure.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the necessary specifications to allow the ground grids of the Interconnection Customer's tie line substation and the POI substation to be tied together.
- Provide the Interconnection Customer the necessary specifications for the last bus/line segment of the Interconnection Customer's tie line substation and the new POI substation to be connected.

#### **Point of Interconnection (Bullard Substation)**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

#### **INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Test and commission the communication path from Interconnection Customer's data concentrator to the POI substation.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Design, procure and construct the necessary infrastructure to create a line position for the Interconnection Customer's tie line including the installation of the following major equipment:
  - o (1) - 115kV circuit breaker
  - o (3) - 115kV disconnect switches
- Terminate the last span/bus from the tie line substation into the POI substation deadend structure.
- Procure and install a marshalling cabinet on the edge of the POI substation near the Interconnection Customer's tie line substation.
- Design, procure and install a bus differential relay for the connection to the Interconnection Customer's tie line substation.



- Procure and install a set of non-pilot step distance relays.
- Modify protective relay elements in the existing line relays to monitor voltage and frequency of the Interconnection Customer's Small Generating Facility.
- Install fiber from the substation control building to the Interconnection Customer tie line dead end structure and splice to the fiber provided by the Interconnection Customer.
- Install necessary communications equipment to tie the Interconnection Customer's communications path to a communications rack in the POI substation.
- Observe the Interconnection Customer's test of the communications system running from the collector substation to the POI substation and provide acceptance of functionality.
- The following data points from the POI substation will be acquired through the POI substation RTU:  
Analogs:
  - o Net Generation MW
  - o Net Generator MVAR
  - o Interchange metering kWh
- Design, procure and install 115 kV revenue metering equipment for the Project including two (2) revenue quality meters, test switch, instrument transformers, metering panels, junction box and secondary metering wire.
- Provide and install an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.
- Procure and install fiber optic cable from the POI substation control building to a splice point on the transmission line running from Mile-Hi substation. Splice the fiber to the fiber installed on the transmission line.
- Procure and install the necessary communications equipment to tie in the fiber running from Mile-Hi substation.
- Procure and install a microwave system including a self-supporting tower and a backup power system.
- Install communications equipment to support the remedial action scheme ("RAS") required for the Project including channel bank, modems, fiber jumpers and a RAS controller.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Execute any necessary agreements with Bonneville Power Administration to facilitate the upgrades required in BPA's Hilltop substation and in NV Energy's Warner substation.
- Execute any necessary agreements with NV Energy to facilitate the upgrades required in NV's Warner substation.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Bullard-Mile Hi Transmission Line
  - Install fiber optic cable between the two substations and splice to fiber running from each substation control building.
- Mile Hi substation
  - Procure any necessary permits and/or property rights to allow for the installation of the required equipment at this site.
  - Procure and install a new 1200 A circuit switcher to replace the existing 2L1 circuit switcher.
  - Procure and install fiber optic cable from the substation control building to a splice point on the transmission line running from Bullard substation. Splice the fiber to the fiber installed on the transmission line.
  - Procure and install the necessary communications equipment to tie in the fiber running from Bullard substation.
  - Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
- Alturas substation
  - Procure any necessary permits and/or property rights to allow for the installation of the required equipment at this site.
  - Construct a new microwave system including self-supporting tower.
  - Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
  - Perform a GPR study.
- Chiloquin substation
  - Procure any necessary permits and/or property rights to allow for the installation of the required equipment at this site.

- o Construct a new microwave system including self-supporting tower.
- o Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
  
- Klamath substation
  - o Install communications equipment to channelize and cross connect the diverse communications circuits interfacing with the substation.
  - o Perform a GPR study.
  
- Swan Lake communications site
  - o Install the necessary equipment to create a communications connection to support RAS requirements.
  
- Grizzly Mountain communications site
  - o Install the necessary equipment to create a communications connection to support RAS requirements. This may include the installation of a new tower.
  
- Spodue Mountain communications site
  - o Install the necessary equipment to create a communications connection to support RAS requirements.
  
- Sugar Mountain #3 communications site
  - o Procure any necessary permits, property rights and/or rights-of-way to allow for the construction of a new communications site.
  - o Construct a new communications site which will include the following major equipment:
    - (1) - 60' Self Supporting Tower
    - (1) - Control Building
    - (1) - Microwave Communications System
    - (1) - Generator
    - (1) - Propane Tank
  - o Arrange for permanent power to the new facility.
  
- Chiloquin Hilltop communications site
  - o Procure any necessary permits, property rights and/or rights-of-way to allow for the construction of a new communications site.
  - o Construct a new communications site which will include the following major equipment:
    - (1) - 60' Self Supporting Tower
    - (1) - Control Building

- (1) - Microwave Communications System
  - (1) - Generator
  - (1) - Propane Tank
  - Arrange for permanent power to the new facility.
- NV Energy Hilltop Substation
  - Ensure all agreements are in place between the Interconnection Customer, NV Energy and BPA prior to the commencement of design activities.
  - Coordinate with BPA and NV Energy to confirm and schedule any work necessary within the substation to support RAS requirements.
  - Install communications equipment to channelize the diverse communications circuits interfacing with the substation for RAS.
- Bonneville Power Administration Warner Substation
  - Ensure all agreements are in place between the Interconnection Customer and BPA prior to the commencement of design activities.
  - Coordinate with BPA to confirm and schedule any work necessary within BPA's substation to support the Project.
  - Install communications equipment to support the RAS required for the Project including channel bank, modems and fiber jumpers.
- System Operations Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.
- Remedial Action Scheme.
  - Design and implement a new RAS to trip the Interconnection Customer's Small Generating Facilities offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer
    - Outage of the Q0729 POI-Alturas 115 kV transmission line
    - Outage of the Q0729 POI-Mile-Hi 115 kV transmission line
    - Outage of the Warner-Hilltop 230 kV transmission line

- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- Coordinate with BPA on the final RAS design.
- Procure a contract with BPA for use of BPA's existing communications system between BPA's Hilltop substation and either Malin or Captain Jack substation. Final determination of which substation will be determined during final design and in coordination with BPA.
- Procure a T1 lease between Alturas and Klamath substations.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/926**

**BLUE MARMOT VI EXECUTED SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)



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This Interconnection Agreement ("Agreement") is made and entered into this 1st day of October, 2019, by PacifiCorp ("Transmission Provider"), and Blue Marmot VI, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 826

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.8.4 Primary Frequency Response

Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in



system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such



non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### 6.1 Billing and Payment Procedures and Final Accounting

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and



conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any



other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbott  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404  
Email: will.talbott@edpr.com

With copy to:

(Primary)

Interconnection Customer: Blue Marmot VI, LLC  
Attention: General Counsel  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

(Secondary)

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Executive Vice President for West and Central Regions  
and Mexico  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

Phone: 503-813-6077 Fax: 503-813-6893

With copy to:

(Primary)

Interconnection Customer: Blue Marmot V, LLC  
Attention: General Counsel  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

(Secondary)

Interconnection Customer: Blue Marmot V, LLC

Attention: Executive Vice President for West and Central Regions  
and Mexico  
Address: 808 Travis Street, Suite 700  
City: Houston State: TX Zip: 77002  
Phone: (713) 265-0350

