

## STANDARD CONTRACT OFF SYSTEM POWER PURCHASE AGREEMENT

THIS AGREEMENT, entered into this 2<sup>nd</sup> day, of July, 2012, is between Power Resources Cooperative, an Oregon cooperative corporation ("Seller") and Portland General Electric Company, an Oregon corporation ("PGE") (hereinafter each a "Party" or collectively, "Parties").

### RECITALS

Seller has constructed, owns, operates and maintains the Coffin Butte Project, a landfill gas facility for the generation of electric power located in Benton County, Oregon, with a Nameplate Capacity Rating of 5660 kilowatt ("kW") as of the date of this Agreement and as further described in Exhibit B ("Facility"); and

The Facility was constructed in two phases. Phase I was completed and began commercial operation on October 1, 1995 and has a generating capacity of 2460 kW. Phase II began commercial operation on January 1, 2008 and has a generating capacity of 3200 kW; and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below. Seller has filed with the Federal Energy Regulatory Commission (FERC) a Form 556 self-certification of the Facility as a Qualifying Facility, and the FERC has accepted Seller's Form 556 for filing; and

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.18, 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. "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.

1.2. "Capacity Value" has the meaning provided for in the Tariff (as defined below).

1.3. "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.

1.4. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable which shall require that all of the following events have occurred:

1.4.1. PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in amounts required by this Agreement and in accordance with all other terms and conditions of this Agreement (certifications required under this Section 1.4 can be provided by one or more LPEs);

1.4.2. Start-Up Testing was completed in 1995 for Phase I of the Facility and in 2007 for Phase II of the Facility, in accordance with Section 1.26;

1.4.3. PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement uninterrupted for a Test Period at a rate in kW of at least 75 percent of average annual Net Output divided by 8,760 based upon any sixty (60) minute period for the entire testing period. If the operation 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;

1.4.4. 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;

1.4.5. 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;

1.4.6. PGE has received a copy of the Transmission Agreement.

1.5. "Contract Price" means the applicable price as selected by Seller in Section 5.

1.6. "Contract Year" means each twelve (12) month period commencing at 00:00 hours on October 1 and ending on 24:00 hours on September 30 falling at least partially in the Term of this Agreement.

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

1.8. "Environmental Attributes" means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from



or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, and any Green Tag Reporting Rights to such Environmental Attributes.

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

1.10. "Forward Replacement Price" means the price at which PGE, acting in a commercially reasonable manner, purchases for delivery at the Point of Receipt a replacement for any Net Output that Seller is required to deliver under this Agreement plus (i) costs reasonably incurred by PGE in purchasing such replacement Net Output, and (ii) additional transmission charges, if any, reasonably incurred by PGE in causing replacement energy to be delivered to the Point of Receipt. If PGE elects not to make such a purchase, costs of purchasing replacement Net Output shall be Dow Jones Mid C Index Price for such energy not delivered, plus any additional cost or expense incurred as a result of Seller's failure to deliver, as determined by PGE in a commercially reasonable manner (but not including any penalties, ratcheted demand or similar charges).

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

1.12. "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.

1.13. "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.

1.14. "Lost Energy Value" means for a Contract Year: zero, unless the Net Output is less than Minimum Net Output and the mean Dow Jones Mid C Index Price is greater than the Contract Price, in which case Lost Energy Value equals: (Minimum Net Output - Net Output) X (the lower of the mean Contract Price or the mean Dow Jones Mid C Index Price - mean Contract Price) minus Transmission Curtailment Replacement Energy Cost if any for like period.

1.15. "Mid-Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.

1.16. "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.

1.17. "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.

1.18. "Net Output" means all energy expressed in kWhs produced by the Facility, and does not include any environmental attributes.

1.19. "Off-Peak Hours" has the meaning provided in the Tariff.

1.20. "On-Peak Hours" has the meaning provided in the Tariff.

1.21. "Point of Receipt" means the PGE System.

1.22. "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.

1.23. "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.

1.24. "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 C.

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

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

1.27. "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.

1.28. "Tariff" shall mean PGE rate Schedule 201 filed with the Oregon Public Utilities Commission in effect on the Effective Date of this Agreement and attached hereto as Exhibit E.

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

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

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

1.32. "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 Receipt (for any reason other than Force Majeure)

1.33. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the difference between Dow Jones Mid C Index Price – Contract Price X curtailed energy for periods of Transmission Curtailment.

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

1.35. "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 Receipt for a term not less than the Term of this Contract.

1.36. 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 October 1, 2012, Seller shall begin initial deliveries of Net Output; and

2.2.2 By September 15, 2012, Seller shall have completed all requirements to meet the Commercial Operation Date as described in Section 1.4 and shall have established the Commercial Operation Date.

2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, Seller shall pay damages equal to the Lost Energy Value. In calculating the Lost Energy Value for use in this section, the Minimum Net Output shall be prorated to account for any operational delay.

2.3 This Agreement shall terminate on September 30, 2027 or the date the Agreement is terminated in accordance with Section 9 or 12.2, 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 cooperative corporation duly organized under the laws of the State of Oregon.

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 has designed and does 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 5660 kW.

3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 47,122,353 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.

3.1.10 Seller will schedule and deliver from the Facility to PGE at the Point of Receipt Net Output not to exceed a maximum of 49,085,784kWh 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.

3.1.11 Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

3.1.12 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.

3.1.13 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 Production Facility Eligible to Receive the Standard Rates and Standard Contract approved by the Public Utility Commission of Oregon at the time this Agreement is executed. Seller will provide, upon request by Buyer 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. Buyer 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 Buyer will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.

#### SECTION 4: DELIVERY OF POWER

4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output from the Facility. Seller's Net Output shall be scheduled and delivered to PGE at the Point of Receipt in accordance with Section 4.5.

