



Portland General Electric Company
121 SW Salmon Street • Portland, Oregon 97204
PortlandGeneral.com

January 22, 2008

Filing Center
Oregon Public Utility Commission
550 Capitol Street NE, Suite 215
Salem, OR 97301-2551

Re: UM 1345: PGE Request for Proposals for Energy Resources

Attached are an original and one copy of PGE's Request for Proposals (RFP) for Energy Supply Resources.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick G. Hager", is written over a faint, larger version of the same signature.

Patrick G. Hager
Manager, Regulatory Affairs

Attachment

Cc: Lori Koho (OPUC)
UM 1345 Service List

Portland General Electric Company

REQUEST FOR PROPOSALS

Electric Energy Supply Resources

January 21, 2008

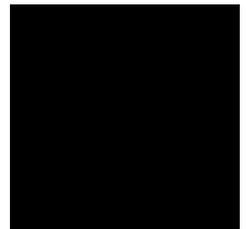


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Purpose and Scope

Portland General Electric Company (PGE), Oregon's largest electric utility, is soliciting bids through this Request for Proposals (RFP) for electric energy products described below. In June 2007, PGE filed with the Oregon Public Utilities Commission (OPUC) its *2007 Integrated Resource Plan (IRP)*, identifying specific planning assumptions and resource needs for upcoming years. The IRP is available on PGE's Internet site at:
http://www.portlandgeneral.com/about_pge/current_issues/energy_strategy/pge_irp_2007.pdf

Resource Targets

PGE is seeking to acquire up to 410 MWa of additional mid-to-long-term energy supply to be available in the 2010 – 2014 timeframe. PGE will consider proposals based on a variety of structures and commercially viable resource types. Acceptable bids for both renewable and non-renewable resources include various forms of contracts, such as power purchase agreements, tolling arrangements and financial hedging instruments, as well as a range of ownership structures, including sales of existing assets, acquisition of project development or natural resource rights and options, build-own-transfer agreements and part ownership. While acquisition of specific resource types will not be predetermined in advance, evaluation and selection of new energy supplies will be conducted consistent with the criteria and methodology applied in our 2007 IRP. Our 2007 IRP identified a preferred incremental portfolio mix that includes the following resources:

- Up to 192 MWa of power purchase agreements of 6-10 year terms, e.g.:
 - Baseload tolling services
 - Firm physical energy purchase
 - Firm financial energy purchase
- Up to 218 MWa of renewable energy resources, including but not limited to:
 - Biomass
 - Wind
 - Geothermal
 - Solar
 - Wave energy

Renewable resources must meet the requirements of Oregon's Renewable Energy Standard ("RES"), as defined in SB 838.

Notwithstanding the above preferred targets, PGE reserves the right to vary from these targets based on evaluation of price and risk factors of received bids.

This competitive RFP is being conducted in consultation with the OPUC and other participants in PGE's IRP public process, and in accordance with OPUC Order 06-446 (UM-1182), dated August 10, 2006 ("Competitive Bidding Guidelines").

About PGE

Located in Oregon's Willamette Valley, PGE serves approximately 804,000 retail customers within a 4,000 square mile service territory (see Figure 1).

- Service territory population 1.57 million, about 43% of the state's population.
- Serves 52 cities, the largest being Portland and Salem.
- 26,000 miles of transmission and distribution lines.
- Net plant-in-service, \$3.0 billion.
- Average annual demand in 2012, approximately 2,630 MWa.
- Expected peak load in 2012, 4,127 MW.
- Approximately 1,830 MWa of owned generation for resource planning purposes, including eight hydro generation facilities, three gas-fired thermal plants, the new Biglow Canyon wind farm, majority ownership of one coal-fired thermal plant, and joint ownership in two units of another coal plant. We also hold long-term contracts for energy from hydroelectric projects on the mid-Columbia River, and regularly enter into short and mid-term wholesale contracts.



Figure 1. PGE Service Territory

For more information, see PGE's Internet site: www.portlandgeneral.com.

RFP Schedule

The tentative schedule listed below may be revised as the RFP process unfolds:

- November 20, 2007 – Selected Accion Group as Independent Evaluator (IE).
- December 21, 2007 – Provided draft RFP to all interested parties.
- January 10 & 11, 2008 – Bidder and stakeholder pre-RFP workshop.
- January 21, 2008 – PGE submits final draft RFP to OPUC for approval.
- January 21, 2008 – IE submits assessment of the final draft RFP to OPUC.
- March 11, 2008* – OPUC approves draft RFP at public meeting.
- March 12, 2008* – PGE issues RFP
- April 18, 2008* – RFP responses due
- July 3, 2008* – PGE identifies initial short list, initiates negotiations.
- August 29, 2008* – PGE selects final short list of bids.
- September 2008* – IE issues final closing report to OPUC.

**Note – these dates are subject to change depending on the quantity of bids received.*

Outside of this RFP process, PGE is also planning to issue a separate RFP for demand-side capacity resources later in 2008. A supply-side capacity RFP is planned for early 2009.

Guidelines for Submitting Proposals

This section describes the guidelines Bidders must follow when submitting proposals.

Registration on PGE's RFP Web Site

All prospective bidders, stakeholders, and other interested parties are requested to register on PGE's RFP web site at www.portlandgeneralRFP.com. The web site is secure so that confidential information can be posted and exchanged via the site. Bidders will be able to upload electronic copies of their bid documents to the site.

Other features of the site include:

- The ability to download all RFP public documents, including copies of this document and all related contracts and appendices.
- An announcement board for posting of information to the public and bidders
- The ability for Bidders to post questions that are available to all users, and comments that are confidential.
- Confidential bid folders for each bid, for the retention and exchange of bid-specific data.
- Confidential evaluation folders for the retention of data provided by the PGE Evaluation Team, for use during regulatory review

Limited information regarding the RFP will also be available on PGE's main web site at http://www.portlandgeneral.com/about_pge/current_issues/rfp.

Procedural and Commercial Questions

All correspondence regarding procedural questions, bid submissions and questions related to product characteristics, terms and conditions should be submitted on PGE's RFP website at www.portlandgeneralRFP.com. PGE will post answers to questions from Bidders, stakeholders, and other interested parties on the site. Registered users will be notified by e-mail when the "Q&A" section of this Web site is updated.

Submitting Bids

Parties submitting bids under this RFP (Bidders) may submit bids responding to one or more of the electric energy products. Electronic copies of bids must be

posted to www.portlandgeneralRFP.com by 4:00 p.m. Pacific Daylight Time on April 18, 2008. In addition, three complete hard copies of bids must be *received by* 4:00 p.m. Pacific Daylight Time on April 18, 2008. Bids must be sealed, and sent to:

Dorothy Sosnowski, Project Manager
Portland General Electric Company
121 SW Salmon St. 3WTC-BR06
Portland, OR 97204

In the event that the Bidder discovers an error or omission in the bid after shipping hard copies, Bidder must note any changes in the electronic filing and such changes must be posted by 4:00 PM on April 18, 2008. In the event of differences between the hard copy and electronic copy, the electronic version shall control. In addition, three corrected hard copies must be received by PGE within three business days of the filing deadline, or by 4:00 PM on April 23, 2008.

All bids received will be date stamped and initialed. Bids received after the deadline, or containing materially incomplete information will not be considered.

Submitting Confidentiality and Non-Disclosure Agreements

Bidders may submit signed confidentiality agreements to the address above up until the deadline for bid submission (4:00 PM on April 18, 2008). However, bidders who desire to have PGE execute the confidentiality agreement prior to bid submission must submit their signed agreement no later than two weeks prior to bid submission, or by 4:00 PM on Friday, April 4. Due to the need to establish uniform procedures that safeguard the confidentiality of all information marked confidential and the expected number of bidders, PGE will not be able to accept changes to the posted Confidentiality and Non-Disclosure Agreement.