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VI, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

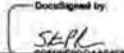
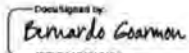
**Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: **Rick Vail** Digitally signed by Rick Vail  
Date: 2019.10.01 11:19:38 -07'00'  
Title: Rick Vail  
VP, Transmission  
Date: 10/01/2019

For the Interconnection Customer

Name:	<u></u>	Name:	<u></u>
Title:	<u>Executive Vice President Western and Central Region and Mexico</u>	Title:	<u>Regional Manager Mexico</u>
Date:	<u>September 27, 2019</u>	Date:	<u>September 27, 2019</u>

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**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's



Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$497,000

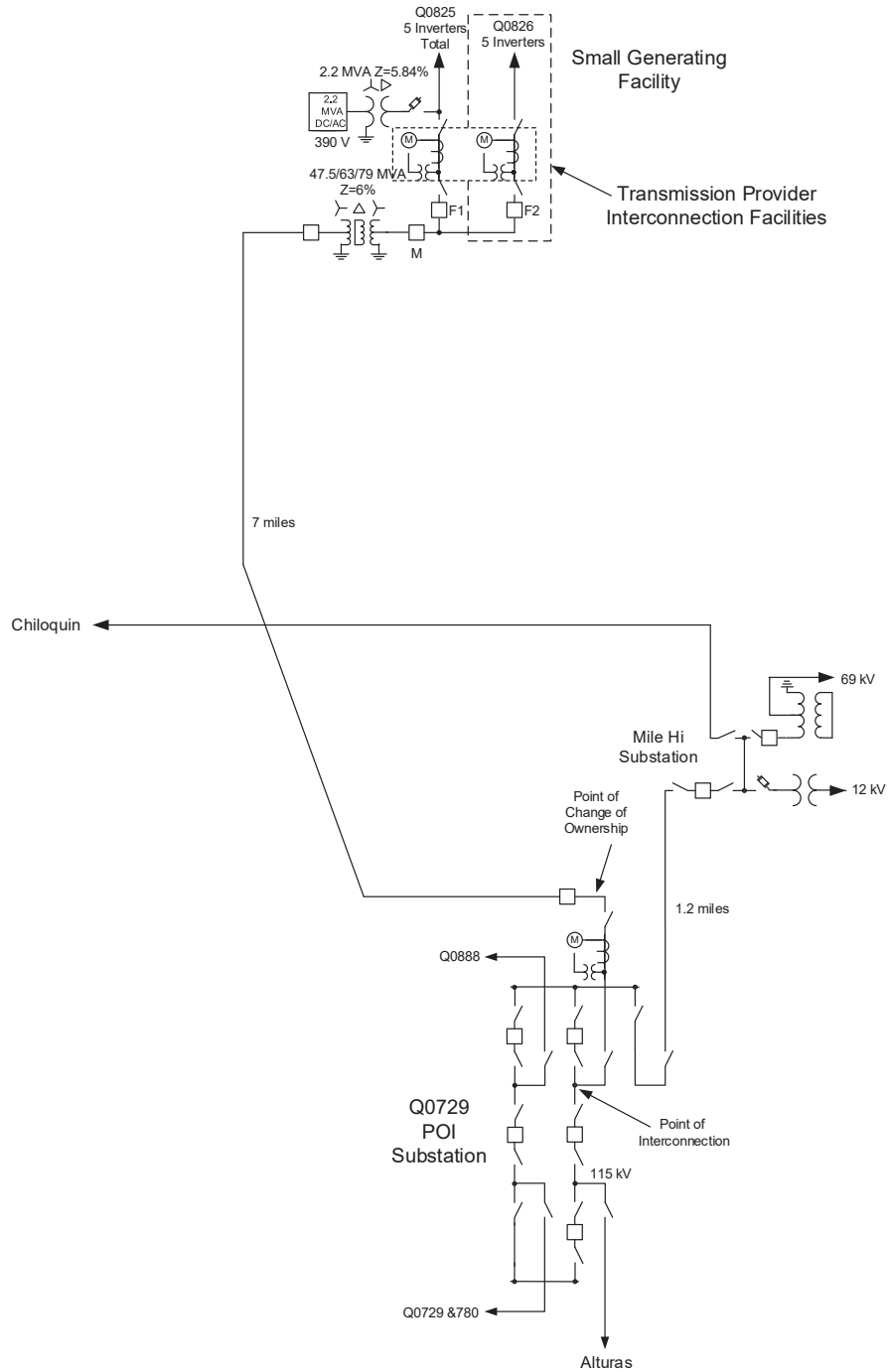
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: June 30, 2022

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> September 27, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$960,000)</u> April 25, 2020	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 15, 2020	<u>Interconnection Customer</u>
(5) <u>Commence engineering and procurement</u> *May 24, 2020	<u>Transmission Provider</u>
(6) <u>Provide Energy Imbalance Market data</u> **December 4, 2020	<u>Interconnection Customer</u>
(6) <u>All design work by BPA and NV Energy Complete</u> January 15, 2021	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 23, 2021	<u>Transmission Provider</u>
(8) <u>Property/permits/ROW procured</u> March 23, 2021	<u>Interconnection Customer</u>
(9) <u>Property/permits/ROW procured</u> July 12, 2021	<u>Transmission Provider</u>
(10) <u>Begin construction</u> November 10, 2021	<u>Transmission Provider</u>
(10) <u>All BPA and NV Energy Construction Complete</u> March 12, 2022	<u>Interconnection Customer</u>

- |  |   |
|--|---|
| (11) <u>Construction complete</u><br>April 5, 2022                                   | <u>Transmission Provider</u>              |
| (12) <u>Commissioning complete</u><br>May 17, 2022                                   | <u>Transmission Provider</u>              |
| (13) <u>Commissioning document review</u><br><u>complete</u><br>May 24, 2022         | <u>Transmission Provider</u>              |
| (14) <u>Backfeed</u><br>May 25, 2022   | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Begin generation testing/first sync</u><br>June 1, 2022                      | <u>Interconnection</u><br><u>Customer</u> |
| (16) <u>Provide NERC Generator Owner/<br/>Operator registration</u><br>June 14, 2022 | <u>Interconnection</u><br><u>Customer</u> |
| (17) <u>Commercial operations</u><br>June 30, 2022                                   | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing



permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation

- control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
  - Operate the Small Generating Facility with a voltage droop.
  - Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
  - Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
  - Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
  - Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
  - Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:
    - Analogs:
      - o Circuit F2 Real Power MW
      - o Circuit F2 Reactive Power MVAR
    - Status:
      - o 34.5 kV circuit breaker F2
  - Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's shared collector substation for the Transmission Provider to install a control building. The control building will share a fence and ground grid with the collector substation and have separate, unencumbered access for the Transmission Provider. Fencing, gates and road access shall meet Transmission Provider standards.
  - Perform a CDEGS grounding analysis for the Transmission Provider control building site and provide the results to the Transmission Provider.