4.2 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller shall schedule and deliver to PGE from the Facility either a) a minimum of seventy-five percent (75%) of its average annual Net Output or b) the Alternative Minimum Amount as defined in Exhibit A during each Contract Year (hereinafter "Minimum Net Output"), provided that such Minimum Net Output for the first or last Contract Year during which Commercial Operations begins shall be reduced pro rata to reflect the Commercial Operation Date, and further provided that such Minimum Net Output shall be reduced on a pro-rata basis for any periods during a Contract Year that the Facility was prevented from generating electricity for reasons of Force Majeure. PGE shall pay Seller the Contract Price for all scheduled and delivered Net Output.

4.3 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller agrees that if Seller does not deliver the Minimum Net Output each Contract Year for reasons other than Transmission Curtailment, PGE will suffer losses equal to the Lost Energy Value. As damages for Seller's failure to deliver the Minimum Net Output (subject to adjustment for reasons of Force Majeure as provided in Section 4.2) in any Contract Year, notwithstanding any other provision of this Agreement the purchase price payable by PGE for future deliveries shall be reduced until Lost Energy Value is recovered. PGE and Seller shall work together in good faith to establish the period, in monthly amounts, of such reduction so as to avoid Seller's default on its commercial or financing agreements necessary for its continued operation of the Facility for QF Facilities sized at 100 kW or smaller, the provisions of this section shall not apply.

4.4 Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit B 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 3.1.10 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 of the Facility 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 10,000kW.

4.5 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 provided that, if the prevailing WECC scheduling protocol establishes a different preschedule deadline, then according to that protocol. The Parties' respective representatives shall maintain hourly real-time 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.

4.6 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 Environmental Attributes produced with respect to the Facility, and PGE shall not report under such program that such Environmental Attributes belong to it.

SECTION 5: CONTRACT PRICE

PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Tariff. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the remainder of the Term. Except as provided herein, Sellers selection is for the Term and shall not be changed during the Term.

- 5.1      X   Fixed Price
- 5.2           Deadband Index Gas Price
- 5.3           Index Gas Price
- 5.4           Mid-C Index Rate Price

SECTION 6: OPERATION AND CONTROL

6.1 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 or transmission to PGE's electric system is curtailed, disconnected, suspended or interrupted, in whole or in part. 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.

6.2 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.

6.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance that could affect the generation, scheduling or delivery of energy to PGE, 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 7: 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 ten (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 (Minimum Net Output / 8760). 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 8: BILLINGS, COMPUTATIONS AND PAYMENTS

8.1 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.

8.2 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 9: DEFAULT, REMEDIES AND TERMINATION**

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

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

9.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within ten (10) days of notice.

9.1.3 Seller's failure to deliver the Minimum Net Output for two consecutive Contract Years.

9.1.4 If Seller is no longer a Qualifying Facility.

9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.

9.1.6 Seller's failure to accurately schedule Net Output, as required by Section 4.5, where there is a demonstrated pattern of scheduling errors. Scheduling errors may include: scheduled energy that differs from Net Output by more than 10% for multiple monthly periods, or in cases where net deviations result in demonstrated excess payments by PGE to the Seller.

9.2 In the event of a default hereunder, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party, and, except for damages related to a default pursuant to Section 9.1.3, by a QF sized at 100 kW or smaller, 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. Such termination shall be effective upon the date of delivery of notice, as provided in Section 21.1. The rights provided in this Section 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

9.3 If this Agreement is terminated as provided in this Section 9, 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.

9.4 If this Agreement is terminated as a result of Seller's default, Seller shall pay PGE the positive difference, if any, obtained by subtracting the Contract Price from the sum of the Forward Replacement Price for the Minimum Net Output that Seller was otherwise obligated to provide for a period of twenty-four (24) months from the date of termination plus any cost incurred for transmission purchased by PGE to deliver the

replacement power to the Point of Receipt and the estimated administrative cost to the utility to acquire replacement power. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.

9.5 In the event PGE terminates this Agreement pursuant to this Section 9, 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.

9.6 Sections 9.1, 9.3, 9.4, 9.5, 11, and 20.2 shall survive termination of this Agreement.

#### SECTION 10: TRANSMISSION CURTAILMENTS

10.1 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 Sections 4.5 of this Agreement.

10.2 If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.5 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 11: INDEMNIFICATION AND LIABILITY

11.1 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 Receipt, 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.

11.2 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 Receipt, 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.

11.3 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.

11.4 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 12: INSURANCE

12.1 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 maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of 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.

12.2 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.

12.3 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 13: FORCE MAJEURE

13.1 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 Transmission Curtailment, 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.

13.2 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:

13.2.1 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

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

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

13.3 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.

13.4 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 14: 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 15: 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 16: 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 17: 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 18: 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 19: 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 20: ENTIRE AGREEMENT

20.1 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.

20.2 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 21: NOTICES

21.1 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:                   Executive Vice President and General Manager  
Power Resources Cooperative  
711 NE Halsey  
Portland, OR 97232

with a copy to:           Coffin Butte Project Plant Manager  
Power Resources Cooperative  
29160 Coffin Butte Road  
Corvallis, Oregon 97330




To PGE:                    Contracts Manager  
                                  QF Contracts, 3WTCBR06  
                                  PGE - 121 SW Salmon St.  
                                  Portland, Oregon 97204

21.2 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 21.

