STANDARD CONTRACT POWER PURCHASE AGREEMENT

THIS AGREEMENT, entered into this 11th day, <u>January</u>, 20<u>13</u>, is between <u>City of Gresham</u> ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").

RECITALS

Seller intends to construct, own, operate and maintain a <u>hydroelectric</u> facility for the generation of electric power located in <u>Gresham</u>, <u>Oregon</u> with a Nameplate Capacity Rating of 168 kilowatt ("kW"), as further described in Exhibit B ("Facility"); and

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

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.19, below, from the Facility in accordance with the terms and conditions of this Agreement.

AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

SECTION 1: DEFINITIONS

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

- 1.1. "As-built Supplement" means the supplement to Exhibit B provided by Seller in accordance with Section 4.4 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- 1.3. "Capacity Value" has the meaning provided for in the Tariff (as defined below).
- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable which shall require, among other things, that all of the following events have occurred:
 - 1.5.1. 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 1.5 can be provided by one or more LPEs);
 - 1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.27:
 - 1.5.3. After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial 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;
 - 1.5.4. PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed, all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
 - 1.5.5. 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;
- 1.6. "Contract Price" means the applicable price as selected by Seller in Section 5.
- 1.7. "Contract Year" means each twelve (12) month period commencing at 00:00 hours on January 1 and ending on 24:00 hours on December 31 falling at least partially in the Term of this Agreement.
 - 1.8. "Effective Date" has the meaning set forth in Section 2.1.
- 1.9. "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.

- 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "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 Delivery.
- 1.12. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of PGE's interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.
- 1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.
- 1.15. "Lost Energy 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 higher of the mean Contract Price or the Mean Dow Jones Mid C Index Price mean Contract Price).
- 1.16. "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.

- 1.17. "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.
- 1.18. "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.
- 1.19. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. Net Output does not include any environmental attributes.
 - 1.20. "Off-Peak Hours" has the meaning provided in the Tariff.
 - 1.21. "On-Peak Hours" has the meaning provided in the Tariff.
- 1.22. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.23. "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.
- 1.24. "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.

- 1.25. "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.
- 1.26. "Senior lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.27. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.
- 1.28. "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.
- 1.29. "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.
- 1.30. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.31. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.32. 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 November 30, 2013 Seller shall begin initial deliveries of Net Output; and
 - 2.2.2 By November 30, 2013 Seller shall have completed all requirements under Section 1.5 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 November 30, 2032, up to 20 years from the Effective Date, or the date the Agreement is terminated in accordance with Section 10 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 Municipality duly organized under the laws 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 will design and operate the Facility consistent with Prudent Electrical Practices.
- 3.1.7 Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.

- 3.1.8 Seller warrants that Net Dependable Capacity of the Facility is 168 kW.
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 400,000 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 500,000 kWh of Net Output during each Contract Year ("Maximum Net Output").
- 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 Commission 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 delivered from the Facility at the Point of Delivery.
- 4.2 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller shall 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 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, 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 Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit 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 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 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- 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	X	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 to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence ansing 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, 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 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: METERING

- 8.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.
- 8.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that he purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 8.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment.
- 8.4 To the extent not otherwise provided in the Generation Interconnection Agreement, all of PGE's costs relating to all metering equipment installed to accommodate Seller's Facility shall be borne by Seller.

SECTION 9: BILLINGS, COMPUTATIONS AND PAYMENTS

- 9.1 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, the Generation Interconnection Agreement, and any other agreement related to the Facility between the Parties or otherwise.
- 9.2 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 10: DEFAULT, REMEDIES AND TERMINATION

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

- 10.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
- 10.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within 10 days of notice.
- 10.1.3 Seller's failure to deliver the Minimum Net Output for two consecutive Contract Years.
 - 10.1.4 If Seller is no longer a Qualifying Facility.
- 10.1.5 Failure of PGE to make any required payment pursuant to Section 9.1.
- 10.2 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 10.1.3 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 10 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 10.3 If this Agreement is terminated as provided in this Section 10 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.
- 10.4 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. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.
- 10.5 In the event PGE terminates this Agreement pursuant to this Section 10, 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.
- 10.6 Sections 10.1 10.3 10.4 10.5, 11, and 20.2 shall survive termination of this Agreement.

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 Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.
- 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 Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.
- 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, it 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

Appendix 1, Schedule 201 Standard Contract Power Purchase Agreement Effective March 7, 2007

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 200kW 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 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.

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.

Appendix 1, Schedule 201 Standard Contract Power Purchase Agreement Effective March 7, 2007

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10	Sel	

Alan Johnston

City of Gresham WWTP 20015 NE Sandy Blvd. Gresham, OR 97230

with a copy to:

Leif Elgethun

HydroGen LLC/Site Based Energy LLC

PO Box 3432

Hailey, Idaho 83333

with a copy to:

Gary Fievez

Matrix Group 360 PO Box 48700 Spokane, WA 99228

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.

CITY OF GRESHOM

Title: Oberat

PGE

Name

Approved as to Form

City Attorney's Office

PGE Business Terms Credit Legal Risk Mgt.

16

Appendix 1, Schedule 201 Standard Contract Power Purchase Agreement Effective March 7, 2007

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- 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

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:

EXHIBIT A 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.

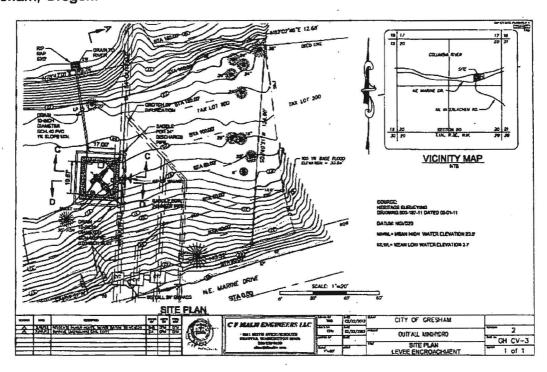
The Seller wishes to use a Minimum Net Output equal to seventy-five (75%) percent of annual Net Output equal to 400,000 kWh x 75% = 300,000 kWh.

EXHIBIT B

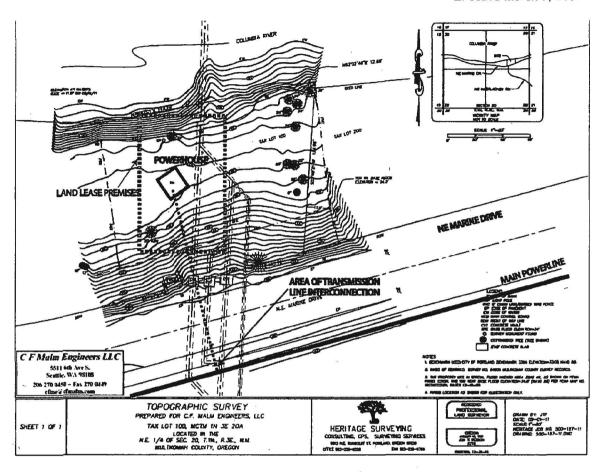
DESCRIPTION OF SELLER'S FACILITY

SITE PLAN

The proposed Wastewater Treatment Plant Outfall Hydroelectric Project will consist of a new 20-foot-long intake pipeline; a new 16-foot-wide, 12-foot-long concrete powerhouse containing a multiple turbine/generator unit with an installed capacity of 168 kW, a new 20-foot-long discharge pipeline, and appurtenant facilities. Facility to be located on City's property located at Section 20, Township 1N, Range 3E, Tax Lot 200 in Gresham, Oregon.