- Procure, install, own and maintain Transmission Provider approved fiber optic cable from the data concentrator to the Transmission Provider's collector substation control building. Provide sufficient cable to allow the Transmission Provider to terminate in the building.
- Procure, install, own and maintain Transmission Provider approved fiber optic cable from the Transmission Provider's collector substation control building to a splice point on the Q0825 transmission tie line. Provide sufficient cable to allow the Transmission Provider to terminate in the building.
- Provide permanent AC power to the Transmission Provider's control building.
- Procure and install Transmission Provider approved H-Frame structures for both sets of the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from both sets of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's instrument transformers.
- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Procure and install a control building on the property prepared by the Interconnection Customer.
- Procure and install a backup DC battery system for the Transmission Provider control building.
- Procure and install a communications rack and associated communications equipment in the Transmission Provider's control building and coordinate the termination of the fiber to be installed by the Interconnection Customer.

- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of both the Interconnection Customer's main step up transformer and the low side of the main step up transformer of the Q0825 generator.
- Design, procure and install two sets of 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.
- Establish an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.

#### **Q0825 Tie Line Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment associated with the radial line constructed as part of the Interconnection Request assigned queue position Q0825 which connects the Interconnection Customer's Small Generating Facility to the Q0825 tie line substation.

#### **INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Transmission Provider to utilize a portion of the fiber optic cable owned by the Q0825 Interconnection Customer for the provision of data.
- Provide at least one buffer tube with 12 strands of fiber for the Transmission Provider's sole use.
- Splice the fiber running from the Transmission Provider's collector substation control building the Transmission Provider's sole use fiber optic cable on the transmission tie line.

#### **Point of Interconnection (Bullard Substation)**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Test and commission the communication path from Interconnection Customer's data concentrator, through the Transmission Provider collector substation control building to the POI substation.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Modify the communications path as necessary to include the Transmission Provider's sole use fiber running from the collector substation.
- Observe the Interconnection Customer's test of the communications system running from the collector substation to the POI substation and provide acceptance of functionality.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer
    - Outage of the POI-Alturas 115 kV transmission line
    - Outage of the POI-Mile-Hi 115 kV transmission line
    - Outage of the Warner-Hilltop 230 kV transmission line
    - Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
  - If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)



**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)      )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                    )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/927**

**BLUE MARMOT VII EXECUTED SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)

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This Interconnection Agreement ("Agreement") is made and entered into this 1st day of October, 2019, by PacifiCorp ("Transmission Provider"), and Blue Marmot VII, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 827

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment



specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

- 1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.
- 1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.
- 1.8.4 Primary Frequency Response
- Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in

system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any



changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such

non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements



Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
  
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and

conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public



disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any

other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

#### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: **Rick Vail**  Digitally signed by Rick Vail  
Date: 2019.10.01 11:18:35 -07'00'  
Rick Vail  
Title: VP, Transmission  
Date: 10/01/2019

For the Interconnection Customer

Name: DocuSigned by:  
SEPL  
Title: Executive Vice President Western and Central Region and Mexico  
Date: September 27, 2019

Name: DocuSigned by:  
Bernardo Goarmon  
Title: EVP Finance  
Date: September 27, 2019





**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$121,000

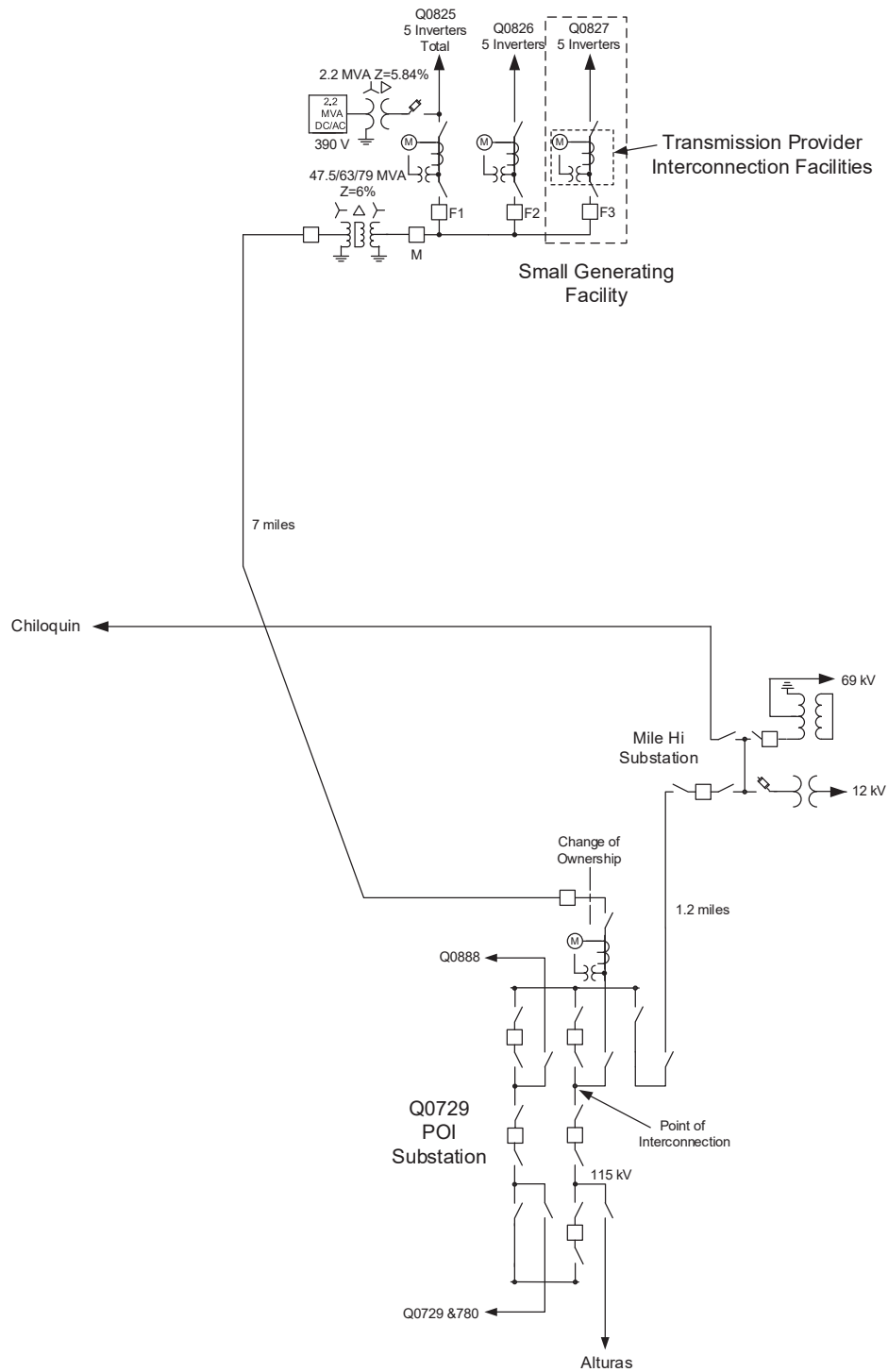
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: June 30, 2022