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: James E. Lebdell  
Title: VP Power Operations & Resource Strategy

PGE Approved By:	
Business Terms	BA
Credit	BL
Legal	LIM
Risk Mgt.	AD

for R. George

POWER RESOURCES COOPERATIVE

By: \_\_\_\_\_  
Name: John P. Prescott  
Title: Executive Vice President and General Manager



# GENERAL DELEGATION OF APPROVAL AUTHORITY

To navigate to each fill-in area—use the tab key

DELEGATION PERIOD (MAXIMUM LENGTH – 1 CALENDAR YEAR)

Year 2012  From \_\_\_\_\_ to \_\_\_\_\_

DELEGATION FROM Jim Barnes	TITLE GM, Risk Mgmt - Power Supply	RC 891	EMPLOYEE No. E04120
SIGNATURE <i>Jim Barnes</i>		PHONE # X8931	

DELEGATION TO Rebecca Brown	TITLE Contract Analyst	RC 676	EMPLOYEE No. E01307
SIGNATURE <i>Rebecca Brown</i>		PHONE # X8545	

DELEGATION SCOPE (Designate here either "to my level of authority per policy" or a specific dollar limit).

To My Level of Authority, Per Policy for each action checked below **or** Dollar Limit \$ N/A

Limited to these actions only: (Check as appropriate):

<input type="checkbox"/> Time Sheets	<input type="checkbox"/> Payroll Adjustment
<input type="checkbox"/> Employee Action Form	<input type="checkbox"/> Position Requisition
<input type="checkbox"/> Requisition for Payment (Expenditure Approval)	<input type="checkbox"/> Contracts * Only Officers Can Delegate
<input checked="" type="checkbox"/> Other <u>see below</u>	

Note: The following actions can no longer be delegated through this General Delegation Process, rather they must be delegated using the PeopleSoft or PowerPlant system's delegation function:

- Purchase Requisitions
- Expense Reports
- P Cards
- Travel Authorizations
- Funding Projects

ADDITIONAL DELEGATIONS, IF ANY (DESCRIBE FULLY – DOLLAR LIMITATION, EXPENDITURE TYPE, ETC.)

**SUBJECT TO PGE'S ENERGY RISK MANAGEMENT POLICIES & PROCEDURES, APPENDIX G - AUTHORIZED SIGNATORIES, REBECCA BROWN IS DESIGNATED TO REVIEW AND INITIAL ENABLING AGREEMENTS AND LONG-TERM CONTRACTS.**

FUNCTIONAL OFFICER APPROVAL SIGNATURE: <i>Whit</i>	DATE 12/11/2011
---	--------------------

Send Original to Controller, 1WTC0501  
(After Functional Officer Approval)

## Appendix G – Authorized Signatories

### Related Corporate Policies for Expenditure Approval

- A. Corporate Approval Process
- B. Delegation of Approval Authority
- C. Expenditure Approval

### Power Operations Expenditure Approval – Power & Fuel Related Invoices

<u>Approver</u>	<u>Individual</u>	<u>Approval Limit</u>	<u>Notes</u>
V.P., Power Operations & Resource Strategy	Jim Lobdell	\$10,000,000	[1]
General Manager, Power Operations	Terri Peschka	\$10,000,000	[2]
Manager, Pre-Schedule and Cash Trading	Tom Ward	\$10,000,000	[3]
Manager, Real Time Trading	Mitchell Hawks	\$10,000,000	[3]

#### Notes

Delegation of approval authority may be granted for up to one year in length and must be renewed annually on a calendar-year basis. Temporary signature authority may also be delegated. See PGE Corporate Policies for more information.

### Power Operations Signature Authority – Contracts, Confirmations & Other <sup>[4]</sup>

<u>Product</u>	<u>Signature(s) Required</u>	<u>Notes</u>
Enabling Agreements/Long-Term Contracts	Vice President, Power Operations G.M., Risk Mgt – Power Supply (initials only) Legal Department (initials only) Credit Risk Management (initials only) Power Contracts (initials only)	[5]
Power & Gas Confirmations	Vice President, Power Operations	[6]
Cash Payments & Letter of Credit Returns	Chief Financial Officer and Treasurer G.M., Risk Mgt – Power Supply Manager – Risk Mgmt., Reporting & Control	[7]

#### Notes

<sup>[1]</sup> Delegation of signature authority for up to \$10 million granted annually by CEO to V.P., Power Operations.

<sup>[2]</sup> Delegation of signature authority for up to \$10 million granted annually by CEO to G.M., Power Operations.

<sup>[3]</sup> Delegation of signature authority for up to \$10 million granted annually by CEO in very limited circumstances. See signature delegations in Controller's office for more information.

<sup>[4]</sup> See Power Supply Transaction Approval Matrix in Appendix E.

<sup>[5]</sup> Designation of signature authority granted annually by V.P., Power Operations to G.M., Power Operations.

<sup>[6]</sup> Designation of signature authority granted annually by V.P., Power Operations to G.M., Power Operations and Risk Management Confirmation personnel.

<sup>[7]</sup> Delegation of signature authority granted annually by CFO and Treasurer to G.M. Risk Mgt. – Power Supply for letters of credit and cash collateral payments up to \$1 million, and to the Manager of Risk Mgmt, Reporting & Control when the G.M. Risk Mgmt. – Power Supply is not available to authorize the payment.

To PGE:                    Contracts Manager  
                              QF Contracts, 3WTCBR06  
                              PGE - 121 SW Salmon St.  
                              Portland, Oregon 97204


21.2 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 21.