Validity of Price and Offer

By submitting a bid, the Bidder acknowledges and agrees that each of its bids constitutes an offer that shall remain irrevocable until the earlier of (1) 140 days after the bid responses are due, as defined under "RFP Schedule" above, and (2) the date that PGE commences post-bid negotiations with final short-listed Bidders. Bidders selected for the final short list will have an opportunity to refresh the price components of their bids during the post-bid negotiation process. However, PGE reserves the right to remove from the short list any bid for which the refreshed price is higher than the next best bid price received for the same product that is not already on the short list.

Price and Non-Price Bid Evaluation Criteria

Price comprises 60 percent of our evaluation criteria, reflecting PGE's intent and commitment to obtain the best possible value for our customers. Non-price factors primarily reflect risk attributes of the bid proposals. Bidders are advised that they are competing primarily on price. PGE will also consider the best combination of price and associated risk.

Reservation of Rights

This RFP is not, and shall not be construed to be, an offer by PGE. PGE is not bound to enter into negotiations or execute an agreement with, or purchase any products from, any Bidder as a result of this RFP. No rights shall be vested in any Bidder, individual or entity by virtue of its preparation to participate in, or its participation in, this RFP. No binding commitment shall arise on the part of PGE to any Bidder under this RFP until and unless the parties execute definitive agreements that become effective in accordance with their terms.

Each Bidder shall be solely responsible for all costs it incurs in preparing to participate in, participating in, or responding to this RFP.

The bids received will be evaluated and selected based on the information supplied by each Bidder pursuant to this RFP. PGE reserves the right to modify or withdraw from this RFP process, or modify the RFP Schedule and any provisions contained herein, for any reason. As part of our normal course of business, PGE conducts bilateral discussions with developers and other electric energy providers. PGE also reserves the right, consistent with the Competitive Bidding Guidelines, to make purchase commitments at any time to suppliers not participating in this RFP process.

PGE reserves to itself:

- The selection of short-listed bids and the awarding of contracts, if any, in the exercise of its sole discretion.
- The right to reject any and all bids, and any portion of a specific bid for any reason.
- The right to waive any informality or irregularity in any bid received.
- The right to award a contract to a Bidder based on a combination of price and non-price factors, a qualitative assessment of portfolio fit, and post-bid negotiations.

PGE shall have no obligation to provide a reason for rejecting a Bidder's bid.

Confidentiality and Nondisclosure

In accordance with an executed Confidentiality and Nondisclosure Agreement, PGE will maintain the confidentiality of any claimed proprietary and confidential information contained in a bid, provided that such information is clearly identified by the Bidder as “Confidential Information” on each page on which such proprietary and confidential material appears. Each Bidder must execute and return a copy of the Confidentiality and Nondisclosure Agreement, the form for which is included separately in the RFP packet, as soon as possible, but no later than its timely submission of its bid or bids. *It is the Bidder’s responsibility to indicate clearly in its proposal what materials it deems to be proprietary and confidential.*

PGE may release such information to PGE employees or attorneys, and external consultants who are involved in the RFP process, or have a need to know for business reasons in connection with the RFP process, to the Independent Evaluator, to the staff of the OPUC and any other person qualified to receive such information pursuant to the Modified Protective Order issued by the OPUC on October 16, 2007 (“Modified Protective Order”), or as may be required by judicial or administrative process or otherwise by law. Renewable bids that PGE recommends for funding from the Energy Trust of Oregon (ETO) will be released to the ETO for their review.

Document Retention

All bids and exhibits supplied to PGE during the RFP process will become the property of PGE. PGE will retain all bid materials supplied to it and pertinent information generated internally by it in connection with the RFP process in accordance with PGE’s document retention policies.

Bid Evaluation Process

This section describes PGE’s process for evaluating bids received in response to this RFP. For details about our scoring criteria, see the sections “Bid Pre-Qualifications” and “Criteria Used for Scoring Qualified Bids” below.

Reviewing, Ranking and Selecting Bids

In selecting the RFP short list, PGE will use a first-price, sealed-bid format. Under this format, Bidders may not update pricing during the scoring and evaluation period. We will use the first prices provided by Bidders to select our short list of candidates, and then negotiate price and non-price elements during post-bid negotiations. The scoring process is illustrated in Figure 2, below.

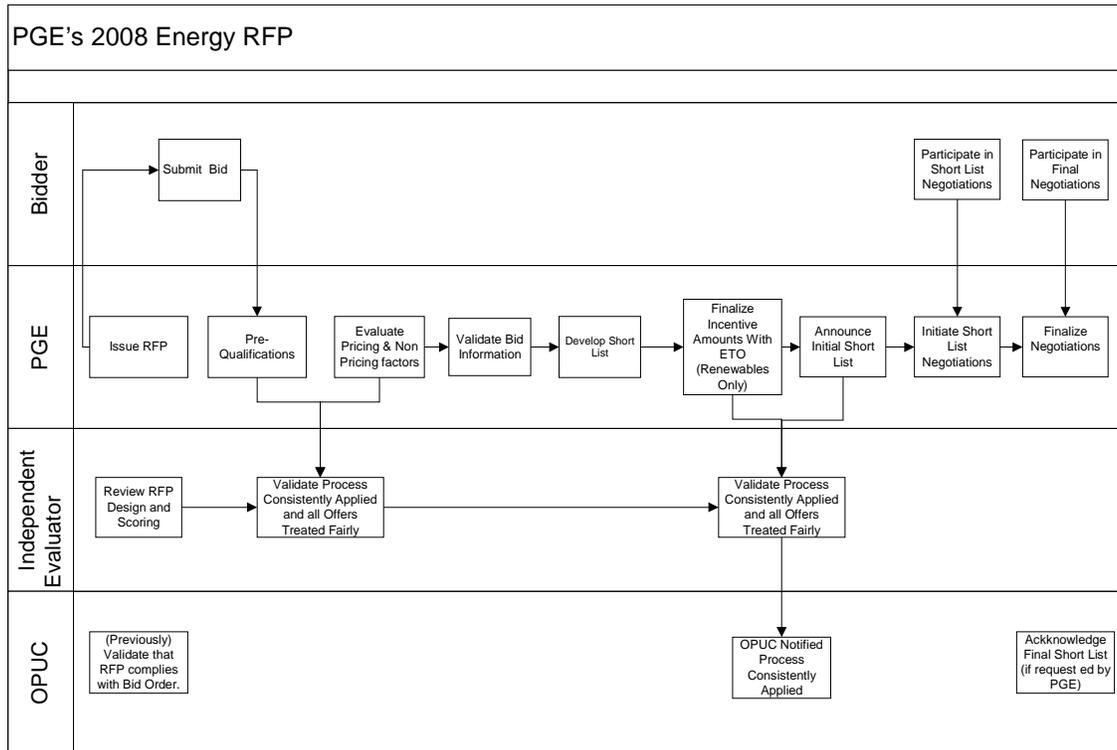


Figure 2. Resource Selection Process

PGE reserves the right to request additional information regarding any proposal received.

Bids will be evaluated using a two-step process.

- *Assessment of Pre-Qualifications* – First, we will screen bids according to pre-established qualifying criteria, *i.e.*, minimum quantity and term, and quality of credit.
- *Evaluation of Scoring Factors* – Next, we will score bids that meet the pre-qualification standards. Overall scores will be comprised of price and non-price factors.