Appendix 1, Schedule 201 Standard Contract Power Purchase Agreement Effective March 7, 2007



Project Summary

Systems Specifications:

Project Size:

168.0 kW

Characteristics:

Micro Hydroelectric

Annual Output:

400,000 kWh Annually

400 Megawatt-hours annually

8,000 Megawatt-hours / 20 years

Location:

Northwest Marine Dr., Gresham, OR

Start of Operation: May 2013

System Details:

Turbines:

(4) 22 kW Turbines and (1) 80kW Turbine in parallel

Generator:

Marathon SB317

Relay:

SEL700GT PF00212

Transformer:

(1) Transformer provided by PGE

EXHIBIT C REQUIRED FACILITY DOCUMENTS

- Seller's Generation Interconnection Agreement, Application Submitted November 2012 to
 PGE
- FERC License: Project Number 13466-001, Issued October 18, 2011, Attached
- City of Gresham Type II Community Service Use Permit, Issued December 30, 2011,
 Attached



Small Generator Facility Interconnection Tier 2, Tier 3 or Tier 4 Interconnection Application (For Small Generator Facilities with Electric Nameplate Capacities of 10 MW or Less)

Applicant Contact Information:		
Name: City of Gresham, Oregon		
Mailing Address: 20015 NE Sandy Blvd.		
City: Gresham	State: Oregon	Zip Code: ⁹⁷²³⁰
Telephone (Daytime): 503-618-2431	(Evening): 503-618	-2525
City: Gresham Telephone (Daytime): 503-618-2431 E-Mail Address: alan.johnston@greshamore	gon.gov	
Site Location for Small Generator Fa	cility (if different fron	n previous):
Street Address/GPS Coordinates: N 45.5	558, W 122.459	
	_ State: Oregon	Zîp Code:
Electric Service Information for Site I	ocation:	*
Capacity:(Amps) Voltage	:(Volts)	
Type of Service: Single-Phase		
Estimated Commissioning Date (if know	/n):	
System Installer:	1	
Name: Aurora Power & Engineering	e e	
Mailing Address: 5989 W. State Street		
City: Boise Telephone (office): 208-3698-0947 Facsimile Number: 866-65-94	State. Idaho	Zin Code: 83703
Telephone (office): 208-3698-0947	_ Ctate:	
Faccimile Number 866-65-94	_ (Cell)	
racsimile Number.	_ E-Iviali Address: _	
• • • • • • • • • • • • • • • • • • •		
Consulting Engineer (if applicable): Name: HydroGen Energy, LLC	~	
0.000 (10) [2.00]		
Mailing Address: P.O. Box 3331	,	
City: Post Falls		Zip Code: 83877
Telephone (office):		
Facsimile Number:	E-Mail Address: pf	hydro@gmail.com

Requested Procedure Under Which to Evaluate Interconnection Request1:

Please in	ndicate below which review procedure applies to the interconnection request.
4	Tier 2 - Certified interconnection equipment with an aggregate Electric Nameplate Capacity of 2 MW or less. Indicate type of certification below. The application fee amount is \$500.
	☑ <u>Lab Tested</u> - system equipment tested to IEEE 1547.1 and other specified standards by a nationally recognized testing laboratory and is appropriately labeled.
	Field Tested* – an identical small generator facility has been approved by an Oregon utility under a Tier 4 study review process within the prior 36 months of the date of this interconnection request.
	Tier 3 – Interconnected facility will not export power beyond point of interconnection. The Electric Nameplate Capacity rating may be 50 kW or smaller, if connecting to an area network or 10 MW or smaller, if connecting to a radial distribution feeder. The application fee amount is \$1,000.
ч.	Tier 4 – Electric Nameplate Capacity rating is 10 MW or smaller and the Small Generator Facility does not qualify for a Tier 1, Tier 2 or Tier 3 review or has been reviewed but not approved under a Tier 1, Tier 2 or Tier 3 review. Application fee amount is \$1,000.
sa	Note: Descriptions for interconnection review categories do not list all criteria that must be utisfied. For a complete list of criteria, please refer to PUC Rule OAR 860, Division 082, Rule).

Field Tested Equipment:

If the field tested equipment box is checked above, please include with the completed application the following information which will be required for review of Tier 2 field tested small generator facilities:

- A copy of the Certificate of Completion, signed by an Oregon utility that has approved an identical small generator facility for parallel operation.
- A copy of all documentation submitted to the Oregon utility that approved the Small Generator Facility for parallel operation under a Tier 4 study process.
- A written statement by the Applicant indicating that the small generator facility being proposed is identical, except for Minor Equipment Modification, to the one previously approved by an Oregon utility for parallel operation.

If a Tier 2 Application utilizing Field Tested equipment is proposed, the remainder of the application will not be required to be completed.

Small Generator Facility Information: List of lab-certified component(s)/system(s) to be used in the Small Generation Facility. Component/System NRTL Providing Label & Listing 1 Marathon electric Primeline Induction Generator 2 Scweitzer SEL 700 GT Intertie Protection Relay Please provide copies of manufacturer brochures or technical specifications **Customer-Owned Transformer Information:** Will Applicant own and maintain transformer? Yes • No. If yes, is it Single-phase 3-phase If 3-phase: Tertiary: Volts Delta Wye Wye Grounded Transformer Impedance % on kVA base Mode of Operation / Energy Source: Proposed Operation Mode QF Other | If QF, FERC "Notice of Self Certification" completed? Yes Energy Source: Solar Wind Hydro Diesel Natural Gas Other Prime Mover Type: Photovoltaic Reciprocating Engine Fuel Cell ✓ Turbine ☐ Other _____ **Energy Production Equipment/Inverter Information:** ☐ Inverter Synchronous ✓ Induction Other Total Electric Nameplate Rating: 168 kW (DC total for inverter-based solar arrays, wind turbines, etc. —or— AC generator capacity) Rated Voltage: 480 Volts Rated Current: 198 **Amps** System Type Tested (Total System): Yes No, attach product literature

Tier 2, Tier 3 or Tier 4 Interconnection Application for Small Generator Facility
Page 3 of 6