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: \_\_\_\_\_

POWER RESOURCES COOPERATIVE

By:  \_\_\_\_\_ 7-2-12  
Name: John P. Prescott  
Title: Executive Vice President and General Manager

**EXHIBIT A  
[NOT SELECTED]**

**[MINIMUM NET OUTPUT**

**Seller may designate an alternative Minimum Net Output to seventy-five (75%) percent of annual Net Output in this exhibit ("Alternative Minimum Amount"). Such Alternative Minimum Amount, if provided, shall exceed zero, and shall be established in accordance with Prudent Electrical Practices and documentation supporting such a determination shall be provided to PGE upon execution of the Agreement. Such documentation shall be commercially reasonable, and may include, but is not limited to, documents used in financing the project, and data on output of similar projects operated by seller, PGE or others.]**

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

The Coffin Butte Project is a 5660 kW gross output landfill gas (methane) fueled facility located at 29160 Coffin Butte Road, near Corvallis, Oregon 97330. The facility is sited adjacent to the Coffin Butte Landfill. The prime movers (five in all) are three Caterpillar 3516 internal combustion engines rated at 820kW (Phase I, commercial operations began October 1, 1995) and two Caterpillar 3520 internal combustion engines rated at 1600kW (Phase II, commercial operations began January 1, 2008). All five units operate 24/7 and have maintained a 97% annual capacity factor. The landfill gas is extracted from the gas collection system via two large blowers and then combusted as the fuel for the engines. No other fuel is used. The generators are rated to produce 4,160 volts output, and an on-site step up transformer increases the voltage to 12,470 volts at the distribution side. The facility is interconnected, and energy output is delivered, to the Consumers Power system at that point. Metering is on the 12,470 volt line that connects to the Consumers Power system. Losses to that point are negligible.

Station service for the facility is currently purchased from Consumers Power. Station service load is comprised primarily of fans, blowers, and radiators. PRC has obtained interconnection wheeling service from Consumers Power to the Bonneville Power Administration (BPA) Adair substation and then point to point transmission service from BPA to PGE's Balancing Authority Area (BAA). The point of delivery to PGE will be PGE's Pearl substation.

06/27/12 FINAL  
For Discussion Purposes Only  
Subject to Management Approval

**EXHIBIT C  
REQUIRED FACILITY DOCUMENTS**

**Interconnection and Wheeling Agreement between Consumers Power Inc. and Power Resources Cooperative**

**Balancing Area Authority Services Agreement (BAASA) between Bonneville Power Administration and Power Resources Cooperative**

**Service Agreement for Point-to-Point Transmission Service between Bonneville Power Administration and Power Resources Cooperative**

**Borrowers Environmental Report, August, 19 1994 (prepared by CH2MHill)**

**Methane Gas Supply Agreement, September 1, 1994**

**Ground Lease, September 1, 1994**

**Conditional Use Permit, Benton County, Oregon, February 9, 1994**

**Oregon DEQ Title V Operating Permit, April 1, 2009**

**BPA Letter Agreement, March 15, 2007**



**EXHIBIT D  
START-UP TESTING**

The following systems were checked and associated tests were performed at plant start up:

1. Pressure tests of all piping;
2. Calibration of all pressure, level, flow, temperature and monitoring instruments;
3. Operating tests of all valves, operators, motor starters and motor;
4. Alarms, signals, and fail-safe or system shutdown control tests;
5. Insulation resistance and point-to-point continuity tests;
6. Bench tests of all protective devices;
7. Tests required by manufacturer of equipment; and
8. Turbine/generator mechanical runs including shaft, vibration, and bearing temperature measurements;
9. Running tests to establish tolerances and inspections for final adjustment of bearings, shaft run-outs;
10. Energization of transformers;
11. Synchronizing tests (manual and auto);
12. Excitation and voltage regulation operation tests;
13. Open circuit and short circuit; saturation tests;
14. Phase angle and magnitude of all PT and CT secondary voltages and currents to protective relays, indicating instruments and metering;
15. Auto stop/start sequence;
16. Level control system tests; and
17. Completion of all state and federal environmental testing requirements.

EXHIBIT E  
TARIFF

**[Attach currently in-effect rate Schedule 201]**

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

**PURPOSE**

To provide information about Avoided Costs, Standard Contracts and negotiated Power Purchase Agreements, 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.

(T)

**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 Contract Power Purchase Agreement.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard Contract Power Purchase Agreement (Standard Contract), 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 as deemed sufficient by the Company as set out in the Standard Contract.

**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.

**SCHEDULE 201 (Continued)**

**POWER PURCHASE AGREEMENT**

In accordance with terms set out 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 Power Purchase Agreement 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 Contract.

Any Seller may elect to negotiate a Power Purchase Agreement 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 the filed Avoided Costs in effect at that time.

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

A Seller choosing a Standard Contract will complete all informational and price option selection requirements in the applicable Standard Contract (Appendix 1 to this schedule) and submit the executed Agreement to the Company prior to service under this schedule. The Standard Contract is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard Contracts are: Standard Contract Power Purchase Agreement, Standard Contract Off System Power Purchase Agreement, Standard Contract for Intermittent Resources and Standard Contract for Off System Intermittent Resources. The Standard Contracts applicable to Intermittent 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**

(T)

In order to execute the Standard Contract the Seller must complete all of the general project information requested in the applicable Standard Contract.

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

The Seller may request in writing that the Company prepare a final draft Standard Contract. 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 Contract.

When both parties are in full agreement as to all terms and conditions of the draft Standard Contract, 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, a completely executed copy will be returned to the Seller. Prices and other terms and conditions in the power purchase agreement will not be final and binding until the Standard Contract has been executed by both parties.

**SCHEDULE 201 (Continued)**

**OFF SYSTEM POWER PURCHASE AGREEMENT**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a power purchase agreement with the Company after following the applicable standard or negotiated contract 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 rates are based on the Company's Avoided Costs. 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."

The Avoided Costs as listed in Tables 1 and 2 below include monthly On- and Off-Peak prices.

**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.

Avoided Costs are based on forward market price estimates through December 2014, the period of time during which the Company's Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the period 2015 through 2030, the 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. (C) (C)

**PRICING OPTIONS FOR STANDARD CONTRACTS**

Pricing options represent 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 Contract 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 Contract pricing will be based on the Avoided Cost in effect at the time the agreement is executed.

**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)**

Four pricing options are available for Standard Contracts. The pricing options include one Fixed Rate Option and three Market Based Options.