Independent Evaluator

PGE will use an independent, third-party evaluator, Accion Group, to help ensure that the RFP is conducted fairly and properly and that all offers are treated objectively and consistently. The Independent Evaluator will:

- Consult with PGE in preparing the RFP and submit its assessment of the final draft RFP to the OPUC when PGE files for RFP approval.
- Independently score all or a sample of the bids to determine whether the selections for the initial and final short-lists are consistent with the scoring criteria.
- Compare the results of the Independent Evaluator's scoring with PGE's scoring and work with PGE to attempt to reconcile and resolve scoring differences, if any.
- Prepare a Closing Report for the OPUC after PGE has selected the final short-list.
- Make any detailed bid scoring and evaluation results available to PGE, the OPUC and non-bidding parties in the RFP docket subject to the terms of the Modified Protective Order.

Requested Power Products

PGE requests proposals for electric energy products, as described in this section, and summarized below. See Appendices A through D for specific product term sheets. PGE will be willing to consider projects that begin before the specified dates, provided they meet our portfolio needs.

PGE is targeting up to 410 MWa of energy resources via this RFP. Within this amount, we may ultimately select a different resource mix than specified below, if an alternate mix offers the best combination of cost and risk for our customers. Depending on bids received, we may also transact for more or less than the 410 MWa target.

Table 1. Summary of Requested Energy Products

Type	Product	Block			Start			Term	
		Min	Pref.	Max.	Min	Pref.	Max.	Min.	Pref.
Energy	Baseload Tolling	25 MW	<150 MWa	410 MWa	Jan-10	Jan-12	Jan-12	5 yrs	5 to 10 yrs
	Firm Physical Energy Purchase	25 MW	<150 MWa	410 MWa	Jan-10	Jan-12	Jan-12	5 yrs	5 to 10 yrs
	Firm Financial Energy Purchase	25 MW	<50 MWa	100 MWa	Jan-10	Jan-12	Jan-12	5 yrs	5 to 10 yrs
	Ownership	25 MW	<150 MWa	410 MWa	Jan-10	Jan-12	Jan-12	NA	
Renewable Energy*	Power Purchase Agreement	2 MW	<150 MWa	410 MWa	Jan-09	Jan-12	Jan-14	5 years	20+ years
	Ownership	2 MW	<150 MWa	410 MWa	Jan-09	Jan-12	Jan-14	NA	

* Renewable resources must meet the requirements of Oregon's Renewable Energy Standard, as defined in SB 838. All Associated Tradable Renewable Energy Credits must be included with bid to be considered a renewable resource.

Characterizing an Energy Product vs. a Capacity or Peaking Product

This RFP requests baseload energy supply. PGE will be issuing an RFP for supply-side capacity resources at a later time. While it is difficult to narrowly define the difference between energy resources and capacity resources, the following description should provide guidance for determining whether a resource is appropriate for submission in this energy RFP. Generally, PGE considers thermal resources or contracts that dispatch economically and provide electricity for most hours of the year to be energy resources. As an example, a natural gas plant with a 7,200 Btu/kWh heat rate and resulting load factor in the Mid-C market of 65% or greater would be considered an energy resource. PGE also considers most types of renewables to be energy resources, including biomass, biogas, wind, solar, geothermal, wave and most types of hydro projects (except pumped storage or other projects designed to deliver energy primarily during peak demand periods).

By contrast, capacity or peaking products are typically used for a limited number of hours per year to meet peak load needs, typically during unusually hot summer and cold winter hours, and to maintain supply reliability. For contracts, supply may be limited to certain months of the year and certain hours of the day. For owned plants, operations may be limited because variable generating costs are “out of the money” except during periods of high demand or reduced supply from baseload generating units. SCCT units, for example, are typically dispatched less frequently and would be considered capacity resources.

PGE recognizes that, while it is clear that some products are baseload and others are peaking, there is a gray area in the middle. PGE suggests that, to be efficient, a Bidder contact us via the RFP web site at www.portlandgeneralRFP.com for initial evaluation if the Bidder is unsure whether the proposal qualifies for consideration for this energy RFP.

Alternative Bid Structures

Bidders may submit bids that differ from the attached term sheets with respect to the allocation of risks between the Bidder and PGE, provided the risks assigned to each party are clearly identified in the bid. Risks may include those for providing fuel, covering environmental damage, providing firm transmission, or providing ancillary services to firm the output variability associated with non-firm, non-dispatchable resources. Please note that the Price Factor criteria assume that the Bidder will provide all required reserves for the energy as defined by the Western Electricity Coordinating Council (WECC).

For example, the Bidder may offer two bids for a tolling agreement. The first would assume that PGE provides the fuel and associated transportation, while the other would assume that the Bidder provides the transportation.

Electric Energy Products Requested

Baseload Tolling – PGE will consider purchasing baseload tolling services delivered to PGE’s service territory beginning no earlier than January 1, 2010, with a preferred start date of January 1, 2012. Baseload tolling service quantities should be in blocks of 25 MW or greater, with a minimum five-year duration. These services should provide PGE with the daily right to convert natural gas to electricity according to the pre-defined physical and operating characteristics of the Bidder’s generating facility. See Appendix A for a sample term sheet and required bid information.

Firm Physical Energy Purchase – PGE will consider purchasing up to 410 MWa of firm energy, delivered to PGE’s service territory beginning no earlier than January 1, 2010, with a preferred start date of January 1, 2012. Purchase

quantities should be in blocks of 25 MW or greater for non-renewable energy products, with a minimum five-year duration. The minimum for renewable-based bids is 2 MW. To the extent that the Bidder does not provide firming, regulation or other ancillary services for integrating the power product, PGE will include our estimated cost of obtaining these services in our bid evaluation. See Appendix B for a sample term sheet and required bid information.

Firm Financial Energy Product – As part of fulfilling the 410MWa need described above, PGE is interested in purchasing up to 100 MWa of fixed-for-floating swaps or other substantially similar products for managing energy price risk, beginning January 1, 2010. Purchase quantities should be in blocks of 25 MW or greater, with a minimum five-year duration. These products would obligate PGE to pay a fixed price based on a predetermined quantity of energy in exchange for variable price payments to PGE for the same quantity of energy, based on a mutually-agreeable, predetermined daily price index. The price index should be transparent, and representative of northwest wholesale power markets, such as the Dow Jones Mid-Columbia Daily Index for Firm On- and Off-Peak Power or the Mid-Columbia On or Off Peak Firm Price ICE Index. See Appendix C for a sample term sheet and required bid information.

Ownership Position in an Energy Resource – PGE will consider acquiring an ownership position of up to 410 MWa in long-term energy resources. Ownership proposals may include (but are not limited to) the sale of existing plants, acquisition of project development or natural resource rights and options, part ownership and build-own-transfer agreements. We will also consider hybrid structures that include both an ownership component and a power purchase agreement (e.g. the sale of a phase or portion of a project with an off-take agreement for the remaining balance). Ownership proposals may be submitted for both renewable and non-renewable energy resources. See Appendix D for a listing of the elements of an ownership offer and required bid information.

Point of Delivery and Transmission

PGE's preferred Point of Delivery (POD) is the PGE Service Territory as shown in Figure 1 above. PGE is electrically connected to both Bonneville Power Administration (BPA) and PacifiCorp. To ensure that bid proposals are evaluated on a comparable basis, POD scoring evaluation will include both price factors to quantify the cost and non-price factors to quantify the risk associated with delivery to PGE. The transmission component will not be a threshold determinant; however, proposals without a delivery component will be scored accordingly. In addition, confirmation of firm delivery capability or rights to transmit the proposed energy supply to PGE's system will ultimately be required prior to execution of any contracts in connection with this RFP. If a proposal

includes interconnection or transmission service, bidder will be required to supply all information as detailed in Appendix H.

About the Term Sheets

Term Sheets are Examples Only

As discussed above under “Alternative Bid Structures,” the draft term sheets included in the appendices are provided as examples only and, while they include expressions of preferred product structures and characteristics, are not intended to exclude other proposals for meeting PGE’s energy needs. Bidders should mark up the sample term sheets as needed. For example, a bid might include use of a specific plant and fuel source. Alternatively, a bid could offer incremental capacity associated with duct firing or other generation augmentation. In any case, bids must include sufficient information for PGE to make a thorough evaluation of the proposals.