I OI SYNCINORIOUS II	iacililes.	*		
Manufacturer:			<u> </u>	
Model No.:	Version No	0.:		
Saturation Curve and	d the Vee Curve (subn	nit copies): 🔲 Salient [☐ Non-Salient	
Torque: lb-ft	Rated RPM:	_		
Field Amperes:	at rated generat	or voltage and current and	PF ove	er-excited
Type of Exciter:				
Locked Rotor Curren	t: Amps		ž.	
Synchronous Speed:	RPM			
Winding Connection:				
Min. Operating Freq.	/Time:			
Generator Connection	n: Delta Wye	☐ Wye Grounded		
Direct-axis Synchron	ous Reactance: (X	d)ohms	*	
Direct-axis Transient	Reactance: (X'd)	ohms		
Direct-axis Sub-trans	ient Reactance: (X	"d)ohms		
For Induction Mach				
Manufacturer: Maratho	on Electric Version No		<u>.</u>	J.
Model No.: 324	Version No	o.: Primeline 324678R1	_	
Locked Rotor Curren	The state of the s		*	
		g Current:Amps		
Rotor Reactance: (XI	r) <u>^{2.724} ohms Reactiv</u>	ve Power Required: 9.1		
Magnetizing Reactan	ice: (Xm) <u>.0272</u> ohms	19.2 VARs (No Load)		
	Rs) <u>.¹⁸¹ </u>	Rs (Full Load)		
Stator Reactance: (>	(s) <u>.¹⁹ </u> ohms			
Short Circuit Reactar	nce: (X" _d)ohms			
Phases: 🗌 Single 🗸] 3-Phase	*		
Frame Size: 324	Design Letter:	Temp. Rise: ⁹	°C.	,

For inverter Based Facility	<u>lles</u> :			
Manufacturer:	Model:	· · · · · · · · · · · · · · · · · · ·		
Rated Voltage:	Volts			
Open Circuit Voltage (if ap)		Volts		
Rated Current:	Amps		•	
Short Circuit Current (if app	olicable):	Amps		
Inverter Information:				
Manufacturer:	Model:			
Electric Nameplate Capaci	y Rated Output:	Amps	Volts	kW
Efficiency:% P	ower Factor:			
Reverse Power Relay Info	ormation: (This section	applies to Tier 3 r	eview only)	
Manufacturer:	Model:			
Electric Nameplate Capaci	y rating:	kVA		

Enclosure Checklist:
✓ Application fee. Make checks payable to Portland General Electric Co.
☐ Enclose FERC "Notice of Self Certification" for QF (if applicable).
☐ Electrical One-Line Diagram (showing complete circuit between generator and proposed point-of-interconnection, including all protective devices, etc.)
Site Plan (documenting generator location, accessibility of lockable disconnect, etc.)
✓ Manufacturer brochures or technical specifications for all lab-tested interconnection/system components to be used in the small generator facility.
Proof of site control (e.g. property tax bill, deed, lease agreement, or other legally binding document proving ownership, leasehold option, or other right to develop small generator facility on-site).
☐ Installation Test Plan attached (if applicable)
☐ For Small Generator Facility with nameplate greater than 3 MW, include communication equipment product sheets, protocol, and design to meet requirements of OAR 860-082-0070(5), Telemetry Requirements.
Applicant Signature: I hereby certify that all of the information provided in this application request form is correct.
Applicant Signature: Part & Date: 11/15/12 Printed Name: Part & Cicley Title (if applicable): Www Services Manager
Printed Name: Part Edicley Title (if applicable): Www Services Manager
Application Fee included: \$ 500 = Approved as to Form
al Queller
City Attorney's Office
PGE Acknowledgement:
I hereby acknowledge the receipt of a Interconnection Request and Application Fee.
Approval for a Tier 2, Tier 3 or Tier 4 Small Generator Facility interconnection is contingent upon the Applicant's Small Generator Facility passing the screens and completing the review process set forth in the PUC rules found in OAR 860, Division 082 and is not granted by the PGE Representative's signature on this Application Form.
PGE Representative Signature: Date:
Printed Name:

137 FERC ¶ 62,053 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

City of Gresham

Project No. 13466-001

ORDER GRANTING EXEMPTION FROM LICENSING (CONDUIT)

(Issued October 18, 2011)

Introduction

1. On May 6, 2011, and as supplemented June 28, 2011, and July 26, 2011, the City of Gresham (applicant or exemptee) filed an application to exempt the proposed 50-kilowatt (kW) City of Gresham Wastewater Treatment Plant Outfall Hydroelectric Project from the licensing requirements set forth in Part I of the Federal Power Act (FPA). The small conduit hydropower project would be located at the applicant's Wastewater Treatment Plant, in Multnomah County, Oregon. The project would not occupy any federal lands. As discussed below, I am issuing a conduit exemption for the project.

Project Description

2. The proposed Wastewater Treatment Plant Outfall Hydroelectric Project would consist of a new 20-foot-long intake pipeline; a new 16-foot-wide, 12-foot-long concrete powerhouse containing a single turbine/generator unit with an installed capacity of 50 kW; a new 20-foot-long discharge pipeline; and appurtenant facilities. The applicant plans to sell the generated energy to Portland General Electric under a power sales

¹ Under Part I of the FPA, 16 U.S.C. §§ 792-823 (2006), the Commission issues licenses to non-federal interests authorizing the construction, operation, and maintenance of water power projects on navigable waters of the United States, on federal lands, and on streams subject to Congress' jurisdiction. Pursuant to section 30 of the FPA, 16 U.S.C. § 823, the Commission is authorized to exempt from the licensing requirements of Part I of the FPA any facility (not including a dam or other impoundment) that is constructed, operated, or maintained for the generation of electric power and is located on non-federal lands and uses for generation only the hydroelectric potential of a manmade conduit, which is operated for the distribution of water for agricultural, municipal, or industrial consumption (and not primarily for the generation of electricity).

agreement. The applicant estimates the project would have an average annual generation of 413 megawatt-hours.

- 3. The Wastewater Treatment Plant Outfall Hydroelectric Project would be located on the applicant's existing wastewater treatment facilities. The applicant's wastewater treatment plant discharges treated water into a flow metering structure, where it enters three parallel pipes with diameters of 48, 42, and 27 inches. The three parallel pipes merge into a single 150-foot-long, 54-inch-diameter outfall diffuser, which discharges the treated water into the Columbia River.
- 4. The proposed City of Gresham Wastewater Treatment Plant Outfall Hydroelectric Project would divert water from the existing 48-inch-diameter outfall pipe through a new 20-foot-long intake pipe that would deliver the water to a new 16-foot-wide, 12-foot-long concrete powerhouse, containing one 50 kW generating unit. The water would be discharged through a new 20-foot-long pipe back into the existing 48-inch-diameter outfall pipe, where the water would continue to the existing 54-inch-diameter outfall diffuser on the applicant's wastewater treatment system.

Background

5. On August 3, 2011, the Commission issued public notice of the conduit exemption application, establishing September 2, 2011, as the deadline for filing comments and motions to intervene. On August 16, 2011, Oregon Department of Fish and Wildlife (Oregon DFW) filed terms and conditions and a timely notice of intervention. On August 16, 2011, the Oregon Department of Environmental Quality (Oregon DEQ) filed a timely notice of intervention. On September 2, 2011, the U.S. Department of the Interior (Interior) stated that it did not have comments regarding the proposed project. No other comments or motions to intervene were received in response to the notice.