**1) Fixed Price Option**

The Fixed Price Option is based on Avoided Costs including forecasted natural gas prices.

This option is available for a maximum term of 15 years. Sellers with contracts exceeding 15 years will make a one time election at execution to select a Market-Based Option for all years up to five in excess of the initial 15. Under the Fixed Price Option, prices will be as established at the time the Standard Contract is executed and will be equal to the Avoided Costs in Tables 1 and 2 effective at execution for a term of up to 15 years.

TABLE 1												
Avoided Costs												
Fixed Price Option												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	40.81	39.03	35.36	30.88	24.51	21.96	37.76	45.65	44.12	40.81	43.61	52.28
2012	48.09	45.98	41.62	36.30	28.74	25.72	44.46	53.83	52.02	48.09	51.42	61.70
2013	52.59	50.27	45.50	39.67	31.39	28.07	48.61	58.89	56.90	52.59	56.24	67.50
2014	55.37	52.92	47.90	41.75	33.01	29.53	51.18	62.00	59.91	55.37	59.21	71.08
2015	87.82	87.57	86.50	84.30	84.22	84.37	84.62	84.87	85.00	85.47	86.59	87.94
2016	91.71	91.43	90.24	87.99	87.91	88.11	88.39	88.67	88.80	89.31	90.49	91.91
2017	92.89	92.95	92.56	92.13	92.36	92.80	93.33	93.75	93.95	94.73	96.79	99.66
2018	96.87	96.94	96.52	96.06	96.31	96.77	97.35	97.80	98.02	98.86	101.07	104.17
2019	100.38	100.46	100.01	99.52	99.79	100.28	100.89	101.37	101.60	102.49	104.83	108.10
2020	103.85	103.92	103.45	102.94	103.22	103.74	104.38	104.89	105.13	106.07	108.54	112.00
2021	107.52	107.60	107.10	106.56	106.86	107.41	108.08	108.61	108.86	109.85	112.45	116.08
2022	112.09	112.18	111.65	111.07	111.39	111.97	112.70	113.26	113.53	114.59	117.36	121.24
2023	117.00	117.09	116.52	115.91	116.25	116.87	117.64	118.24	118.53	119.65	122.61	126.74
2024	121.50	121.60	121.00	120.35	120.71	121.37	122.19	122.83	123.13	124.33	127.47	131.87
2025	126.70	126.80	126.17	125.47	125.85	126.56	127.43	128.11	128.43	129.70	133.04	137.72
2026	129.03	129.13	128.48	127.78	128.17	128.88	129.77	130.46	130.79	132.09	135.48	140.25
2027	131.40	131.51	130.85	130.13	130.52	131.25	132.15	132.86	133.20	134.51	137.98	142.82
2028	133.83	133.93	133.26	132.53	132.93	133.67	134.59	135.31	135.65	137.00	140.52	145.46
2029	136.28	136.38	135.70	134.96	135.36	136.12	137.06	137.79	138.14	139.51	143.09	148.12
2030	138.78	138.89	138.19	137.44	137.85	138.62	139.58	140.32	140.68	142.07	145.73	150.85

(C)

(C)

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)  
FIXED PRICE OPTION (Continued)

TABLE 2												
Avoided Costs												
Fixed Price Option												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	35.72	34.95	31.54	23.23	14.32	10.75	23.74	33.68	35.21	35.21	36.99	45.40
2012	42.43	41.51	37.43	27.47	16.78	12.51	28.08	39.99	41.82	41.82	43.96	54.04
2013	45.24	44.26	39.89	29.27	17.87	13.32	29.93	42.63	44.59	44.59	46.87	57.61
2014	46.81	45.80	41.28	30.28	18.47	13.75	30.95	44.11	46.14	46.14	48.49	59.63
2015	38.19	37.94	36.87	34.67	34.58	34.74	34.99	35.24	35.36	35.84	36.96	38.31
2016	41.32	41.04	39.85	37.61	37.53	37.73	38.00	38.28	38.41	38.92	40.10	41.52
2017	41.24	41.31	40.91	40.49	40.72	41.15	41.69	42.11	42.31	43.09	45.14	48.02
2018	44.45	44.51	44.09	43.63	43.88	44.35	44.93	45.38	45.59	46.44	48.65	51.75
2019	47.00	47.07	46.62	46.13	46.40	46.89	47.50	47.98	48.21	49.10	51.44	54.71
2020	49.65	49.72	49.25	48.74	49.02	49.54	50.18	50.69	50.93	51.87	54.34	57.80
2021	52.15	52.22	51.73	51.19	51.49	52.03	52.71	53.24	53.49	54.48	57.07	60.71
2022	55.70	55.79	55.26	54.68	55.00	55.58	56.30	56.87	57.14	58.19	60.96	64.85
2023	59.38	59.47	58.91	58.30	58.63	59.26	60.03	60.63	60.91	62.04	64.99	69.13
2024	63.21	63.30	62.70	62.05	62.41	63.07	63.89	64.53	64.83	66.03	69.17	73.58
2025	67.14	67.24	66.60	65.91	66.29	66.99	67.86	68.55	68.87	70.14	73.48	78.15
2026	68.37	68.47	67.83	67.12	67.51	68.22	69.11	69.80	70.13	71.43	74.83	79.59
2027	69.63	69.73	69.07	68.35	68.75	69.48	70.38	71.09	71.42	72.74	76.20	81.05
2028	70.92	71.02	70.35	69.62	70.02	70.76	71.68	72.40	72.74	74.09	77.61	82.55
2029	72.21	72.32	71.63	70.89	71.30	72.05	72.99	73.72	74.07	75.44	79.03	84.06
2030	73.53	73.64	72.95	72.19	72.61	73.38	74.33	75.08	75.43	76.82	80.48	85.60

(C)

(C)

Under the Fixed Price Option, the Company will pay Seller the Off-Peak Avoided Cost pursuant to Table 2 for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard Contract; (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 the On-Peak Avoided Cost pursuant to Table 1 for all other output. (See Appendix 1, the Standard Contract for defined terms.)