Starting Date for Energy

PGE will consider bids with start dates earlier than those shown in the term sheets, but no earlier than January 1, 2010, for non-renewable bids and January 1, 2009, for renewable bids.

Firm Transactions

For the purposes of this RFP, a “firm transaction” is one for which the only excuse for failure deliver or receive is force majeure, as defined in the purchase agreement templates. **Firm energy includes reserves and ancillary services** to ensure that energy schedules are certain and delivered intact within the hour.

Financial Swap and Option Transactions

All “fixed for floating swap” products are assumed to be priced against the Dow Jones Mid-Columbia On- or Off-Peak firm price indices or the Mid-Columbia On or Off Peak Firm Price ICE Index. All financial swap and options products will be executed under an International Swaps and Derivatives Association (ISDA) agreement.

Contract Terms and Conditions

Energy Purchase Agreements

PGE invites Bidders to submit proposals for various types of contract resources. These may include (but are not limited to) standard fixed price physical energy sales, tolling agreements or financial hedging instruments. Contract templates for power purchases are included in appendices as follows:

- Appendix E – Firm Physical Wholesale Energy Purchase and Sale Agreement
- Appendix F – Tolling Agreement.

Bidders must use one or more of the purchase agreement templates included in this RFP, and must include any proposed revisions to the contract (shown in red-line) as part of their response package to this RFP. PGE will evaluate all proposed revisions, but is under no obligation to accept any revisions or adopt any changes. Changes, if any, to terms and conditions or revisions to the templates will be discussed with Bidders selected for post-bid negotiations.

Ownership Position in an Energy Resource

PGE invites bidders to submit proposals for various types of asset sale and ownership transfer agreements. Ownership proposals may include (but are not limited to) sales of existing assets, acquisition of project development or natural resource rights, build-own-transfer agreements or joint ownership. We will also consider hybrid structures that include both an ownership component and a power purchase agreement (e.g. the sale of a phase or portion of a project with an off-take agreement for the remaining output). Bidders submitting a proposal for a PGE ownership position in an energy resource are requested to provide as part of their response package to this RFP the documents identified in Appendix D. PGE will consider the terms and conditions in those documents, but will be under no obligation to accept them without modification. Changes to terms and conditions or revisions to the documents will be discussed with Bidders selected for post-bid negotiations.

Bid Pre-Qualifications

To be considered for evaluation, all proposals must meet the requirements specified below.

General

General pre-qualifications include minimum bid quantity, minimum bid term, credit, and bidder qualifications.

Minimum Bid Quantity

The minimum bid amounts are:

- *Non-renewable energy products* – 25 MW¹
- *Renewable energy products* – 2 MW

Minimum Bid Term

The minimum bid term is five years.

Credit and Bidder Qualifications

All transactions are contingent upon the Bidder meeting and maintaining the credit requirements established by PGE's Credit Risk Management Department:

- Bidder's or Bidder's credit support provider's (if any) long-term, senior unsecured debt that is not supported by third-party credit enhancement must be rated by one or more of the following agencies: BBB- or higher by Standard & Poor's and Fitch, BBB (low) by DBRS, or Baa3 or higher by Moody's Investor Services, Inc. If the Bidder or Bidder's credit support provider is reviewed by more than one agency, PGE will consider the lowest rating maintained.
- Bidders that are not rated, and bids offering full project ownership, will be subject to review by PGE's Credit Risk Management Department for qualification.

Typically contracts will only be awarded to Bidders that have minimum investment grade credit rating or provide acceptable performance assurance. Alternatively, the Bidder must provide performance assurance in the form of a

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¹ Per Guideline 6 of the Competitive Bidding Guidelines, Qualifying Facilities larger than 10 MW must be allowed to participate in this RFP.

parental guarantee, a letter of credit and/or cash, based on the Bidder's and/or parent's credit profile and the amount of expected financial exposure related to the project.

Bids for an outright purchase of a 100 percent interest in a plant will be considered regardless of the creditworthiness of the Bidder. If the plant is not yet complete, PGE's Credit Risk Management Department requirements will apply until commercial operation of the plant. All information required to evaluate and establish credit will be subject to the Confidentiality and Nondisclosure Agreement.

As applicable, the Bidder must provide documentation, satisfactory to PGE, that it is able to schedule power and operate under industry standards established by the Federal Energy Regulatory Commission (FERC), Western Electricity Coordinating Council (WECC) and the North American Energy Reliability Council (NERC).

For New Projects Used to Support Bids

Commercial In-Service Date

Projects being developed to support bids must have a reasonable commercial in-service date of no later than January 1, 2012, for energy products, and January 1, 2014, for renewable bids. The Bidder must identify the power supply source it intends to use to support its bid commitments before the project in-service date. PGE will consider projects that begin before the specified dates, provided they meet our portfolio needs.

Technology

Projects being developed to support bids shall use commercially viable generation technology. The Bidder shall specify the generation technology it proposes to use and provide preliminary design studies – completed in sufficient detail to identify all major equipment and components. The Bidder will also provide a site layout plan, and a project milestone schedule indicating critical path elements. For generation technologies that are not in common use by electric utilities, the Bidder shall identify electric projects where the technology is already being used or provide documents describing the technology in reasonable detail.

Suitability of Site (where applicable)

The Bidder must identify the project site location, show site control and provide satisfactory evidence that the site is not otherwise committed and is available for

the full-term of the proposed bid. The Bidder must have identified all required site-specific permits and have prepared a plan or schedule for obtaining all permits and licenses. For proposals to sell project development rights or lease options, the Bidder should identify any required permits and licenses that the bidder intends to acquire and those that the purchaser would be responsible to obtain.

Fuel Supply (where applicable)

The Bidder must demonstrate physical and commercial access to fuel supplies and fuel transportation for the term of the contract proposed in its bid.

Criteria Used for Scoring Qualified Bids

This section briefly describes the criteria PGE will use to evaluate bids submitted in response to the RFP. The following tables summarize these criteria. For details about information that should accompany each bid, see “Appendix G, Required Bidder Profile,” and “Appendix H, Required Bidder Information.”

Table 2. Evaluation Criteria for Energy Products

<i>Factors</i>	<i>Descriptions</i>	<i>Sub Total</i>	<i>Total</i>
Price Factors	Base prices adjusted for considerations described in following paragraph		60%
Non-Price Factors			
	Project Development	5%	
	<ul style="list-style-type: none"> ▪ Project financing ▪ Site control ▪ Developer experience ▪ Permitting status 		
	Project Characteristics	14%	
	<ul style="list-style-type: none"> ▪ Fuel supply diversity, resource risk, and O&M reliability characteristics ▪ Point-of-delivery ▪ Project location ▪ Resource supply diversity ▪ Resource adequacy ▪ Extension option or equity position 		
	Product Characteristics	6%	
	<ul style="list-style-type: none"> ▪ Compensation for failure to meet Guaranteed Availability Factor (GAF) ▪ Dispatchability ▪ GAF ▪ Amount (MW/h) ▪ Product flexibility ▪ Contract term 		
	Credit Factors	5%	
	Environmental Factors	10%	
	Total Non-Price Factors:		40%
Total:			100%

Price Factors

Price will be heavily weighted. To evaluate bids containing different product characteristics on a comparable basis, prices submitted by the bidder will be subject to adjustment for the following considerations:

- *Consistent with the analysis in the 2007 IRP, PGE will calculate a carbon tax based on the proposed Low Carbon Economy Act of 2007 (Bingaman Proposal) safety valve price of \$12/metric ton starting in 2012, escalating annually at 5% real – see discussion below.*
- *Additional costs associated with delivering product to PGE's service territory from proposed PODs (if outside PGE's service territory).*
- *Ancillary services, if not included in product pricing – see discussion below.*
- *Fuel risk premium.*
- *Variability of output by time-of-day or season – If the bid does not include integration for intermittent and non-dispatchable resources, we will estimate the cost and include it in our price analysis.*
- *Quality and firmness of energy.*
- *Any other factor necessary to ensure bids are evaluated on a comparable basis.*

The price will be calculated as the ratio of the bid's projected total cost per MWh to forecast market prices using real-levelized or annuity methods (per Guideline 9a. of the Competitive Bidding Guidelines). The carbon tax will be applied to both the bid price (numerator), based on the actual emissions profile of the project as submitted by the bidder and verified by PGE, and to the market price (denominator), based on the emissions profile of the resource setting the market clearing price (assumed to be an F-class gas turbine plant).