Section 30(c) Conditions

6. Section 30(c) of the FPA³ requires the Commission to include in its conduit exemptions such terms and conditions as may be prescribed by federal and state fish and wildlife agencies to prevent loss of, or damage to, fish and wildlife resources and to otherwise carry out the purposes of the Fish and Wildlife Coordination Act. Standard

² By filing timely notices of intervention, Oregon DFW and Oregon DEQ are parties to this proceeding according to Rule 214(a)(2) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(a)(2) (2011).

³ 16 U.S.C. § 823a(c) (2006).

⁴ 16 U.S.C. §§ 661-667e (2006).

article 2 of this exemption requires compliance with the terms and conditions prepared by federal or state fish and wildlife agencies to protect fish and wildlife resources. On August 16, 2011, the Oregon DFW filed two terms and conditions regarding potential harm to fish and wildlife resources under emergency or unexpected situations and also regarding its reserved authority to impose future conditions as necessary for the protection of fish and wildlife resources. The section 30(c) conditions are set forth in Appendix A of this order and are incorporated into the exemption by Ordering Paragraph (A).

Environmental Review

- 7. Pursuant to section 380.4(a)(14) of the Commission's regulations, ⁵ Commission staff is not required to prepare an environmental assessment or an environmental impact statement for conduit exemption applications. Nonetheless, I have considered the environmental information in the exemption application and other pertinent information, and find that the construction and operation of the project would not cause any long-term, adverse impacts to terrestrial resources, land use, water quantity or quality, aquatic resources, threatened and endangered species, cultural and historical resources, aesthetics, or recreational resources.
- 8. Some minor, short term effects will occur during installation of the pipeline and powerhouse on terrestrial resources in the immediate project area. The predominant vegetation at the project site is a combination of non-native grass, non-native trees, and gravel. The construction of the conduit project would involve digging a ditch along the length of the penstock and pouring a foundation for the powerhouse, and excavating and backfilling to install a discharge tube back into the irrigation works. Disturbance in the area will be minor, since it would occur in an area previously disturbed by the original construction of the wastewater treatment plant.
- 9. In comments dated July 8, 2010, included within the applicant's exemption application, the Yakama Nation Tribal Council (Yakama Nation) raised concerns regarding the potential effects of the project on total dissolved gases and temperature of the discharge water. The Yakama Nation proposed that the applicant conduct

⁵ 18 C.F.R. § 380.4(a)(14) (2011).

⁶ Located in Washington State, the Yakama Nation is a federally-recognized tribe that has entered into a treaty with the United States. While the project is not located on tribal land, the treaty provides for fishing by tribal members at usual and customary places, including portions of the Columbia River, which hosts runs of anadromous species such as Chinook, coho, sockeye, chum, and pink salmon, as well as steelhead trout. The Yakama Nation's concerns seem to be centered on the potential effect of the project on the migration path of species it fishes.

monitoring for total dissolved gases and water temperature in order to assess what, if any, impacts the proposed project would have on these water quality parameters. On March 11, 2011, applicant stated that it will explore monitoring plans proposed by the Yakama Nation during the design phase of the project, and the applicant also stated that it is willing to share water quality monitoring data on water leaving the Wastewater Treatment Plant. On April 22, 2011, the Yakama Nation requested to consult informally with applicant during the design phases of the project and it also requested that applicant perform a good faith effort to evaluate the feasibility of monitoring the previously described water quality parameters.

- 10. Unlike conventional hydropower projects, conduit exemptions utilize existing water conveyance systems and have limited, if any, opportunity to affect water quality during operation. Generally, conduit exemptions do not affect any of the parameters that typically affect water quality at a conventional hydropower project, such as the level of water intake, water quality in the impounded water body, volume of water passing through the system, or the location of discharge.
- 11. As described above, the proposed project would take and return water from a 48-inch outfall pipe where the water then joins water from the 42-inch and 27-inch outfall pipes and enters a larger 54-inch outfall diffuser pipe and is discharged into the Columbia River. The project would not alter the point of discharge. The Yakama Nation expressed concerns that an increase in total dissolved gases could potentially impact fisheries in the Columbia River. Total dissolved gases increase at hydropower projects where air is introduced into the system, for example when spillways discharge water into deep pools or when air is entrapped within the system. These conditions would not exist at the proposed project as it operates essentially as a closed system. The existing volume, depth, and point of discharge from the Wastewater Treatment Plant would remain unchanged by project operations and there would be no opportunity for the project to entrap air, which would potentially cause an increase in dissolved gases, in the system. Therefore, the project is not expected to alter the quality of water leaving the wastewater treatment plant.
- 12. The May 6, 2011 application contained comments from the Oregon Department of Water Resources that concluded that the proposed construction, operation, and maintenance of the project would not have any impacts on water temperature. We agree since water used by the project would not be exposed to the atmosphere and the conveyance through the project system would not increase water temperature by any appreciable amount.⁷

⁷ Although the project will negligibly increase water temperature, we note that the applicant has agreed to continue consultation with the Yakama Nation and examine the feasibility of monitoring the water quality impacts of the proposed project.

- 13. Based on the discussion above, no water quality monitoring is necessary and additional measures to protect water quality at the project are not necessary. The monitoring proposed by the Yakama Nation will not be made a condition of this exemption. However, the applicant may continue to consult with the Yakama Tribe and conduct the monitoring as it deems appropriate.
- 14. Accordingly, approval of the proposed conduit exemption would not be a major federal action significantly affecting the quality of the human environment.

Historic Properties Management

15. As a result of its pre-filing consultation, the applicant received a letter dated July 8, 2010 (and included within the applicant's exemption application), from the Oregon Parks and Recreation Department's State Historic Preservation Officer (Oregon SHPO) stating that it determined that there were no historic properties affected on above-ground historic resources. To protect below-ground historic resources, the applicant proposed professional archeological monitoring if any ground disturbing activities uncover a cultural resource. While all ground disturbing activities will be conducted in previously disturbed areas and are not expected to uncover any cultural resources, this measure is reasonable to protect cultural resources in the event of an unanticipated discovery. Therefore, article 15 is included, which requires the exemptee to cease construction activities and to initiate consultation with the SHPO and any affected Tribe if archeological or historic remains are discovered during construction

Other Issues

16. To ensure that construction of the proposed project will not affect the operation or integrity of the City of Gresham Waste Water Treatment Plant's distribution outfall, article 14 requires the exemptee to consult with the City of Gresham Waste Water Treatment Plant in preparation of the project's plans and specifications to be filed with the Commission for approval before the start of any construction. Construction and operation of the proposed hydroelectric project shall be secondary to the City of Gresham Waste Water Treatment activities.

Administrative Conditions

1. Annual Charges

17. The Commission collects annual charges from exemptees for the administration of its hydropower program. Under the regulations currently in effect, projects with an installed capacity of 1,500 kW or less, like this project, are not assessed an annual charge, as explained in article 7.

2. Start of Construction

18. Standard article 3 provides that the Commission may revoke the exemption if construction of the generating facilities has not begun in two years or is not completed within four years of the date this exemption is issued. Article 8 states that the Commission may terminate the exemption if construction of any other project works described in this exemption has not begun within two years or is not completed within four years of the date this exemption is issued.⁸

3. Exhibit F and G Drawings

- 19. Although the Exhibit F and G drawings filed on June 28, 2011, and July 26, 2011, are being approved, the Commission requires exemptees to file sets of approved project drawings on microfilm and electronic file formats. Article 9 requires the exemptee to file the Exhibit F and G drawings approved in Ordering Paragraph (C) in microfilm and electronic file formats.
- 20. Under Article 10, the exemptee is required, within 90 days of completion of construction of the project facilities, to file revised Exhibit F and G drawings showing the as-built conditions.