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> September 27, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$960,000)</u> April 25, 2020	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 15, 2020	<u>Interconnection Customer</u>
(5) <u>Commence engineering and procurement</u> *May 24, 2020	<u>Transmission Provider</u>
(6) <u>Provide Energy Imbalance Market data</u> **December 4, 2020	<u>Interconnection Customer</u>
(6) <u>All design work by BPA and NV Energy Complete</u> January 15, 2021	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 23, 2021	<u>Transmission Provider</u>
(8) <u>Property/permits/ROW procured</u> March 23, 2021	<u>Interconnection Customer</u>
(9) <u>Property/permits/ROW procured</u> July 12, 2021	<u>Transmission Provider</u>
(10) <u>Begin construction</u> November 10, 2021	<u>Transmission Provider</u>
(10) <u>All BPA and NV Energy Construction Complete</u> March 12, 2022	<u>Interconnection Customer</u>

- |  |   |
|--|---|
| (11) <u>Construction complete</u><br>April 5, 2022                                   | <u>Transmission Provider</u>              |
| (12) <u>Commissioning complete</u><br>May 17, 2022                                   | <u>Transmission Provider</u>              |
| (13) <u>Commissioning document review</u><br><u>complete</u><br>May 24, 2022         | <u>Transmission Provider</u>              |
| (14) <u>Backfeed</u><br>May 25, 2022   | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Begin generation testing/first sync</u><br>June 1, 2022                      | <u>Interconnection</u><br><u>Customer</u> |
| (16) <u>Provide NERC Generator Owner/<br/>Operator registration</u><br>June 14, 2022 | <u>Interconnection</u><br><u>Customer</u> |
| (17) <u>Commercial operations</u><br>June 30, 2022                                   | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.



\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.
- All Interconnection Facilities required for Interconnection Request Q0826 must be complete. This includes the installation of a control building and communications equipment at the generating facility collector substation.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation

control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.

- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:

Analogs:

- o Circuit F3 Real Power MW
- o Circuit F3 Reactive Power MVAR

Status:

- o 34.5 kV circuit breaker F3
- Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's CT/VT instrument transformers.

- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of Interconnection Customer's main step up transformer.
- Design, procure and install 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer

- Outage of the POI-Alturas 115 kV transmission line
- Outage of the POI-Mile-Hi 115 kV transmission line
- Outage of the Warner-Hilltop 230 kV transmission line
- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.



Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/928**

**BLUE MARMOT VIII EXECUTED SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)

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This Interconnection Agreement ("Agreement") is made and entered into this 1st day of October, 2019, by PacifiCorp ("Transmission Provider"), and Blue Marmot VIII, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 828

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own

unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected



Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.8.4 Primary Frequency Response

Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in

system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric

storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.



1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

**Article 2. Inspection, Testing, Authorization, and Right of Access**

2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such

non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,

the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not



previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
  
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and

conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being

cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.



## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any

other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot VIII, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

#### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: **Rick Vail**  Digitally signed by Rick Vail  
Date: 2019.10.01 11:17:38 -07'00'  
Rick Vail  
Title: VP, Transmission  
Date: 10/01/2019



For the Interconnection Customer

Name: DocuSigned by:  
SEPK  
Title: Executive Vice President Western and Central Region and Mexico  
Date: September 27, 2019

Name: DocuSigned by:  
Bernardo Goarman  
Title: EVP Finance  
Date: September 27, 2019

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**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of six (5) SMA Sunny Central 2000 kW inverters and one (1) SMA Sunny Central 1000 kW inverter. The inverters are connected individually to 2.2 MVA (5.84% impedance) (or a 1.1 MVA) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$40,000

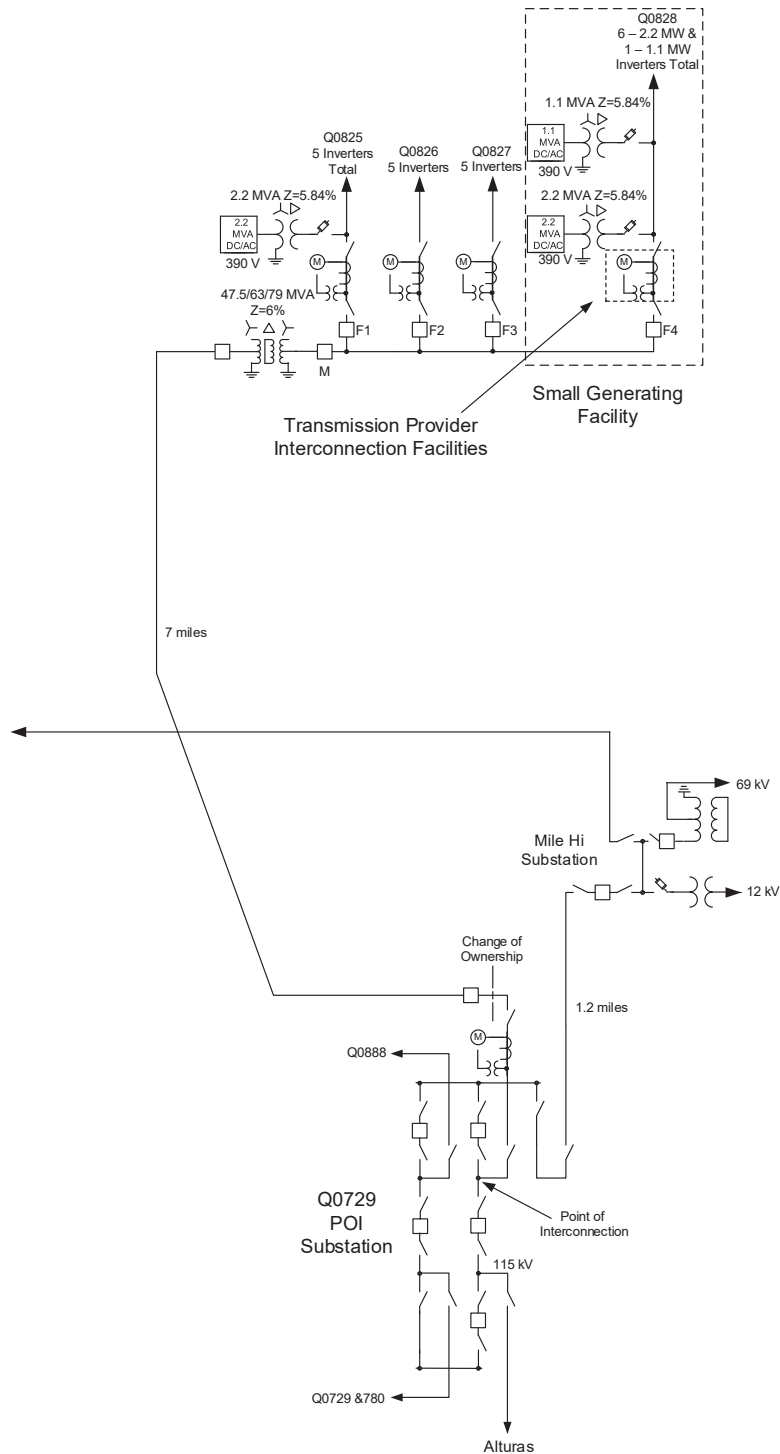
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades



**Attachment 4 to SGIA**

**Milestones**

In-Service Date: June 30, 2022

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> September 27, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$960,000)</u> April 25, 2020	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 15, 2020	<u>Interconnection Customer</u>
(5) <u>Commence engineering and procurement</u> *May 24, 2020	<u>Transmission Provider</u>
(6) <u>Provide Energy Imbalance Market data</u> **December 4, 2020	<u>Interconnection Customer</u>
(6) <u>All design work by BPA and NV Energy Complete</u> January 15, 2021	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 23, 2021	<u>Transmission Provider</u>
(8) <u>Property/permits/ROW procured</u> March 23, 2021	<u>Interconnection Customer</u>
(9) <u>Property/permits/ROW procured</u> July 12, 2021	<u>Transmission Provider</u>
(10) <u>Begin construction</u> November 10, 2021	<u>Transmission Provider</u>
(10) <u>All BPA and NV Energy Construction Complete</u> March 12, 2022	<u>Interconnection Customer</u>



- |  |   |
|--|---|
| (11) <u>Construction complete</u><br>April 5, 2022                                   | <u>Transmission Provider</u>              |
| (12) <u>Commissioning complete</u><br>May 17, 2022                                   | <u>Transmission Provider</u>              |
| (13) <u>Commissioning document review</u><br><u>complete</u><br>May 24, 2022         | <u>Transmission Provider</u>              |
| (14) <u>Backfeed</u><br>May 25, 2022   | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Begin generation testing/first sync</u><br>June 1, 2022                      | <u>Interconnection</u><br><u>Customer</u> |
| (16) <u>Provide NERC Generator Owner/<br/>Operator registration</u><br>June 14, 2022 | <u>Interconnection</u><br><u>Customer</u> |
| (17) <u>Commercial operations</u><br>June 30, 2022                                   | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) - under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.
- All Interconnection Facilities required for Interconnection Request Q0826 must be complete. This includes the installation of a control building and communications equipment at the generating facility collector substation.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Small Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:
  - Analogs:
    - Circuit F4 Real Power MW
    - Circuit F4 Reactive Power MVAR
  - Status:
    - 34.5 kV circuit breaker F4
- Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from both sets of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.

- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's CT/VT instrument transformers.
- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of Interconnection Customer's main step up transformer.
- Design, procure and install 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:



- Outage of the Chiloquin substation 230-115 kV transformer
- Outage of the Warner substation 230-115 kV transformer
- Outage of the POI-Alturas 115 kV transmission line
- Outage of the POI-Mile-Hi 115 kV transmission line
- Outage of the Warner-Hilltop 230 kV transmission line
- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                    )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/929**

**BLUE MARMOT IX EXECUTED SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**January 31, 2020**

SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)

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This Interconnection Agreement ("Agreement") is made and entered into this 1st day of October, 2019, by PacifiCorp ("Transmission Provider"), and Blue Marmot IX, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

#### **Transmission Provider Information**

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

#### **Interconnection Customer Information**

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

Interconnection Customer Application No: 829

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

#### **Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Appendix 5 to Attachment O of the Tariff.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary

arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Transmission Provider and any Affected Systems.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own



unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected

Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the Tariff or by the applicable system operator(s) for the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment

specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

### 1.8.1 Power Factor Design Criteria

#### 1.8.1.1 Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

#### 1.8.1.2 Non-Synchronous Generation

The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only

apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate the Interconnection Customer from the time service commenced.

1.8.4 Primary Frequency Response

Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in

system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Sections 1.8.4.1 and 1.8.4.2 of this Agreement. The primary frequency

response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.4.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts

to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the Transmission System.

- 1.8.4.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.4.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear

Regulatory Commission shall be exempt from Sections 1.8.4, 1.8.4.1, and 1.8.4.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 1.8.4, but shall be otherwise exempt from the operating requirements in Sections 1.8.4, 1.8.4.1, 1.8.4.2, and 1.8.4.4 of this Agreement.

- 1.8.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 1.8.4, 1.8.4.1, 1.8.4.2 and 1.8.4.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric



storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 1.8.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### 2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.

2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any

changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

### 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Transmission Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Transmission Provider shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.
- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Transmission Provider's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such

non-terminating Party otherwise is responsible for these costs under this SGIA.

- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

- 3.4.1 Emergency Conditions -- "Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, the Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the

Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other

customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Transmission Provider.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Transmission Provider's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### 5.2 Network Upgrades

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree,



the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to the Interconnection Customer any amounts advanced for Network Upgrades not

previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

- 5.2.1.2 If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### 5.3 Special Provisions for Affected Systems

Unless the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

## **Article 6. Billing, Payment, Milestones, and Financial Security**

### **6.1 Billing and Payment Procedures and Final Accounting**

- 6.1.1 The Transmission Provider shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.
- 6.1.2 Within three months of completing the construction and installation of the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility

under this Agreement, the Transmission Provider shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Provider under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Transmission Provider, and contain terms and

conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Transmission Provider and must specify a reasonable expiration date.

**Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Provider of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person

harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being



cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public

disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **Article 10. Disputes**

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of Oregon (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any

other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the

remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other

Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:  
Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

If to the Transmission Provider:

Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232  
Phone: 503-813-6077 Fax: 503-813-6893

### 13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204

Transmission Provider: PacifiCorp  
Attention: Central Cashiers  
Address: 825 NE Multnomah St, Ste 550  
City: Portland State: OR Zip: 97232

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Ziya Kirman  
Address: 808 Travis St, Ste 700  
City: Houston State: TX Zip: 77002  
Phone: 713-356-2517 Email: ziya.kirman@edpr.com

If to the Transmission Provider:



Transmission Provider: PacifiCorp  
Attention: Transmission Services  
Address: 825 NE Multnomah St, Ste 1600  
City: Portland State: OR Zip: 97232

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Transmission Provider: PacifiCorp  
Attention: Manager, Grid Operations  
Address: 9951 SE Ankeny St  
City: Portland State: OR Zip: 97216  
Phone: 503-251-5197 Fax: 503-251-5228

Transmission Provider's Operating Representative:

Interconnection Customer: Blue Marmot IX, LLC  
Attention: Will Talbot  
Address: 53 SW Yamhill St  
City: Portland State: OR Zip: 97204  
Phone: 503-535-1525 Fax: 503-222-9404

#### 13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

### **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Transmission Provider

Name: **Rick Vail**  Digitally signed by Rick Vail  
Date: 2019.10.01 11:16:59 -07'00'  
Rick Vail  
Title: VP, Transmission  
Date: 10/01/2019

For the Interconnection Customer

Name: DocSigned by: SEPL  
Title: Executive Vice President Western and Central Region and Mexico  
Date: September 27, 2019

Name: DocSigned by: Bernardo Goarmon  
Title: EVP Finance  
Date: September 27, 2019

TSJ

**Attachment 1 to SGIA**

**Glossary of Terms**

**Affected System** - An electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Applicable Laws and Regulations** - All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Business Day** - Monday through Friday, excluding Federal Holidays.

**Default** - The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** - The Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** - The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** - Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** - Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** - Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** - The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** - The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** - A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** - Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's

Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** - Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** - The Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** - The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** - The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** - The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** - The entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** - The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** - The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** - The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2 to SGIA**

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

**Small Generating Facility:** A 10 MW generating facility consisting of five (5) SMA Sunny Central 2000 kW inverters. The inverters are connected individually to 2.2 MVA (5.84% impedance) 390 V - 34.5 kV transformers. The overall Small Generating Facility is connected to a 47.5/63/79 MVA (6% impedance) 34.5 - 115 kV transformer. See Attachment 3.