PGE may require performance assurances in support of the Bidder's obligations, which may include one or more subordinate liens in combination with corporate guarantees, escrow accounts, cash deposits or letters of credit. PGE retains the right to adjust the bid price to include the cost to us of performance assurances if the bidder does not provide adequate performance assurance. Lower levels of performance assurances may be acceptable, if there are other compelling compensating factors as determined by PGE in its sole discretion.

Point of Delivery (POD) – If delivery to PGE's service territory is not included in product pricing, applicable transmission service cost will be applied. These costs include wheeling, losses, and required ancillary services as prescribed in applicable tariffs. If the Bidder has transmission service to a POD other than PGE's service territory, Bidder shall provide all contracts and agreements for all such service so that PGE can determine the appropriate service that may be required to deliver the bid product from the POD to PGE's service territory.

Ancillary Services – If ancillary services are not included in product pricing, power product bids for delivery to PGE’s service territory will at a minimum need the following ancillary services to meet control area operations and transmission provider requirements:

- Operating and supplemental reserves
- Generation and energy imbalance
- Scheduling, system control and dispatch
- Reactive support and voltage control

Bidders shall provide a comprehensive list of all ancillary services they are planning to provide in delivering the energy product to the POD. To the extent that any of these required ancillary services are not being supplied by the Bidder, PGE will, for scoring purposes, adjust the price provided by the Bidder to reflect the cost of acquiring additional ancillary services required.

Non-Price Factors

Project Development

This category scores the likelihood that a project supporting a bid will be placed in commercial service. The evaluation criteria for this category generally address construction and development risks associated with the completion of projects that are not yet in commercial operation, and which are necessary to support bids. Plants that are already operating or are sufficiently advanced in construction may be deemed to earn the maximum possible score from this category.

For projects that are less advanced, we will consider the following criteria for scoring:

- Method and status of project financing
- Level of site control by developer
- Project team experience
- Status of required permits, licenses and studies
- Status of equipment supply and EPC agreements

Point of Delivery

POD is both a price and non-price factor. This category scores the risks associated with potential transmission constraints or curtailments in delivering the power from external PODs to PGE’s service territory. When scoring for non-price factors, we will factor in the risks of transmission congestion.

The preferred POD for products specified in this RFP is PGE's service territory. Bidders are encouraged to submit separate bids for delivery to our system or other PODs where appropriate, to allow the Bidder and PGE to consider any comparative advantages in costs or differences in risk tolerance for exposure to incremental transmission expenses and uncertainties for PODs external to PGE's system. Bidder must identify the POD for each bid, and will be responsible for all transmission arrangements and costs to the specified POD. These costs include those of any required interconnection and transmission service.

Most of PGE's long-term rights to transmission on BPA's system are already dedicated to existing resources. While PGE will evaluate each proposal and POD on a case by case basis, Bidders should assume that PGE has no unutilized, long-term firm transmission rights that are available to be re-directed to transmitting proposed resources to PGE's service territory.

The Pacific Northwest (PNW) transmission system currently has numerous constraints that can limit the firm delivery of power products for extended periods of time. BPA has proposed to conduct a system-wide open season for transmission service during the first half of 2008. If BPA is successful with this process, then the region may develop new long-term transmission service in a more timely fashion and at a more predictable cost. The scoring process for this RFP assumes continuation of the status quo; however, PGE retains the right to adjust the delivery risk of external PODs based upon the progress of BPA's open season process.

A Bidder may specify multiple PODs in its bid, provided it specifies which party has the right to choose the applicable POD. Bids that assign this option to PGE will be scored more favorably than those that do not.

For proposed projects within PGE's service territory, interconnection to, and transmission service on, PGE's transmission system will be provided under the terms and conditions of PGE's federal Open Access Transmission Tariff (OATT), PGE's Generator Interconnection Guidelines, and all applicable orders and rules.

Confirmation of firm delivery capability or rights to transmit the proposed energy supply to PGE's system will be required prior to execution of any contracts in connection with the RFP.

PGE's federal Open Access Transmission Tariff (OATT) is available at:
http://www.oatioasis.com/PGE/PGEdocs/PGE_CURRENT_OATT_Part_I_as_of_10-12-07_Schedules_Attachmen%E2%80%A6.pdf

PGE's Generator Interconnection Guidelines are available at:
http://oasis.portlandgeneral.com/pdf/gen_inter.pdf
http://oasis.portlandgeneral.com/pdf/gen_inter.pdf

Physical Project Characteristics

This category captures the physical characteristic risks of the bid products. The evaluation criteria for this category generally address physical and operational risks associated with the production and delivery of power to PGE. Some of the characteristics that we will consider in our scoring are:

- Resource supply diversity
- Resource adequacy
- Point of delivery (as discussed above)
- Project location
- Fuel supply diversity and O&M reliability characteristics
- Risk that the resource will not perform as expected (for variable and intermittent resources)
- Project life and extension options. Rights that allow PGE to extend the life of a resource beyond the initial term or forecast provide potential future risk mitigation. As a result, proposals that provide rights to long-term access to the resource or energy supply (particularly in the case of renewables) will be scored higher than proposals that do not provide similar rights.

Our non-price scoring criteria also values projects that provide benefits to Oregon and our local economy. The criteria include a benefit for location within Oregon, and a somewhat higher benefit for location within our service territory.

Power Product Characteristics

This category scores how well the bid product matches PGE's operational needs. The evaluation criteria for this category generally address price, performance and supply portfolio concentration risks, along with the benefits of flexibility and optionality. Some of the characteristics that we will consider in our scoring are:

- Guaranteed Availability Factor (GAF) and compensation for failure to achieve it
- Dispatchability
- Product flexibility
- Contract term
- Amount (MW per hour)

Credit Evaluation

This category scores the creditworthiness of the Bidder. We will take into account the following credit considerations in our scoring:

- Debt and equity ratings
- Performance assurance
- Financial ratio analysis
- Default risk
- Credit concentration and liquidity effect
- Enforceability of contractual credit terms
- Bidder revisions to contract templates that may affect credit requirements

Environmental Impacts

This category captures whether or not a bid contains tradable renewable energy credits (TRCs) and other environmental attributes (not including CO₂ emissions, which are addressed in the price score, as described above). To address other environmental concerns, we will review the following characteristics in this scoring category:

- Air emissions (including particulate matter, NO_x, SO₂, and CO)
- Land use
- Water discharge
- Waste directly related to power production (e.g. ash)

PGE will also reflect in scoring any required or voluntary commitments to mitigate environmental impacts of projects, *e.g.*, payments to the Climate Trust to mitigate for emissions.

PGE is willing to consider other project specific environmental benefits that a Bidder is able to offer that are not mentioned in this solicitation. Bidders are encouraged to describe any such project-specific factors that they believe would be valuable to PGE.

Considerations for Renewable Resource Products

Minimum Bid Threshold – While we set a minimum quantity threshold of 25 MW for proposals submitted through this RFP, we set a lower minimum of 2 MW for bids supported by renewable resources. PGE would like to encourage the submission of renewable bids in this RFP and also recognizes that the current incentives available in Oregon, including the Business Energy Tax Credit and Energy Trust of Oregon incentives, favor smaller renewable projects.