4. Operation and Maintenance

21. Ensuring that the exempted project is fit for use is an important public interest function of the Commission. Article 11 states that if the exemptee causes or allows essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, the Commission will deem it the intent of the exemptee to surrender the exemption.

5. Exemptee Liability

22. Section 10(c) of the FPA provides that licensees, and not the United States, are liable for "damages occasioned to the property of others by the construction, maintenance, or operation of the project works" To clarify that exemptees would be similarly liable, article 12 states that the exemptee is liable for damages to the property of others.

⁸ The start-of-construction deadline in standard article 3 (contained in the attached E-1) refers to the project's generating facilities. The deadline in special article 8 applies to on-the-ground construction of other project facilities.

⁹ 16 U.S.C. § 803(c) (2006).

6. Property Rights

23. Pursuant to 18 C.F.R. § 4.31(b)(2), an applicant for a conduit exemption is required to demonstrate that, at the time it files its exemption application, it has all real property interests in any lands required for the construction and operation of the project. The application filed on May 6, 2011, and as supplemented June 28, 2011, and July 26, 2011, contains documentation that the applicant has the necessary property rights to develop and operate the project. However, because an exemption is issued in perpetuity, article 13 reserves the Commission's authority to revoke the exemption if in the future the exemptee fails to maintain sufficient rights to comply with the terms and conditions of the exemption.

7. Review of Final Plans and Specifications

24. To ensure that the exemptee is constructing and operating a safe and adequate project, article 14 requires the exemptee to file final contract drawings and specifications for the pertinent features of the project for Commission approval prior to commencing construction.

The Director orders:

- (A) The City of Gresham Wastewater Treatment Plant Outfall Hydroelectric Project is exempted from the licensing requirements of Part I of the Federal Power Act, subject to the conditions submitted by the Oregon Department of Fish and Wildlife, under section 30(c) of the FPA, as those conditions are set forth in Appendix A to this order, and the articles specified below.
 - (B) The project consists of:
- (1) All lands to the extent of the exemptee's interests in those lands, enclosed by the project boundary shown by Exhibit G-2 filed on July 26, 2011.
- (2) The following project works: (1) one new 20-foot-long intake pipe (2) a new 16-foot-wide, 12-foot-long concrete powerhouse; (3) a new single turbine/generator unit with an installed capacity of 50 kilowatts; (4) a new 20-foot-long discharge pipeline; and (5) appurtenant facilities. The project works generally described above are more specifically shown and described by those portions of Exhibits A, F, and G below:

Exhibit A: Exhibit A, pages 1 through 3 filed on June 28, 2011.

Exhibit F: The following Exhibit F drawings filed on June 28, 2011.

¹⁰ 18 C.F.R. § 4.31(b)(2) (2011).

Project No. 13466-001

Exhibit No.	FERC Drawing No.	Drawing Title
F-1	P-13466-1	Preliminary Site Plan
F-2	P-13466-2	Preliminary Powerhouse Details
F-3	P-13466-3	Preliminary Standpipe Bypass Details

Exhibit G: The following Exhibit G drawings filed on July 26, 2011.

Exhibit No.	FERC Drawing No.	Drawing Title
G-I	P-13466-4	Project Location
G-2	P-13466-5	Project Boundary

- (3) All of the structures, fixtures, equipment, or facilities used to operate or maintain the project, or other rights that are necessary or appropriate in the operation or maintenance of the project.
- (C) The Exhibits A, F, and G described above are approved and made part of the exemption.
- (D) This exemption is also subject to the articles set forth in Form E-1 entitled "Standard Terms and Conditions of Exemption from Licensing" (attached), and the following additional articles:

Article 7. Administrative Annual Charges. The exemptee shall pay the United States annual charges, effective the date of commencement of project operation, as determined in accordance with the provisions of the Commission's regulations in effect from time to time, for the purpose of reimbursing the United States for the cost of administration of the Commission's hydropower program. The authorized installed capacity for that purpose is 50 kilowatts. Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kilowatts will not be assessed annual charges.

Article 8. Start of Construction. The Commission may terminate this exemption if actual construction of any proposed or required project works has not begun within two

years or has not been completed within four years from the issuance date of the exemption. If an exemption is terminated under this article, the Commission will not accept from the prior exemption holder a subsequent application for exemption from licensing for the same project within two years of the termination.

Article 9. Exhibit Drawings. Within 90 days of the date of issuance of this order, the exemptee shall file the approved exhibit drawings in aperture card and electronic file formats, as described below.

(a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Project-Drawing Number (i.e., P-13466-1 through P-13466-5) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., G-1, etc.), Drawing Title, and date of this exemption shall be typed on the upper left corner of each aperture card. See Figure 1.

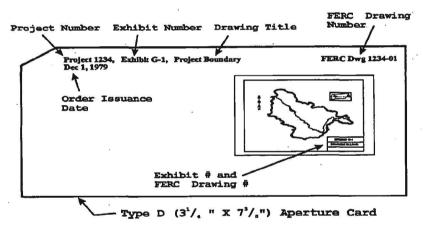


Figure 1 Sample Aperture Card Format

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections Portland Regional Office.

(b) The exemptee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections Portland Regional Office. Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this exemption, and

file extension in the following format [e.g., P-13466-5, G-2, Project Boundary Map, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file FILE TYPE - Tagged Image File Format, (TIFF) CCITT Group 4 RESOLUTION - 300 dpi desired, (200 dpi min) DRAWING SIZE FORMAT - 24" X 36" (min), 28" X 40" (max) FILE SIZE - less than 1 MB desired

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points (i.e., latitude and longitude coordinates, or state plane coordinates). The points must be arranged in a triangular format for GIS georeferencing the project boundary drawing to the polygon data, and must be based on a standard map coordinate system. The spatial reference for the drawing (i.e., map projection, map datum, and units of measurement) must be identified on the drawing and each reference point must be labeled. In addition, each project boundary drawing must be stamped by a registered land surveyor.

(c) The exemptee shall file two separate sets of the project boundary data in a georeferenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or a similar GIS format) with the Secretary of the Commission, ATTN: OEP/DHAC. The filing shall include both polygon data and all reference points shown on the individual project boundary drawings. A single electronic boundary polygon data file is required for the project boundary. Depending on the electronic file format, the polygon and point data can be included in a single file with multiple layers. The georeferenced electronic boundary data file must be positionally accurate to ±40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. The file name(s) shall include: FERC Project Number, data description, date of this exemption, and file extension in the following format [P-13466, boundary polygon/or point data, MM-DD-YYYY.SHP]. The data must be accompanied by a separate text file describing the spatial reference for the georeferenced data: map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this exemption, and file extension in the following format [P-13466, project boundary metadata, MM-DD-YYYY.TXT].