**Interconnection Customer Interconnection Facilities:** The Interconnection Customer's Small Generating Facility will utilize Interconnection Facilities installed for Interconnection Request Q0825. From the Small Generating Facility, there is a single circuit interrupter located proximal to the Small Generating Facility step-up transformer. There is then approximately 7 miles of tie line from the Small Generating Facility and a tie-line circuit breaker to the Point of Interconnection substation. See Attachment 3.

**Transmission Provider's Interconnection Facilities:** Metering facilities in the Interconnection Customer's shared collector substation. See Attachment 3.

**Estimated Cost of Transmission Provider's Interconnection Facilities:** Estimated cost of Transmission Provider's Interconnection Facilities directly assigned to Interconnection Customer: \$121,000

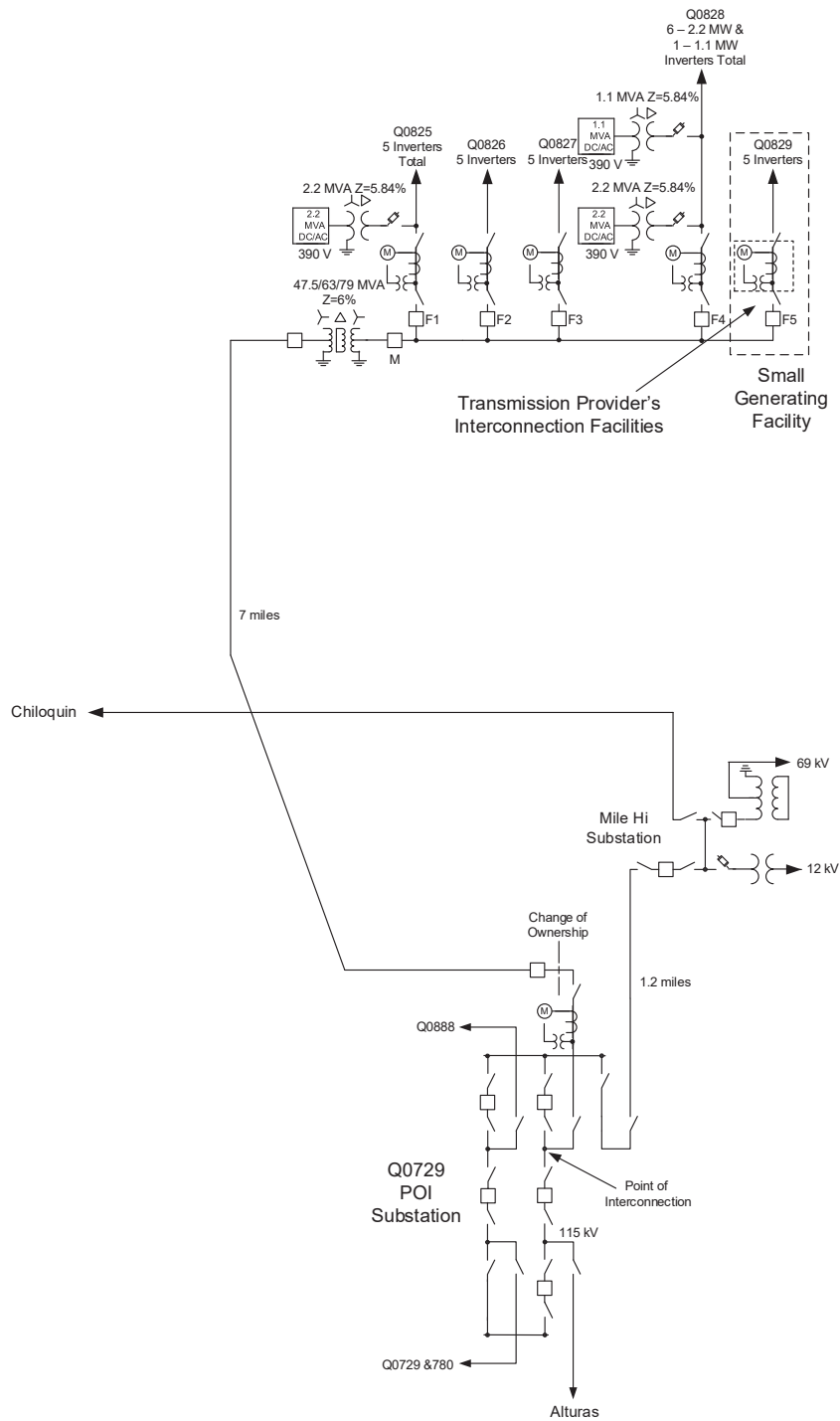
**Estimated Annual Operation and Maintenance Cost of Transmission Provider's Interconnection Facilities:** \$1,000. Interconnection Customer shall be responsible for Transmission Provider's actual cost for maintenance of the Transmission Provider's Interconnection Facilities.

**Point of Interconnection:** The point where the Transmission Provider's Interconnection Facilities connect to the existing substation bus at the Point of Interconnection substation in Lake County, Oregon. See Attachment 3.

**Point of Change of Ownership:** The point where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities. See Attachment 3.

Attachment 3 to SGIA

One-line Diagram Depicting the Small Generating Facility,  
Interconnection Facilities, Metering Equipment, and Upgrades





**Attachment 4 to SGIA**

**Milestones**

In-Service Date: June 30, 2022

Critical milestones and responsibility as agreed to by the Parties:

<b>Milestone/Date</b>	<b>Responsible Party</b>
(1) <u>Execute Interconnection Agreement</u> September 27, 2019	<u>Interconnection Customer</u>
(2) <u>Provide Financial Security (\$960,000)</u> April 25, 2020	<u>Interconnection Customer</u>
(3) <u>Design information provided</u> May 15, 2020	<u>Interconnection Customer</u>
(5) <u>Commence engineering and procurement</u> *May 24, 2020	<u>Transmission Provider</u>
(6) <u>Provide Energy Imbalance Market data</u> **December 4, 2020	<u>Interconnection Customer</u>
(6) <u>All design work by BPA and NV Energy Complete</u> January 15, 2021	<u>Interconnection Customer</u>
(7) <u>Design complete</u> March 23, 2021	<u>Transmission Provider</u>
(8) <u>Property/permits/ROW procured</u> March 23, 2021	<u>Interconnection Customer</u>
(9) <u>Property/permits/ROW procured</u> July 12, 2021	<u>Transmission Provider</u>
(10) <u>Begin construction</u> November 10, 2021	<u>Transmission Provider</u>
(10) <u>All BPA and NV Energy Construction Complete</u> March 12, 2022	<u>Interconnection Customer</u>

- |  |   |
|--|---|
| (11) <u>Construction complete</u><br>April 5, 2022                                   | <u>Transmission Provider</u>              |
| (12) <u>Commissioning complete</u><br>May 17, 2022                                   | <u>Transmission Provider</u>              |
| (13) <u>Commissioning document review</u><br><u>complete</u><br>May 24, 2022         | <u>Transmission Provider</u>              |
| (14) <u>Backfeed</u><br>May 25, 2022   | <u>Interconnection</u><br><u>Customer</u> |
| (15) <u>Begin generation testing/first sync</u><br>June 1, 2022                      | <u>Interconnection</u><br><u>Customer</u> |
| (16) <u>Provide NERC Generator Owner/<br/>Operator registration</u><br>June 14, 2022 | <u>Interconnection</u><br><u>Customer</u> |
| (17) <u>Commercial operations</u><br>June 30, 2022                                   | <u>Interconnection</u><br><u>Customer</u> |

Transmission Provider to request, and Interconnection Customer to approve, the commencement of engineering and construction no later than 30 days prior to those dates, respectively.