Tradable Renewable Energy Credits and Oregon RES Qualifications – PGE is prepared to evaluate renewable product bids both with and without tradable renewable energy credits. However, in order to be considered a renewable resource for

purposes of this RFP, renewable bids must include all associated TRCs and any other environmental attributes. The resource must also qualify as renewable according to the requirements of the Oregon RES as outlined in SB 838. Bids submitted without TRCs or those that do not qualify as renewable under the Oregon RES, will be evaluated as non-renewable energy resources.

Firm Physical Energy Purchases from Non-dispatchable, Intermittent Resources – Bids for firm energy from resources such as wind require integration services to supply a firm, in-hour product. Bidders have the choice of acquiring integration services on their own behalf, or requesting that PGE supply such services. Because PGE has a limited ability to self-supply such services, we may acquire such services on the bidder's behalf from another supplier, such as BPA. In making this decision, PGE will evaluate market prices for integration services, our own portfolio flexibility and resource mix and internal opportunity costs. If a bidder would like PGE to supply integration services, we will add the estimated cost of these services to the bidder's price.

Another important element of integration services is the scheduling notice period. Longer notice periods provide load-serving entities higher supply certainty and reduced exposure to market risk by limiting reliance upon spot markets to absorb fluctuations in energy production. For non-price scoring purposes, PGE prefers to know as far in advance as possible the amount of energy to be supplied in any given hour.

We will award the highest non-price score to products which, after integration, provide a flat volume of power for all hours. However, we recognize that such certainty has an associated cost, and will score that as part of the price factor scoring. For example, we would expect the price of a product that is flat for all hours, *i.e.*, no variability, to be more expensive than a variable product provided with a 168-hour scheduling notice. Both of these products would likely be more expensive than one provided with a 24-hour scheduling notice. We expect the product with the combination of lowest price and the longest scheduling notice to achieve the highest overall score.

Price to PGE – The ETO has limited funding available via the open solicitation process that could be used to “buy down” the costs of renewable resources to that of non-renewable alternatives (see Appendix I). The ETO may help fund more than one project, but reserves the right to make no offers to renewable proposals. PGE will score bids for renewable resources and finalize the initial short list based on their price to PGE *after* applying any subsidies agreed to by the ETO. TRCs are required in all bids that assume financial support from the ETO.

The ETO has a preference for projects based in Oregon, but will defer judgment until bids are reviewed and costs are defined.

Bidders are requested to submit their bid pricing without including any ETO funding, unless a funding commitment has already been obtained from the ETO, as approved by the ETO Board of Directors. If a funding commitment has been pre-approved by the ETO, please specify the amount separately in the pricing section of the bid.

Production Tax Credit and Investment Tax Credit - In the event that the federal Production Tax Credit (PTC) and Investment Tax Credit for Solar (ITC) are not renewed by the time bids are due (currently scheduled for April 18, 2008), bidders are requested to submit their annual pricing both with and without the PTC and ITC and to state the basis (i.e. assumptions for tax credit renewal) on which they are calculating the PTC and ITC.

Technical evaluation of renewables-based bids – PGE will use consultants, if necessary, to help us evaluate such technical information as wind speed, solar insolation data, and geothermal reservoir exploration and modeling.

Post-Bid Negotiations

PGE's goal is to conduct an efficient post-bid negotiation process. PGE will initiate negotiations with a short list of Bidders whose proposals rank highest in the evaluation process and whose proposed transactions, PGE believes in its sole discretion, offer value to PGE's energy supply portfolio for customers, and have a reasonable likelihood of being executed.

The number of Bidders with whom negotiations will be held will depend upon the bids received, the results of the scoring process and other factors described more fully in the sections "Bid Evaluation Process" and "Criteria Used for Scoring Qualified Bids." Selection for the short-list and initiation of negotiations do not constitute a winning bid.

PGE intends to negotiate price and non-price elements during the post-bid negotiations. Any contract contemplated by this RFP shall not bind PGE until execution of a definitive agreement by both PGE and the Bidder and, if required, the agreement is approved or otherwise authorized by the appropriate regulatory agencies.

A number of factors will be considered in the post-bid process to ensure an appropriate fit with our overall energy portfolio. These include concentrations of risk and contract terms, firmness of delivery, fuel risk exposure and leverage effects. Leverage effects refer to the impact of long-term contracts on PGE's debt-equity ratio and cost of borrowing². The leverage impacts of contracts will be considered during the post-short list bid evaluation process.

As defined in the Oregon Competitive Bidding Guidelines, considerations of ratings agency debt imputation (the leverage adjustment) will be reserved for the selection of the final bids from the initial short list of bids. PGE will obtain an advisory opinion from a ratings agency to substantiate our analysis and final resource selections, if requested by the Commission.

PGE shall have no obligation to enter into a definitive agreement with any Bidder to this RFP and, at its sole discretion, may terminate negotiations with any Bidder at any time without liability or obligation to any Bidder. Whether or not, and until, negotiations with Bidders produce final and fully executed contracts satisfactory to PGE for its resource targets under the RFP, PGE reserves the right to pursue any and all other resource options available to it.

■ _____
² If PGE purchases power under a contract requiring fixed payments, Standard & Poor's may calculate the net present value (NPV) of the fixed payments and impute a percentage of that as debt on PGE's balance sheet.

Appendix A – Energy Product, Baseload Tolling Service

Sample Term Sheet – For Discussion Only

<i>Product:</i>	Baseload Tolling Service should provide PGE the daily right to convert natural gas to electricity according to the pre-defined physical and operating characteristics of the Bidder's tolling facility. In consideration of such right, PGE will pay the Bidder a capacity charge over the contract term.
<i>Seller:</i>	Bidder
<i>Purchaser:</i>	Portland General Electric Company (PGE)
<i>Tolling Facility:</i>	Bidder's natural gas fueled electric generating plant or network of plants as mutually agreeable to PGE and the Bidder.
<i>Available Hours:</i>	On-peak and off-peak hours. On-peak hours include hours ending 0700 through 2200, Pacific Prevailing Time (PPT), Monday through Saturday, excluding NERC holidays. Off-peak hours include hours ending 0100 through 0600 and hours ending 2300 through 2400, PPT, Monday through Saturday, and hours ending 0100 through 2400, PPT, Sundays and NERC holidays.
<i>Term:</i>	Bidder to provide. The minimum bid term is 5 years, with a start date no earlier than January 2010; the maximum start date is January 2012 . <i>Sample: Commencing January 1, 2012, for up to 20 years</i>
<i>Contract Quantity:</i>	25 MW minimum, 410 MWa maximum
<i>Available Capacity:</i>	Bidder to provide. <i>Preferred: 50 to 150 MWa</i>
<i>Heat Rate:</i>	Bidder to provide. <i>Preference: Less than 7,300 Btu per kWh (HHV) at full power</i>
<i>VOM:</i>	Bidder to provide. <i>Sample: Variable operation and maintenance rate: \$2.50 per MWh, to be paid by PGE to the Bidder for all hours that PGE dispatches the tolling facility.</i>
<i>Delivery Point:</i>	Bidder to provide. <i>Preferred: PGE's system.</i>
<i>Quality:</i>	Firm transactions as defined in "About the Term Sheets."