**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)**

**MARKET BASED PRICE OPTIONS:**

Market Based Price Options include Option 2, Deadband Index Gas Price; Option 3, Index Gas Price; and Option 4, Dow Jones Mid-Columbia Daily On- and Off-Peak Electricity Firm Price Index (DJ-Mid-C Firm Index). The price components for pricing Options 2 and 3 are defined as follows:

On Peak Price:	$P_{Peak}$	
Off Peak Price:	$P_{Off}$	
Variable Operating and Maintenance, Fixed Costs, and Gas Transportation (Table 6):	VFG	
Capacity Value (Table 7):	C	
Heat Rate:	HR = 6,732 BTU/kWh	(C)
Losses:	1.9%	
Forecasted Gas Price (Table 5):	$GP_F$	
First of Month* Northwest Pipeline Corp. Canadian Border Index as Reported in <u>Platts</u> <u>Inside FERC's Gas Market Report</u>	$GP_{Sumas}$	
First of Month* one-month spot price averages for AECO/NIT transactions as Reported in <u>Canadian Gas Price Reporter</u> <u>Natural Gas Market Report</u> (in US dollars):	$GP_{AECO}$	
Monthly Indexed Gas Price:	$GP_{MI} = (GP_{Sumas} + GP_{AECO})/2$	
Deadband Gas Index:	$GP_{DB}$	

Where:

If  $GP_{MI} > GP_F$   
 $GP_{DB} = \text{Minimum of } (GP_{MI} \text{ or } 1.1 * GP_F)$   
Otherwise  
 $GP_{DB} = \text{Maximum of } (GP_{MI} \text{ or } .9 * GP_F)$

\* "First of Month" means the first such monthly issuance.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)  
MARKET BASED PRICE OPTIONS (Continued)

Tables 3 and 4 below list applicable rates for Options 2 (Deadband Index Gas Price Option) and 3 (Index Gas Price Option) for the period through 2014. The monthly On- and Off-Peak prices will be applied for all Market Based Price Options.

(C)

TABLE 3												
Avoided Costs												
On-Peak Resource Sufficiency Rate (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	40.81	39.03	35.36	30.88	24.51	21.96	37.76	45.65	44.12	40.81	43.61	52.28
2012	48.09	45.98	41.62	36.30	28.74	25.72	44.46	53.83	52.02	48.09	51.42	61.70
2013	52.59	50.27	45.50	39.67	31.39	28.07	48.61	58.89	56.90	52.59	56.24	67.50
2014	55.37	52.92	47.90	41.75	33.01	29.53	51.18	62.00	59.91	55.37	59.21	71.08

(C)

(C)

TABLE 4												
Avoided Costs												
Off-Peak Resource Sufficiency Rate (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	35.72	34.95	31.54	23.23	14.32	10.75	23.74	33.68	35.21	35.21	36.99	45.40
2012	42.43	41.51	37.43	27.47	16.78	12.51	28.08	39.99	41.82	41.82	43.96	54.04
2013	45.24	44.26	39.89	29.27	17.87	13.32	29.93	42.63	44.59	44.59	46.87	57.61
2014	46.81	45.80	41.28	30.28	18.47	13.75	30.95	44.11	46.14	46.14	48.49	59.63

(C)

(C)

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)  
MARKET BASED PRICE OPTIONS (Continued)

(M)

**2) Deadband Index Gas Price Option**

The Deadband Index Gas Price Option bases the fuel price component of the Energy rate on comparisons between the Forecast Gas Price (Table 5) and the simple average of the First of Month gas indices for Sumas and AECO trading hubs. The Northwest Pipeline Gas Index (Sumas) will be as reported in Platts Inside FERC's Gas Market Report. The AECO/NIT (AECO) Gas Index will be as reported in Canadian Gas Price Reporter Natural Gas Market Report (in US dollars). The fuel price component used will be bound between 90% and 110% of the natural gas price forecast but based on the then current gas price.

The price paid per MWh will be:

$$\begin{aligned} P_{\text{Peak}} &= GP_{\text{DB}} * \text{HR} / 1,000 / (1 - \text{Losses}) + \text{VFG} + C \\ P_{\text{Off}} &= GP_{\text{DB}} * \text{HR} / 1,000 / (1 - \text{Losses}) + \text{VFG} \end{aligned}$$

Under the Deadband method, the Company will pay Seller the Off-Peak prices for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard Contract; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. All other purchases will be at On-Peak prices. (See Appendix 1, the Standard Contract for defined terms.)

(M)

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)  
MARKET BASED PRICE OPTIONS (Continued)

**3) Index Gas Price Option**

The Index Gas Price Option is the simple average of the First of Month gas indices for Sumas and AECO trading hubs used in establishing the Avoided Costs. The Sumas Gas Index will be as reported in Platts Inside FERC's Gas Market Report. The AECO Gas Index will be as reported in the Canadian Gas Price Reporter Natural Gas Market Report (in US dollars).

The price paid per MWh will be:

$$\begin{aligned} P_{\text{Peak}} &= GP_{\text{MI}} * \text{HR} / 1,000 / (1 - \text{Losses}) + \text{VFG} + \text{C} \\ P_{\text{Off}} &= GP_{\text{MI}} * \text{HR} / 1,000 / (1 - \text{Losses}) + \text{VFG} \end{aligned}$$

Under the Index Gas Price, the Company will pay Seller the Off-Peak Prices for: (a) for all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard Contract; (d) for Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. All other purchases will be at On-Peak prices. (See Appendix 1, the Standard Contract for defined terms.)