Interconnection Customer in writing (email acceptable) Backfeed, First Sync, and Commercial Operations. Transmission Provider to approve requests without undue delay.

\*As applicable and determined by the Transmission Provider, within 60 days of the Interconnection Customer's authorization for the Transmission Provider to begin engineering, the Interconnection Customer shall provide a detailed short circuit model of its generation system. This model must be constructed using the ASPEN OneLine short circuit simulation program and contain all individual electrical components of the Interconnection Customer's generation system.

\*\*Any design modifications to the Interconnection Customer's Small Generating Facility after this date requiring updates to the Transmission Provider's network model will result in a minimum of 3 months added to all future milestones including Commercial Operation.

\*\*\*Construction of all contingent facilities must also be complete by this date or the remaining milestones must be modified accordingly.

Agreed to by:

For the Transmission Provider \_\_\_\_\_  
Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**Attachment 5 to SGIA**

**Additional Operating Requirements for the Transmission  
Provider's Transmission System and Affected Systems Needed to  
Support the Interconnection Customer's Needs**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System and/or Distribution System.

**Property Requirements**

Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider owned facilities or is otherwise not conveyed using Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Except as expressly waived in writing by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing

permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

#### As-Built Documentation

Within sixty (60) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, site plan, relay functional diagram, relaying AC and DC schematic wiring diagrams, relay settings and step-up transformer documentation as applicable.

#### Relay and Control Settings.

Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider may be considered a breach of interconnect agreement and could lead to permanent disconnection from the Transmission Provider's system.

**Attachment 6 to SGIA**

**Transmission Provider's Description of its Upgrades  
and Best Estimate of Upgrade Costs**

Distribution Upgrades: None.

Network Upgrades: None.

Contingent Facilities. As identified in the System Impact Study for this project dated October 24, 2018 and the Facilities Study dated January 22, 2019 the following upgrades are required to be in-service prior to this project:

- Point of Interconnection substation and other Network Upgrades to be built for a higher priority Interconnection Request (Q729/780) – under construction as of January 2019 and assumed to be complete June 2019.
- All Interconnection Facilities and Network Upgrades required for Interconnection Request Q0825 must be complete. This includes a new line position in Bullard substation, a new circuit switcher in Mile Hi substation, and the implementation of a remedial action scheme requiring the construction of two new communications sites as well the installation of communications equipment at multiple Transmission Provider and Bonneville Power Administration sites.
- All Interconnection Facilities required for Interconnection Request Q0826 must be complete. This includes the installation of a control building and communications equipment at the generating facility collector substation.

If the schedule for completion of these upgrades is delayed the dependent milestones for the Interconnection Customer's project must also be delayed accordingly.

**Attachment 7 to SGIA**

**Scope of Work**

**Small Generating Facility Requirements**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Small Generating Facility.

**INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR**

- Procure any necessary agreements to allow the Small Generating Facility to utilize the Interconnection Customer Interconnection Facilities constructed as part of the Interconnection Request assigned queue position Q0825.
- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Small Generating Facility and portion of the shared collector substation.
- Construct, own and maintain the Interconnection Customer's Small Generating Facility and associated collector substation.
- Design the Small Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses. The Transmission Provider anticipates that the Interconnection Customer will need to install approximately 5.7 MVAR of fixed capacitive reactance to meet the power factor requirements based on the Interconnection Customer's current design.
- Design the Small Generating Facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Small Generating Facility with automatic voltage-control equipment and operate with the voltage regulation

- control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Small Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriate by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
  - Operate the Small Generating Facility with a voltage droop.
  - Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
  - Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements as specified in the interconnection agreement.
  - Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
  - Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
  - Provide the following points to the data concentrator installed in the shared collector substation as part of Interconnection Request Q0825. These points are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:  
Analogs:
    - o Circuit F5 Real Power MW
    - o Circuit F5 Reactive Power MVARStatus:
    - o 34.5 kV circuit breaker F5
  - Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's 34.5 kV instrument transformers. The installation location shall be coordinated with the Transmission Provider.
  - Install complete conduit and control cable provided by the Transmission Provider from both sets of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building.
  - Provide Transmission Provider unfettered and maintained access to the Transmission Provider's CT/VT instrument transformers.



- Establish permanent station retail service with the Transmission Provider's retail business unit for power that will flow from the Transmission Provider's system when the Project is not generating.
- Provide any construction or backup retail service necessary for the Project.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed or must participate in.
- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's collector substation control building and coordinate on the location of the cable.
- Procure and install 34.5 kV instrument transformers on the low side of Interconnection Customer's main step up transformer.
- Design, procure and install 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.

**Other**

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

**TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Remedial Action Scheme.
  - Modify the remedial action scheme ("RAS") implemented as part of Interconnection Request Q0825 to include the Interconnection Customer's Small Generating Facility. The Small Generating Facility will be tripped offline for any of the following outage scenarios:
    - Outage of the Chiloquin substation 230-115 kV transformer
    - Outage of the Warner substation 230-115 kV transformer

- Outage of the POI-Alturas 115 kV transmission line
- Outage of the POI-Mile-Hi 115 kV transmission line
- Outage of the Warner-Hilltop 230 kV transmission line
- Outage of the Mile-Hi-Chiloquin 115 kV transmission line.
- If necessary, present for approval any generator tripping/load reduction schemes to the WECC Remedial Action Scheme Reliability Subcommittee ("RASRS").
- System Operations Control Centers
  - Modify databases as necessary to include the Interconnection Customer's Generating Facility, Interconnection Facilities and Network Upgrades.

Exhibit 1 to Attachment 5 to SGIA  
Transmission Provider's Interconnection Policy

(ATTACHED)

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/930  
BLUE MARMOT NOTICE OF INTENT**

**January 31, 2020**

**Oregon Department of Energy** (</energy/Pages/index.aspx>) / **Energy Facilities & Safety** (</energy/facilities-safety/Pages/default.aspx>) / **Facilities** (</energy/facilities-safety/facilities/Pages/default.aspx>) / Blue Marmot Solar Energy Facility

## Blue Marmot Solar Energy Facility

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**Site Description:** Blue Marmot Solar Energy Facility is a proposed solar photovoltaic energy generation facility with a nominal generating capacity of 60 megawatts, located within a site boundary of approximately 5,170 acres. The site boundary encompasses five solar array sites as well as related or supporting facilities.

**Status:**

Proposed. The Department received a Notice of Intent to apply for a Site Certificate on January 19, 2018, and issued a public notice on February 14, 2018. The deadline to submit public comments on the NOI was March 16, 2018. On November 11, 2019, the applicant submitted a request for the Council to extend the NOI, and at the November 22, 2019 EFSC meeting the Council granted the extension. The NOI expiration date is now January 19, 2021. The Department will issue the project order prior to the applicant submitting a preliminary application for site certificate (pASC).