- Fuel Delivery Point:* Bidder to provide.
Preferred: PGE to deliver fuel to a trading hub, such as AECO or Sumas, with the Bidder to supply all additional gas transportation services.
Sample: PGE to deliver fuel to an agreed-upon trading hub or pipeline interconnection, and be responsible for all expenses related to the transportation of fuel to that trading hub or pipeline interconnection.
- Fuel Supply:* Bidder to provide.
Sample: PGE shall be responsible for all expenses related to the acquisition of fuel.
Note: Bidders interested in providing the fuel for this tolling service should describe in detail the services, pricing, terms and conditions associated with this service, and should indicate whether their supplying fuel is an option or a requirement of their proposal.
- Dispatch:* Bidder to provide.
Sample: PGE has the right of daily dispatch on a customary pre-schedule basis. Real-time hourly adjustments shall be made available according to pre-established facility ramp-rates, start-up costs and dispatch protocols. Energy shall be scheduled according to customary WECC scheduling practices.
- Availability Guarantee:* Bidder to provide.
Sample: 97 percent capacity availability over the contract Term. Scheduled maintenance shall not exceed 400 hours per year, except for major overhauls required by manufacturer specifications.
- Maintenance:* Bidder shall be responsible for all operation and maintenance expenses for the tolling facility (except VOM as stated above). The Bidder agrees to maintain the tolling facility according to the manufacturer's and operator's recommended guidelines. Bidder and PGE shall coordinate all scheduled maintenance outages. However, the Bidder agrees that no annual maintenance outages will be scheduled during the months of November through February, and July through September. Other planned maintenance shall be performed on weekends.
- Capacity Charge:* Bidder to provide.
Sample: \$USD ____ per kW month paid monthly during the term.

Appendix B – Energy Product, Firm Physical Energy Purchase

Sample Term Sheet – For Discussion Only

<i>Product:</i>	Firm Physical Energy Purchase
<i>Product Seller:</i>	Bidder
<i>Product Purchaser:</i>	Portland General Electric Company (PGE)
<i>Available Hours:</i>	On-Peak and off-peak hours. On-peak hours include hours ending 0700 through 2200, Pacific Prevailing Time (PPT), Monday through Saturday, excluding NERC holidays. Off-peak hours include hours ending 0100 through 0600 and hours ending 2300 through 2400, PPT, Monday through Saturday, and hours ending 0100 through 2400, PPT, Sundays and NERC holidays.
<i>Term:</i>	Bidder to provide. The minimum bid term is 5 years, with a start date no earlier than January 2010 for non-renewable bids and January 2009 for renewables; the maximum start date is January 2012 for non-renewables and January 2014 for renewables. <i>Sample: Commencing January 1, 2010, for up to 20 years.</i>
<i>Contract Quantity:</i>	Bidder to provide. <i>Sample: 25 MW minimum, 410 MWa maximum.</i> <i>Preferred: 50 to 150 MWa; 2 MW to 150 MWa for renewables.</i>
<i>Delivery Point:</i>	Bidder to provide. <i>Preferred: PGE service territory</i>
<i>Quality:</i>	Firm transactions as defined in "About the Term Sheets." Bidders proposing energy service from non-dispatchable sources, such as hydro, wind or solar, must provide descriptions and costs of ancillary services required to firm their products.
<i>Energy Payment:</i>	Bidder to provide. <i>Sample: \$USD ____ per MWh.</i>

Appendix C – Energy Product, Firm Financial Energy Purchase

Sample Term Sheet – For Discussion Only

<i>Product:</i>	Firm Financial Energy Purchase. PGE to purchase fixed for floating swaps or other substantially similar energy price risk-management products. These products should obligate PGE to pay a fixed price in exchange for variable price payments to PGE, based on a mutually-agreeable and predetermined daily price index. The price index should be transparent and representative of Northwestern wholesale power markets such as the Dow Jones Mid-Columbia Daily Index for Firm Power or the Mid-Columbia On or Off Peak Firm Price ICE Index.
<i>Product Seller:</i>	Bidder
<i>Product Purchaser:</i>	Portland General Electric Company (PGE)
<i>Available Hours:</i>	On-Peak and off-peak hours. On-peak hours include hours ending 0700 through 2200, Pacific Prevailing Time (PPT), Monday through Saturday, excluding NERC holidays. Off-peak hours include hours ending 0100 through 0600 and hours ending 2300 through 2400, PPT, Monday through Saturday, and hours ending 0100 through 2400, PPT, Sundays and NERC holidays.
<i>Term:</i>	Bidder to provide. The minimum bid term is 5 years, with a start date no earlier than January 2010; the maximum start date is January 2012. <i>Sample: Commencing January 1, 2010, for up to 20 years.</i>
<i>Contract Quantity:</i>	Bidder to provide. <i>Sample: 25 MW minimum, 100 MWa maximum.</i> <i>Preferred: 50 to 100 MWa.</i>
<i>Purchaser Pays:</i>	Bidder to provide – Fixed price. <i>Sample: \$USD ____ per MWh.</i>
<i>Bidder Pays:</i>	Daily Index. <i>Sample: Mid-Columbia Daily Electricity Price Index as published in the Dow Jones Daily Index for Mid-C Firm, On-peak and Off-peak hours or the Mid-Columbia On or Off Peak Firm Price ICE Index.</i>

Appendix D – Energy Product, Elements of an Ownership Offer

[Draft– For Discussion Only]

PGE invites offers for ownership positions of up to 410 MWa that fit our mid- to long-term resource requirements. Ownership bids may include (but are not limited to) the sale of existing plants, acquisition of project development or natural resource rights and options, joint ownership and build-own-transfer agreements. We will also consider hybrid structures that include both an ownership component and a power purchase agreement (e.g. the sale of a phase or portion of a project with an off-take agreement for the remaining output). Ownership proposals may also be submitted for both renewable and non-renewable energy resources. In making such proposals, Bidders are asked to provide the following (as applicable):

- Detailed description of the project including, but not limited to, the location, availability of transmission, fuel type and fuel transportation.
- Current and proposed ownership structure.
- Project *pro forma* financial operating statements and documentation supporting significant assumptions. Documentation should at least address operating and financial information, such as output and efficiency, estimates for unit availability, O&M costs, fuel and fuel transportation costs, transmission costs and losses, expected ongoing capital requirements, warranties and guarantees, project operating characteristics, and all regulatory compliance requirements.
- Current and proposed capital structure.
- Legal and regulatory requirements to complete siting and construction.
- Whether the project is turnkey or PGE will be involved in the development.
- Whether the project would be operated under a joint ownership arrangement.
- Payment schedule for purchase of ownership position.
- Current and proposed operating agreement(s).
- Description of project management and workforce agreements(s).
- Associated development contract, *e.g.*, Engineering, Procurement and Construction (EPC), long-term service agreement (LTSA).
- Joint ownership agreement, if any.
- For projects currently in operation, provide operating history and any other information required to evaluate the proposal.
- For projects in the planning or development phase, provide information on liquidated damages related to the project missing significant project development and operational milestones and missing the stated capacity. Also, describe the developer's

insurance coverage during construction and at project completion including insurance amounts, deductibles, and the timing of coverage effectiveness.

PGE retains the right to contact contractors, equipment suppliers and others engaged in developing or operating the project(s) described in the ownership proposal. PGE may also request additional information relevant to specific bids.

Appendix E – Firm Physical Wholesale Energy Purchase and Sale Agreement

Template provided in a separate document available for download on www.portlandgeneralRFP.com.

Appendix F – Tolling Agreement

Template provided in a separate document available for download on www.portlandgeneralRFP.com.

Appendix G – Required Bidder Profile

Company Name:		
Name of Contact:		
Title:		
Mailing Address:		
Telephone:	Fax:	E-mail:

Bidder's general background and principal business:

Legal entity that would be the contracting party to a power purchase contract with PGE. State whether this entity will be formed for the sole purpose of the project and a description of the ownership and debt arrangements:
--

Bidder's senior unsecured debt rating:
<input type="checkbox"/> Standard & Poor's
<input type="checkbox"/> Moody's Investor Services., Inc.
<input type="checkbox"/> Fitch Ratings
<input type="checkbox"/> DBRS

Appendix H – Required Bid Information

Please use the following multi-page form to provide required information regarding each bid. Wherever possible, enter information directly onto the form. Check boxes () indicate documents that are likely to be provided as attachments to the form.