**4) Mid C Index Price Option**

Under this option, prices paid per MWh will be based on the DJ-Mid-C Firm Index plus 0.211 ¢ per kWh for wholesale wheeling.

(D)

**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)**  
**MARKET BASED PRICE OPTIONS (Continued)**

Table 5 contains the gas pricing components for Option 1 (Fixed Price Option) and Option 2 (Deadband Index Gas Price Option).

<b>TABLE 5</b>												
<b>Forecasted Gas Price - GP<sub>F</sub> (\$/MMBTU) - Without Transportation</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>
2015	5.51	5.48	5.32	5.01	5.00	5.02	5.05	5.09	5.11	5.18	5.34	5.53
2016	5.96	5.92	5.75	5.43	5.42	5.45	5.49	5.53	5.55	5.62	5.79	5.99
2017	5.95	5.96	5.91	5.85	5.88	5.94	6.02	6.08	6.11	6.22	6.51	6.93
2018	6.41	6.42	6.36	6.30	6.33	6.40	6.48	6.55	6.58	6.70	7.02	7.46
2019	6.78	6.79	6.73	6.66	6.70	6.77	6.85	6.92	6.95	7.08	7.42	7.89
2020	7.16	7.17	7.10	7.03	7.07	7.14	7.24	7.31	7.34	7.48	7.83	8.33
2021	7.52	7.53	7.46	7.38	7.43	7.50	7.60	7.68	7.71	7.86	8.23	8.75
2022	8.03	8.04	7.97	7.89	7.93	8.01	8.12	8.20	8.24	8.39	8.79	9.34
2023	8.56	8.57	8.49	8.41	8.45	8.54	8.65	8.74	8.78	8.94	9.37	9.96
2024	9.11	9.12	9.04	8.94	8.99	9.09	9.21	9.30	9.34	9.51	9.96	10.60
2025	9.68	9.69	9.60	9.50	9.55	9.65	9.78	9.88	9.92	10.11	10.58	11.25
2026	9.85	9.87	9.78	9.67	9.73	9.83	9.96	10.06	10.11	10.29	10.78	11.46
2027	10.03	10.05	9.96	9.85	9.91	10.01	10.14	10.24	10.29	10.48	10.98	11.67
2028	10.22	10.23	10.14	10.03	10.09	10.20	10.33	10.43	10.48	10.67	11.18	11.89
2029	10.41	10.42	10.32	10.22	10.28	10.39	10.52	10.62	10.67	10.87	11.38	12.11
2030	10.60	10.61	10.51	10.41	10.47	10.58	10.71	10.82	10.87	11.07	11.59	12.33

(C)

(C)



**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)**  
**MARKET BASED PRICE OPTIONS (Continued)**

Table 7 represents the variable C in the formulas for Option 2 (Deadband Index Gas Price Option) and Option 3 (Index Gas Price Option).

<b>TABLE 7</b>												
<b>Capacity Value - C (\$/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>
2015	49.63	49.63	49.63	49.63	49.63	49.63	49.63	49.63	49.63	49.63	49.63	49.63
2016	50.39	50.39	50.39	50.39	50.39	50.39	50.39	50.39	50.39	50.39	50.39	50.39
2017	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64
2018	52.42	52.42	52.42	52.42	52.42	52.42	52.42	52.42	52.42	52.42	52.42	52.42
2019	53.39	53.39	53.39	53.39	53.39	53.39	53.39	53.39	53.39	53.39	53.39	53.39
2020	54.20	54.20	54.20	54.20	54.20	54.20	54.20	54.20	54.20	54.20	54.20	54.20
2021	55.37	55.37	55.37	55.37	55.37	55.37	55.37	55.37	55.37	55.37	55.37	55.37
2022	56.39	56.39	56.39	56.39	56.39	56.39	56.39	56.39	56.39	56.39	56.39	56.39
2023	57.61	57.61	57.61	57.61	57.61	57.61	57.61	57.61	57.61	57.61	57.61	57.61
2024	58.30	58.30	58.30	58.30	58.30	58.30	58.30	58.30	58.30	58.30	58.30	58.30
2025	59.56	59.56	59.56	59.56	59.56	59.56	59.56	59.56	59.56	59.56	59.56	59.56
2026	60.66	60.66	60.66	60.66	60.66	60.66	60.66	60.66	60.66	60.66	60.66	60.66
2027	61.77	61.77	61.77	61.77	61.77	61.77	61.77	61.77	61.77	61.77	61.77	61.77
2028	62.91	62.91	62.91	62.91	62.91	62.91	62.91	62.91	62.91	62.91	62.91	62.91
2029	64.07	64.07	64.07	64.07	64.07	64.07	64.07	64.07	64.07	64.07	64.07	64.07
2030	65.25	65.25	65.25	65.25	65.25	65.25	65.25	65.25	65.25	65.25	65.25	65.25

(C)

(C)



**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 Contract:

- 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 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 his/her 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.

(M)

(M)

**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.

(M)  
(C)  
(C)

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE THE STANDARD RATES AND STANDARD CONTRACT**

A QF will be eligible to receive the standard rates and Standard Contract 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.

**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. A unit of Oregon local government may also be a "passive investor" 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 the standard rates and Standard Contract 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 the standard rates and standard contract is sought.

(M)

**SCHEDULE 201 (Concluded)**

(T)

DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER  
PRODUCTION FACILITY ELIGIBLE TO RECEIVE THE STANDARD RATES  
AND STANDARD CONTRACT (Continued)

(M)

**Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to the standard rates and Standard Contract 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 the standard rates and Standard Contract so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection contract requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard Contract.

**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 the standard rates and Standard Contract. Any dispute concerning a QF's entitlement to the standard rates and Standard Contract will be presented to the Commission for resolution.