Article 10. As-built Exhibit F and G Drawings. The exemptee shall file, within 90 days from completion of construction of the subject facilities, revised Exhibit F and G drawings showing the as-built conditions.

Article 11. Operation and Maintenance. The Commission may determine that the exemptee has impliedly surrendered this exemption if essential project property is

removed or destroyed or becomes unfit for use, without adequate replacement; or if the project is abandoned or good faith project operation or maintenance is discontinued; or if the exemptee refuses or neglects to comply with the terms of the exemption and the lawful orders of the Commission.

- Article 12. Liability. The exemptee shall be liable for all damages occasioned to the property of others by the construction, operation, or maintenance of the project works or works appurtenant or accessory thereto, constructed under this exemption and in no event shall the United States be liable therefore.
- Article 13. Property Rights. The Commission reserves the right to require the exemptee to gain additional property rights, if such rights become necessary to develop, operate, or maintain the project or to achieve compliance with the terms and conditions of the exemption. The Commission may revoke this exemption if, at any time, the exemptee does not hold sufficient property rights in the land or project works necessary to develop, maintain, and operate the project.
- Article 14. Contract Drawings and Specifications. The exemptee shall, at least 60 days prior to the start of construction, submit one copy to the Commission's Portland Regional Office Director and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the final contract drawings and specifications prepared in consultation with the City of Gresham's wastewater treatment plant. The Commission may require changes in the plans and specifications to assure a safe and adequate project. The exemptee shall not start any construction activities before getting a prior authorization from the Commission's Portland Regional Office.
- Article 15. Archeological and Historical Properties Management. If any archeological or historic remains are discovered during construction, the exemptee shall: (1) cease work at the site immediately and (2) consult with the Oregon State Historic Preservation Officer and any affected Tribes that may attach religious or cultural significance to the discovered materials to determine if the remains warrant a recovery effort or if the site is eligible for listing on the National Register of Historic Places.

Project No. 13466-001

- 12 -

(E) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2006), and the Commission's regulations at 18 C.F.R. § 385.713 (2011). The filing of a request for rehearing does not operate as a stay of the effective date of this exemption, or of any other date specified in this order. The exemptee's failure to file a request for rehearing shall constitute acceptance of this order.

William Guey-Lee, Chief Engineering Resources Branch Division of Hydropower Administration and Compliance

E-1 Form Standard Terms and Conditions of Exemption from Licensing 18 C.F.R. § 4.94 (2011)

Any exemption granted under § 4.93 of the Commission's regulations, 18 C.F.R. § 4.93 (2011), for a small conduit hydroelectric facility is subject to the following standard terms and conditions:

Article 1. The Commission reserves the right to conduct investigations under sections 4(g), 306, 307, and 311 of the Federal Power Act with respect to any acts, complaints, facts, conditions, practices, or other matters related to the construction, operation, or maintenance of the exempt facility. If any term or condition of the exemption is violated, the Commission may revoke the exemption, issue a suitable order under section 4(g) of the Federal Power Act, or take appropriate action for enforcement, forfeiture, or penalties under Part III of the Federal Power Act.

Article 2. The construction, operation, and maintenance of the exempt project must comply with any terms and conditions that the United States Fish and Wildlife Service and any state fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish and wildlife resources or otherwise to carry out the purposes of the Fish and Wildlife Coordination Act, as specified in Exhibit E of the application for exemption from licensing or in the comments submitted in response to the notice of the exemption application.

Article 3. The Commission may revoke this exemption if actual construction of any proposed generating facilities has not begun within two years or has not been completed within four years from the effective date of this exemption. If an exemption is revoked under this article, the Commission will not accept from the prior exemption holder a subsequent application for exemption from licensing or a notice of exemption from licensing for the same project within two years of the revocation.

Article 4. In order to best develop, conserve, and utilize in the public interest the water resources of the region, the Commission may require that the exempt facilities be modified in structure or operation or may revoke this exemption.

<u>Article 5</u>. The Commission may revoke this exemption if, in the application process, material discrepancies, inaccuracies or falsehoods were made by or on behalf of the applicant.

Article 6. Before transferring any property interests in the exempt project, the exemption holder must inform the transferree of the terms and conditions of the exemption. Within 30 days of transferring the property interests, the exemption holder must inform the Commission of the identity and address of the transferree.

-2-

APPENDIX A OREGON DEPARTMENT OF FISH AND WILDLIFE SECTION 30(C) CONDITIONS OF THE FEDERAL POWER ACT FILED ON AUGUST 16, 2011

- 1. If at any time, unanticipated circumstances or emergency situations arise in which fish or wildlife are being killed, harmed or endangered by any of the project facilities the exemptee shall immediately take appropriate action to prevent further loss. The exemptee shall, within 24 hours, notify the nearest Oregon DFW office and comply with the measures required by Oregon DFW to prevent additional injury or mortality. The exemptee shall notify the Commission as soon as possible but no later than 10 days after each occurrence and inform the Commission as to the nature of the occurrence and the measures taken.
- 2. Oregon DFW may modify or add to these terms and conditions at any time for the protection of fish and wildlife and their habitats.



CITY OF GRESHAM Urban Design & Planning 1333 N.W. Eastman Parkway Gresham, Oregon 97030-3825

STAFF REPORT - TYPE II FINDINGS AND RECOMMENDATIONS

DATE:

December 30, 2011

FROM:

Ken C. Onyima, AICP, Senior City Planner

FILE NUMBER:

CS2 11-26000258

APPLICANT:

Michael Nacrelli, DES City of Gresham

REPRESENTATIVE:

C.F. Malm Engineers LLC (206)-270-0450

LOCATION:

North of Marine Drive at Interlachen Lane

PARCEL DESCRIPTION:

1N3E20A #200

PROPOSAL:

Type II Community Service Use for installation of a small-scale hydropower facility on Waste Water Treatment Plant effluent outfall to the Columbia River. The facility will consist of two structures: an underground powerhouse with turbine/generator and a control structure with a concrete slab and control

panel.

DECISION:

APPROVAL WITH CONDITIONS

EXHIBITS:

A. Vicinity Map

B. Applicant's Narrative Materials & Plans

I. FINDINGS OF FACT

- A. LOCATION The subject property is located along the north side of Marine Drive at Interlachen Lane.
- B. ZONING The subject property is designated Low Density Residential-5 (LDR-5). This district allows community service uses as is proposed.
- C. PROPOSAL This project will install a small-scale hydroelectric facility with related equipment/control cabinet on the effluent discharge pipeline from City of Gresham Waste Water Treatment Plant to the Columbia River. The facility will consist of two structures: an underground powerhouse with turbine/generator and a control structure with concrete slab and control panel. This proposal falls under the provisions of Section 8.0111.J which allows, among other uses, facilities required for the transmission of power and communication.
- D. SITE DESCRIPTION The site is basically rectangular in shape, with a size of 1.29 acres, located north of Marine Drive at Interlachen Lane. The site slopes away from Marine Drive towards the river and overlay districts that include Hillside, Habitat Conservation Area and Flood Plain.