**Location:**

Lake County, near Lakeview. **PDF Map** (</energy/facilities-safety/facilities/Facilities%20library/BMS-map.pdf>) | **Online Map** (<https://geo.maps.arcgis.com/home/webmap/viewer.html?webmap=5f58fa2370004bf6b42cafe8187badae&find=Blue%20Marmot%20Solar%20Energy%20Facility&mapOnly=true>)

**Applicant/Certificate holder:** Blue Marmot Solar Park LLC

ODOE contact: **Kellen Tardaewether** (<mailto:kellen.tardaewether@oregon.gov>)

Applicant/Certificate holder contact: **Will Talbott** (<mailto:william.talbott@edpr.com>)

### Project Timeline

Notice of Intent

**NOI Exhibits A-P and Attachment A**  
**(/energy/facilities-safety/facilities/Facilities%20library/2018-01-19-BMS-NOI-part-1.pdf)**  
**NOI Attachments B-F (Property Owner Maps)**  
**(/energy/facilities-safety/facilities/Facilities%20library/2018-01-19-BMS-NOI-part-2.pdf)**  
**NOI Attachments G-P (Figures) (/energy/facilities-safety/facilities/Facilities%20library/2018-01-19-BMS-NOI-part-3.pdf)**

**Public Notice on Notice of Intent (/energy/facilities-safety/facilities/Facilities%20library/2018-02-14-BMS-NOI-Public-Notice.pdf)**

02/14/2018

Contact the Facility Siting Team:

503-378-4040

800-221-8035

**energy.siting@oregon.gov (mailto:energy.siting@oregon.gov)**

**Sign up to receive EFSC announcements or project updates by email.**

**([https://public.govdelivery.com/accounts/ORDOE/subscriber/topics?qsp=ORDOE\\_1](https://public.govdelivery.com/accounts/ORDOE/subscriber/topics?qsp=ORDOE_1))**

**About the Site Certificate Process (/energy/facilities-safety/facilities/Documents/Fact-Sheets/EFSC-How-to-Participate-in-the-Public-Process.pdf)**

**Site Certificate Process Flowchart (/energy/facilities-safety/facilities/Documents/Fact-Sheets/EFSC-Process-Flowchart.pdf)**

**Expedited Review Process Flowchart (/energy/facilities-safety/facilities/Documents/Fact-Sheets/EFSC-Expedited-Review-Process-Flowchart.pdf)**

#### EXHIBIT FILES REFERENCE

- Exhibit A: Applicant Information
- Exhibit B: Project Description
- Exhibit C: Property Location and Maps
- Exhibit D: Organizational Information
- Exhibit E: Permits Required
- Exhibit F: Property Ownership
- Exhibit G: Materials Analysis

- Exhibit H: Geology and Soil Stability
- Exhibit I: Soils
- Exhibit J: Wetlands
- Exhibit K: Land Use
- Exhibit L: Protected Areas
- Exhibit M: Financial Analysis
- Exhibit N: Non-generating Facility Information
- Exhibit O: Water Requirements
- Exhibit P: Fish Wildlife Habitat
- Exhibit Q: Threatened and Endangered Plants and Animals
- Exhibit R: Scenic Aesthetic Values
- Exhibit S: Cultural Resources
- Exhibit T: Recreational Facilities
- Exhibit U: Public Services
- Exhibit V: Waste Minimization
- Exhibit W: Site Restoration
- Exhibit X: Noise
- Exhibit Y: Carbon Dioxide Emissions
- Exhibit Z: Cooling Towers
- Exhibit AA: EMFs – Electric and Magnetic Fields
- Exhibit BB: Other Information
- Exhibit CC: Additional Statutes Rules Ordinances
- Exhibit DD: Other Specific Standards

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Yes

No

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)            )  
BLUE MARMOT VI LLC (UM 1830)        )  
BLUE MARMOT VII LLC (UM 1831)        )  
BLUE MARMOT VIII LLC (UM 1832)       )  
BLUE MARMOT IX LLC (UM 1833)        )  
  Complainants        )  
  vs.                                )  
PORTLAND GENERAL ELECTRIC            )  
COMPANY                                    )  
  Defendant                        )  
Pursuant to ORS 756.500.                )  
\_\_\_\_\_ )

**EXHIBIT BLUE MARMOT/931**

**BLUE MARMOT NOTICE OF INTENT EXTENSION**

**January 31, 2020**



BEFORE THE  
ENERGY FACILITY SITING COUNCIL  
OF THE STATE OF OREGON

IN THE MATTER OF THE  
APPLICATION FOR A SITE  
CERTIFICATE FOR BLUE MARMOT  
SOLAR ENERGY FACILITY

)  
)  
)  
)  
)

ORDER GRANTING AN EXTENSION OF THE  
NOTICE OF INTENT EXPIRATION DATE

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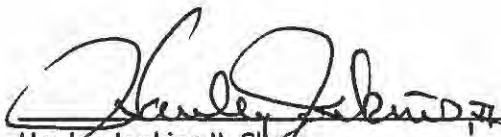
On January 19, 2018, Blue Marmot Solar Park, (applicant) submitted a Notice of Intent (NOI) to apply for a site certificate for the Blue Marmot Solar Energy Facility. In accordance with OAR 345-020-0060, the NOI will expire two years after submittal, or on January 19, 2020, unless the Council extends the expiration date.

As stated in the November 12, 2019 request letter, the applicant requests Council extend the NOI for an additional year due to ongoing proceedings with the Public Utility Commission regarding transmission and energy delivery from the proposed facility. The applicant requests the one-year extension to clarify commercial arrangements and finalize the proposed facility to prepare and submit the pASC.

Pursuant to OAR 345-020-0060, the Council may extend the NOI expiration date for a period of up to one year if the applicant submits a petition to the Council not less than 45 days before the NOI expiration date and the Council finds that the petition shows good cause. The applicant submitted its extension request more than 45 days before the expiration date.

The Council finds that the applicant has shown good cause for extension of the NOI expiration date and that an extension of one year is reasonable.

THEREFORE, the Council hereby extends the expiration date of the NOI for the Blue Marmot Solar Energy Facility and specifies a new expiration date of January 19, 2021.

  
Hanley Jenkins II, Chair  
Oregon Energy Facility Siting Council

Nov. 29, 2019  
Date

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1829, UM 1830, UM 1831, UM 1832, UM 1833**

BLUE MARMOT V LLC (UM 1829)	)
BLUE MARMOT VI LLC (UM 1830)	)
BLUE MARMOT VII LLC (UM 1831)	)
BLUE MARMOT VIII LLC (UM 1832)	)
BLUE MARMOT IX LLC (UM 1833)	)
Complainants	)
vs.	)
PORTLAND GENERAL ELECTRIC	)
COMPANY	)
Defendant	)
Pursuant to ORS 756.500.	)
_____	)

**EXHIBIT BLUE MARMOT/932**

**BLUE MARMOT CONSOLIDATED SCHEDULE**

**January 31, 2020**

Consolidated schedule for Blue Marmot V, Blue Marmot VI, Blue Marmot VII, Blue Marmot VIII, Blue Marmot IX