(T)

**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. Contracts entered into pursuant to this schedule will not terminate prior to the Standard or negotiated contract's termination date if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed.

**TERM OF AGREEMENT**

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

(M)

# 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 (OMB Control No. 1902-0075, expiration 05/31/2013). 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; 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 5/31/2013

**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). Power Resources Cooperative		
<b>1b</b> Applicant street address 711 NE Halsey		
<b>1c</b> City Portland	<b>1d</b> State/province Oregon	
<b>1e</b> Postal code 97232	<b>1f</b> Country (if not United States)	<b>1g</b> Telephone number (503) 288-1234
<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>8/1/95</u> and to begin operation on <u>10/1/95</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 Name of contact person</b> R. Erick Johnson		<b>2b Telephone number</b> (503) 744-3300	
	<b>2c Which of the following describes the contact person's relationship to the applicant? (check one)</b> <input type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant <input type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter <input checked="" type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter			
	<b>2d Company or organization name (if applicant is an individual, check here and skip to line 2e)</b> <input type="checkbox"/> R. Erick Johnson PC			
	<b>2e Street address (if same as Applicant, check here and skip to line 3a)</b> <input type="checkbox"/> 4500 SW Kruse Way, Suite 100			
	<b>2f City</b> Lake Oswego		<b>2g State/province</b> Oregon	
	<b>2h Postal code</b> 97035		<b>2i Country (if not United States)</b>	
	Facility Identification and Location	<b>3a Facility name</b> Coffin Butte Project		
<b>3b Street address (if a street address does not exist for the facility, check here and skip to line 3c)</b> <input type="checkbox"/> 29160 Coffin Butte Road				
<b>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.</b>  Longitude <input type="checkbox"/> East (+) _____ degrees                      Latitude <input type="checkbox"/> North (+) _____ degrees <input type="checkbox"/> West (-) _____ degrees <input type="checkbox"/> South (-) _____ degrees				
<b>3d City (if unincorporated, check here and enter nearest city)</b> <input type="checkbox"/> Corvallis		<b>3e State/province</b> Oregon 97330		
<b>3f County (or check here for independent city)</b> <input type="checkbox"/> Benton		<b>3g Country (if not United States)</b>		
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	<b>4a Identify utility interconnecting with the facility</b> Consumers Power Inc., Philomath, Oregon			
	<b>4b Identify utilities providing wheeling service or check here if none</b> <input type="checkbox"/> Consumers Power Inc.; Bonneville Power Administration			
	<b>4c Identify utilities purchasing the useful electric power output or check here if none</b> <input type="checkbox"/> Portland General Electric or Pacific Power Division of PacifiCorp (tbd)			
<b>4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none</b> <input type="checkbox"/> Consumers Power Inc.; Bonneville Power Administration				

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) Power Resources Cooperative	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____ %
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) _____	_____ %
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:

Power Resources Cooperative

Energy Input

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

<input checked="" type="checkbox"/> Biomass (specify)	<input type="checkbox"/> Renewable resources (specify)	<input type="checkbox"/> Geothermal
<input checked="" 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 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.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	5,660 kW
7b 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.	0 kW
7c Electrical losses in interconnection transformers.	0 kW
7d Electrical losses in AC/DC conversion equipment, if any	0 kW
7e 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	0 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	0.0 kW
7g Maximum net power production capacity = 7a - 7f	5,660.0 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 Coffin Butte Project is a 5660 kW gross output landfill gas (methane) fueled facility located near Corvallis, Oregon at the Coffin Butte Landfill. The prime movers (five in all) are three Caterpillar 3516 internal combustion engines rated at 820kW (Phase I, commercial operations began October 1, 1995) and two Caterpillar 3520 internal combustion engines rated at 1600kW (Phase II, commercial operations began January 1, 2008). All five units operate 24/7 and have maintained a 97% annual capacity factor. The landfill gas is extracted from the gas collection system via two large blowers and then combusted as the fuel for the engines. No other fuel is used. The generators are rated to produce 4,160 volts output, and an on-site step up transformer increases the voltage to 12,470 volts at the distribution side. The energy output is delivered to the Consumers Power system at that point. Metering is on the 12,470 volt line that connects to the Consumers Power system. Losses to that point are negligible.

Station service for the facility is currently purchased from Consumers Power. Station service load is comprised primarily of fans, blowers, and radiators. For a PURPA sale, PRC will obtain wheeling service from Consumers Power to a Bonneville Power Administration (BPA) substation and then point to point transmission service from BPA to an investor-owned public utility. Transmission Losses on the BPA system are 1.9% to reach the purchasing utility's Balancing Authority Area.

### 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 border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Facility location (city or county, state)</th> <th style="width: 20%;">Root docket # (if any)</th> <th style="width: 30%;">Common owner(s)</th> <th style="width: 20%;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td>QF -</td> <td>_____</td> <td>_____ kW</td> </tr> <tr> <td>2) _____</td> <td>QF -</td> <td>_____</td> <td>_____ kW</td> </tr> <tr> <td>3) _____</td> <td>QF -</td> <td>_____</td> <td>_____ 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 indicated requirement</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="text-align: center;">Requirement</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at make-up water inputs.</td> </tr> </tbody> </table>		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.
		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.																				
<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 indicated requirement</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="text-align: center;">Requirement</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><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; vertical-align: top;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at make-up water inputs.</td> </tr> </tbody> </table>		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.	
	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.

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)	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 %
<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	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 <i>in separate rows</i> .						
	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></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></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></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.

**15b** Indicate the annual average rate of net electrical energy output kW

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

**15d** 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

**15e** Multiply line 15d by 2,544 to convert from hp to Btu/h 0 Btu/h

**15f** Indicate the annual average rate of supplementary energy input from natural gas or oil Btu/h

**15g** 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)





---

## 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.

---