E. SURROUNDING LAND USE/PLAN MAP DESIGNATIONS

North: Columbia River

South: NE Marine Drive. Single-family residential dwellings (LDR-5)

West: Big Eddy Marina, Inc., Single-family residential dwelling (LDR-5)

East: Outside City Limits, City of Fairview

- F. PUBLIC NOTICE AND COMMENTS The City of Gresham Development Planning Division sent notices of the application to surrounding owners of record of property within 300 feet of the subject property as shown on the most recent property tax assessment roll. No written comments were received as of the writing of this report. Various agencies were sent notices; their comments and recommendations are attached to and made a part of this review and recommendation.
- G. APPLICATION ACCEPTANCE DATE: The application was accepted and deemed complete on December 2, 2011.

II. APPLICATION PROCESS FINDINGS

- 11.0101 <u>Development Permit Required: Satisfied</u> A development permit is being pursued in accordance with the Gresham Development Code standards and requirements. This staff report represents the review of the proposed development as it relates to the Gresham Development Code standards and requirements for development.
- 11.0400 Type II Administrative Procedures: Satisfied This proposal is subject to a Community Service Type II review, which is an administrative review and decision. Under this procedure, notice of this proposal was mailed to owners of property within 300 feet of the site. The notice was also posted on site. The notice provides an opportunity for persons to make written comments which address relevant criteria and standards.
- 11.0900 Development Permit Application and Decision: Satisfied A development permit application for a Type II review, in accordance with Section 11.0902 was submitted to the City on November 3, 2011. The application was deemed complete by the City on December 2, 2011. The determination of completeness occurred within 180 days of the submittal of the initial application. Copies of the application were transmitted to each affected agency and city departments for review and comment. Section 11.0903(G) requires that a final decision be issued within 120 days of the determination of completeness.
- 11.0502 Public Notice Requirements A notice of the proposed development was mailed to property owners within 300 feet of the development site. The notice gave a brief description of the proposal, a list of the applicable development standards and criteria for decision, the location of the proposed development, and a contact person.

III. FINDINGS

The Manager adopts the findings in the Applicant's application submittal material as found in Exhibit B and supporting evidence relied on therein, except to the extent inconsistent with the following findings. The Manager makes the following findings regarding this application.

As detailed in the findings made by the applicant regarding the impact of the proposal on the applicable Overlay Districts (Flood Plain, Hillside, and HCA), there will be no impact by the proposed system. The control structure is above the 100-year flood plain overlay, and the powerhouse structure, even though it's below the 100-year flood plain, will be underground thus not impacting the flood plain. The proposal is also exempt from Habitat Conservation Area (HCA) regulations because the encroachment will be less than 120 square feet of impervious surface.

IV. STAFF & AGENCY COMMENTS

The below noted comments and requirements are from various City staff regarding compliance with applicable development code requirements and other applicable codes.

DEVELOPMENT ENGINEERING COMMENTS

Development Engineering does not object to the proposed use.

TRANSPORTATION PLANNING COMMENTS

Development Transportation Planning has reviewed the proposed project. Development Transportation Planning has no comments as the hydro-electric generator will generate no more than 2 vehicular trips in a month for maintenance/inspections.

FIRE COMMENTS

- Fire hydrant locations are not shown on the plans. Additional hydrants <u>may be</u> required on site and spaced per the Oregon Fire Code. Show existing and all new fire hydrants on a separate civil plan that clearly delineates the fire hydrants. OFC 507/App. C
- 2. Prior to applying for a building permit, submit a fire hydrant flow test report. Fire flow for commercial buildings varies based on construction and square footage; indicate on the plans. The fire flow report will verify that the correct fire flow is available from the nearest fire hydrant. OFC 507/App. B
- 3. All fire department access roads shall not be less than 20 feet wide on site, and extend to within 150' of all portions of the facilities. Access roads in excess of 150' shall be provided with an approved turn around. *OFC 503*
- 4. No Parking Fire Lane signs or curb marking will be required on site. The marking will be indicated on the building permit plans. *OFC App D-103.6*
- 5. The turning radius for all emergency apparatus roads shall be 28' inside and 48' outside radius. *OFC 503.2.4*
- 6. If a gate is installed across a fire access road, it must meet the requirements of the Gresham Fire Gate Policy. A gate installed across the "main" access road will require a Supra Lock Box at minimum. If the gate is electronically operated, the lock box shall be installed next to the card reader. The box shall have a toggle switch inside that will allow the fire department to open the gate. The policy and lock box order forms can be faxed to you upon request. OFC 506.1

7. All fire department access roads, water mains and fire hydrants shall operate prior to any building construction. *OFC 1414.1*

BUILDING DIVISION COMMENTS

None

ADDRESSING COMMENTS

A separate address will be assigned to this site due to the installation of a cabinet to house the hydropower equipment. Address will be available when building permits are issued.

LIENS & COLLECTION COMMENTS

No liens at this time.

V. DECISION

The Community Service review for the proposed small scale hydropower facility is approval subject to the conditions of approval listed in Section VI of this staff report. Note that this approval is based on the applicant's presented narrative and plans and the conditions are aimed at assuring the criteria are met when the applicant's narrative and plans do not provide enough information to assure each criterion is met.

VI. CONDITIONS OF APPROVAL

General Conditions:

- The findings and approval of this Community Service review is based on the plans submitted as a part of the development application. Development shall conform to the plans as submitted and as modified by the Conditions of Approval. Any changes to the plans must comply with the Gresham Development Code, City of Gresham Public Works Standards, the Building Code and Uniform Fire Code.
- 2. This approval is valid for one year from the date of decision¹. A structural or grading permit must be submitted to the City within this time period or an application for extension filed and granted. Please refer to Section 11.0105 for information on the expiration of development permits.
- 3. Fire hydrant locations are not shown on the plans. Additional hydrants <u>may be</u> required on site and spaced per the Oregon Fire Code. Show existing and all new

¹ Please note, it is the responsibility of the developer to keep track of expiration time lines.

fire hydrants on a separate civil plan that clearly delineates the fire hydrants. **OFC 507/App. C**

- 4. Prior to applying for a building permit, submit a fire hydrant flow test report. Fire flow for commercial buildings varies based on construction and square footage; indicate on the plans. The fire flow report will verify that the correct fire flow is available from the nearest fire hydrant. OFC 507/App. B
- 5. All fire department access roads shall not be less than 20 feet wide on site, and extend to within 150' of all portions of the facilities. Access roads in excess of 150' shall be provided with an approved turn around. *OFC* 503
- 6. No Parking Fire Lane signs or curb marking will be required on site. The marking will be indicated on the building permit plans. *OFC App D-103.6*
- 7. The turning radius for all emergency apparatus roads shall be 28' inside and 48' outside radius. *OFC 503.2.4*
- 8. If a gate is installed across a fire access road, it must meet the requirements of the Gresham Fire Gate Policy. A gate installed across the "main" access road will require a Supra Lock Box at minimum. If the gate is electronically operated, the lock box shall be installed next to the card reader. The box shall have a toggle switch inside that will allow the fire department to open the gate. The policy and lock box order forms can be faxed to you upon request. OFC 506.1
- 9. All fire department access roads, water mains and fire hydrants shall operate prior to any building construction. *OFC 1414.1*

End of Staff Report

EXHIBIT D START-UP TESTING

Required factory testing includes such checks and tests necessary to determine that the equipment systems and subsystems have been properly manufactured and installed, function properly, and are in a condition to permit safe and efficient start-up of the Facility, which may include but are not limited to (as applicable):

- 1. 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. Complete pre-parallel checks with PGE.

Required start-up test are those checks and tests necessary to determine that all features and equipment, systems, and subsystems have been properly designed, manufactured, installed and adjusted, function properly, and are capable of operating simultaneously in such condition that the Facility is capable of continuous delivery into PGE's electrical system, which may include but are not limited to (as applicable):

- 1. Turbine/generator mechanical runs including shaft, vibration, and bearing temperature measurements:
- 2. Running tests to establish tolerances and inspections for final adjustment of bearings, shaft run-outs;
- 3. Brake tests:
- 4. Energization of transformers;
- 5. Synchronizing tests (manual and auto);
- 6. Stator windings dielectric test;
- 7. Armature and field windings resistance tests;
- 8. Load rejection tests in incremental stages from 5, 25, 50, 75 and 100 percent load:
- 9. Heat runs:
- 10. Tests required by manufacturer of equipment:
- 11. Excitation and voltage regulation operation tests:
- 12. Open circuit and short circuit; saturation tests;
- 13. Governor system steady state stability test:
- 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.

Appendix 1, Schedule 201 Standard Contract Power Purchase Agreement Effective March 7, 2007

EXHIBIT E
TARIFF: 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.

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. 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

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.

(T)

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.

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.

(C)

(C)

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						
						oided Co						
					Fixed	d Price O	ption	5				
				1	On-Peak			1)				
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

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

		-		3		TABLE 2	i						
					Ave	oided Co	sts						
10-169					Fixed	I Price O	ption						
					off-Peak	Forecast	(\$/MWH)					
									_				
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Į.
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	l
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	l
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	ŀ
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	1
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	F
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	

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.)

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:

Peak

Off Peak Price:

Poff

Variable Operating and Maintenance,

VFG

Fixed Costs, and Gas Transportation (Table 6):

Capacity Value (Table 7):

Heat Rate:

HR = 6.732 BTU/kWh

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Losses:

1.9%

Forecasted Gas Price (Table 5):

GP_E

First of Month* Northwest Pipeline Corp. Canadian Border Index as Reported in Platts

Inside FERC's Gas Market Report

GP_{Sumas}

First of Month* one-month spot price averages for AECO/NIT transactions as Reported in

Canadian Gas Price Reporter

Natural Gas Market Report (in US dollars):

GP_{AECO}

Monthly Indexed Gas Price:

 $GP_{MI} = (GP_{Sumas} + GP_{AECO})/2$

Deadband Gas Index:

GPDB

Where:

If GPMI>GPF

 $GP_{DB} = Minimum of (GP_{MI} or 1.1*GP_F)$

Otherwise

 $GP_{DB} = Maximum of (GP_{MI} or .9*GP_F)$

[&]quot;First of Month" means the first such monthly issuance.

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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.

-						TABLE 3	6		10/90	0		
					Ave	oided Co	sts					
				n-Peak I	Resource	Sufficie	ncy Rate	(\$/MWH	I)			
Year	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sep	Oct	Nov	Dec
												A STATE OF THE PARTY OF THE PAR
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
-	40.81 48.09	39.03 45.98	35.36 41.62	30.88 36.30	24.51 28.74	21.96 25.72	37.76 44.46	45.65 53.83	44.12 52.02	40.81 48.09	43.61 51.42	52.28 61.70
2011												

						TABLE 4						
3					Avo	oided Co	sts					
			0	ff-Peak I	Resource	Sufficie	ncy 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

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

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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:

 P_{Peak} = $GP_{DB}*HR/1,000/(1-Losses) + VFG + C$ P_{Off} = $GP_{DB}*HR/1,000/(1-Losses) + VFG$

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.)

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:

 P_{Peak} = $GP_{MI}*HR/1,000/(1-Losses) +VFG +C$ P_{Off} = $GP_{MI}*HR/1,000/(1-Losses) +VFG$

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.

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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).

		_				TABLE 5				-		
		Fo	recasted	Gas Pri	ce - GP _F	(\$/MMBT	U) - With	out Tran	sportati	on		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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 6 contains the Variable O&M and Fixed Costs that are derived from a natural gas-fired CCCT.

						TABLE 6						×
3 12		Variable	O&M, Fi	xed Cost	s and G	is Transj	oortation	Forecas	t - VFG (\$/MWH)		
Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	0.35	0.35	0.33	0.29	0.29	0.30	0.30	0.30	0.31	0.31	0.33	0.35
2016	0.40	0.40	0.38	0.34	0.34	0.35	0.35	0.36	0.36	0.37	0.38	0.41
2017	0.39	0.39	0.38	0.37	0.38	0.39	0.39	0.40	0.40	0.42	0.45	0.50
2018	0.43	0.43	0.43	0.42	0.42	0.43	0.44	0.45	0.45	0.46	0.50	0.55
2019	0.47	0.47	0.46	0.45	0.46	0.46	0.47	0.48	0.48	0.50	0.54	0.59
2020	0.51	0.51	0.50	0.50	0.50	0.51	0.52	0.53	0.53	0.55	0.59	0.64
2021	0.53	0.53	0.53	0.52	0.52	0.53	0.54	0.55	0.55	0.57	0.61	0.67
2022	0.58	0.58	0.58	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.67	0.73
2023	0.63	0.64	0.63	0.62	0.62	0.63	0.64	0.65	0.66	0.68	0.72	0.79
2024	0.70	0.70	0.69	0.68	0.68	0.70	0.71	0.72	0.72	0.74	0.79	0.87
2025	0.74	0.74	0.73	0.72	0.73	0.74	0.75	0.77	0.77	0.79	0.85	0.92
2026	0.75	0.76	0.74	0.73	0.74	0.75	0.77	0.78	0.78	0.80	0.86	0.94
2027	0.77	0.77	0.76	0.74	0.75	0.76	0.78	0.79	0.79	0.82	0.87	0.95
2028	0.79	0.79	0.78	0.77	0.77	0.79	0.80	0.81	0.82	0.84	0.90	0.98
2029	0.79	0.79	0.78	0.77	0.77	0.79	0.80	0.81	0.82	0.84	0.90	0.98
2030	0.80	0.80	0.79	0.78	0.79	0.80	0.81	0.83	0.83	0.85	0.91	1.00

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).

						TABLE 7							
					apacity	Value - C	(\$/MWH)					
Year	Jan	Feb	Mar	Apr	May	Jun	Jui	Aug	Sep	Oct	Nov	Dec	
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	(6
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	(

MONTHLY SERVICE CHARGE

(M)

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.
- 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.

INTERCONNECTION REQUIREMENTS (Continued)

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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.

(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.

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 abovedescribed 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 (T) to the Commission for resolution.

SPECIAL CONDITIONS

- Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as 1. 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.