For early-stage ownership proposals, including acquisition of project development or natural resource rights, please fill out sections as applicable.

1. Project Description

Project name: Location: Initial in-service date(s): Nameplate capacity (MW): Expected monthly and annual energy generation (MWh):

<i>Term Sheet:</i> <input type="checkbox"/> Provide a term sheet describing energy product being bid and price, including any exceptions or modifications to the applicable sample term sheet found in the RFP. <input type="checkbox"/> Submit the appropriate sample purchase agreement provided with the RFP including all requested amendments to the document. All modifications of the credit terms and conditions will be used for the credit evaluation:
<i>Term:</i> Include any provisions for renewal or extension:

One- or two-paragraph summary of proposal:
--

2. Project Development Criteria

For bids supplying power products from specific generating projects that will not be in commercial operation by May 1, 2008, please supply the following additional information.
<i>Project name:</i>
<i>Permitting and Licensing Status</i> <ul style="list-style-type: none"><input type="checkbox"/> List and describe the current status and jurisdictional responsibility for all licenses, permits, zoning variances, and other regulatory approvals necessary for the construction and operation of the project.<input type="checkbox"/> Status categories include: approved, not approved but application submitted, working on application, work on application has not begun.<input type="checkbox"/> For each license, permit, zoning variance and regulatory approval that has not yet been obtained, show the sequencing and duration of permitting and licensing activities in a project schedule diagram, including expected construction time.<input type="checkbox"/> For projects in the permitting and licensing phase, identify whether there is opposition to the siting of this project and how this opposition impacts project permitting.<input type="checkbox"/> Discuss in general terms your approach for resolving these permitting issues or any planned mitigation measures.<input type="checkbox"/> Could any of these permitting issues significantly delay or prevent successful siting of the project?

<i>Progress to Date</i> <ul style="list-style-type: none"><input type="checkbox"/> Describe the progress in development or construction of the project to date, including a description of any contracts or letters of intent signed in connection with the project, or a description of other factors demonstrating project progress.<input type="checkbox"/> Include current status of project design and engineering, and equipment procurement.
--

<i>Milestone Schedule</i> <p>Submit an overall milestone schedule for the generating project that identifies all key dates including but not limited to dates for regulatory approvals, finalization of transmission and interconnection agreements, finalization of fuel supply agreements, status of equipment and major components supply agreements, pre-construction milestones and construction milestones. The schedule that is submitted must be attainable and one to which the Bidder will commit to in the executed agreement. Include all aspects of the development including fuel and transmission infrastructure activities.</p>

<i>Project name:</i>
<i>Experience of Developer Team</i> <p>Provide the following information:</p> <ul style="list-style-type: none"><input type="checkbox"/> Describe the developer's participation in successfully developing power production projects in the U.S., emphasizing projects located in the Pacific Northwest and similar to the project proposed in the bid.<input type="checkbox"/> List members of the development team.<input type="checkbox"/> Provide a resume for each individual, including training, experience with power project development, functions performed, and area of expertise.<input type="checkbox"/> Summarize the current status and a short description of power project development efforts

with which team members have been involved. The summary for each team member should include the type of projects developed (e.g., wind, CCCT, biomass, etc.), current owner of the projects, geographic location and current status, e.g., operating, in construction, permitted.

Describe business-related litigation or regulatory investigations in which the developer or development team members were previously (in the last 7 years), are currently, or are expected to be engaged.

Financial Plans

Provide the financial information listed below to the extent the information is currently available:

Describe whether the Bidder intends to internally finance construction of specific generating project(s), or plans to obtain project financing from another source.

Describe any existing commitments by financial institutions and provide documentation supporting these commitments. *In lieu* of such information, describe the plans for securing such commitments.

List the name, telephone number and contact person of the developer's:

Commercial bank:

Financial advisor:

Bond underwriter:

Other key financial trustee, advisor, counsel or lender:

Provide a list of projects in the development phase, identifying the manufacturer of the principal components, counterparties in power sales agreement(s), the stage of completion of the project, the estimated operational date, the original estimated operational date, the percentage the project is over- or under-budget, and the project financing sources.

Identify the extent to which the developer is committed to providing additional assets if necessary to complete the project.

Has the Bidder already committed to proceed with construction of specific generating projects? If not, what actions or events would need to occur before the Bidder can commit to such construction?

If the decision to proceed with the generating project depends on obtaining power purchase and tolling agreements with third parties, please identify the amount of the project output that needs to be subscribed before the Bidder will proceed with construction, and the amount of firm commitments through executed agreements that the Bidder already has for output from the project.

Identify the counterparty, product amount and term of each executed agreement. If such information is confidential, please provide a summary of amounts committed.

Site Control

Site control is an important factor in our RFP evaluation, and should be interpreted to include the site itself, along with all required easements and access required for the site.

Project name:

Describe the level of control of the generation project site, e.g., ownership, lease, option, letter of intent.

If the Bidder does not have control over the project site, describe the actions already taken to obtain control of the site.

3. Project Characteristics

For bids supplying energy products from a specific generating project, or in the case of a portfolio from several generating projects, provide a reasonably detailed description of the project(s), including the information requested below.

Source of supply: Will the bid be supported from:

- A specific project.
- A portfolio of projects.
- A system sale not necessarily tied to specific projects.
- A financial transaction without reliance on specific resources.

Identify all project(s) that will be used to support the bid:

Resource Base of Energy Product

- Describe the project site(s), including a description of the facilities of any thermal energy users and any other major structures related to the production of electricity or thermal energy.
- Concisely describe the technology used for the generation of electricity, including a technical description of, and vendor for, each turbine generator and emissions control technology, as applicable, and each principal fuel or energy source to be used.
- Provide the necessary design documents that will enable PGE to evaluate the engineering design and equipment used for transmission interconnection.
- Provide any additional design documents that would enable PGE to evaluate the engineering design, equipment and layout of the project.
- Describe all licensing and regulatory requirements.

Resource Adequacy Considerations:

For products supplied from portfolios or system sales, will the Bidder assign specific regional resources to support the product should a regional or national resource adequacy standard be implemented? If so, identify the resources.

Maintenance and Outages

Describe the normal annual maintenance outage for the project, including timing and expected duration.

List major outages planned during the contract period.

Point-of-Delivery

Identify the POD(s) for the bid:	
Provide evidence satisfactory to PGE of the Bidder’s ability to deliver the power product to each specified POD on a firm basis. Including the following information:	
Provide all applicable interconnection and transmission service agreements:	
Identify any restrictions on operation imposed by applicable interconnection and transmission agreements. Include any requirement to participate in remedial action schemes or be subject to re-dispatch as identified by the transmission provider.	
If the proposed POD is not within PGE’s service territory, describe the basis upon which the power is expected to be delivered to PGE’s service territory, including: <input type="checkbox"/> Firm Delivery - Describe actions taken to secure firm rights to PGE. <input type="checkbox"/> Non-firm Delivery - Please describe:	
Key dates for finalizing the interconnection and transmission agreements.	
Dates	Agreements
Completion dates for transmission facility additions or modifications necessary to secure such service.	
Dates	Transmission Facility Additions

Fuel or Energy Source and Technology

Fossil-Fuel Technology

Complete a separate copy of this page for each fossil-fueled project used to support the bid.

Project name:
Provide a heat rate curve for the project showing heat rate versus output.
What is the primary fuel type to be used by the project? What is the maximum gas demand in daily MMBtu (24 hours) on a 20° day (peak cold day)? Please demonstrate that the project has sufficient gas transportation to meet peak output needs. <i>(For gas-fired projects only)</i> Are there restrictions that could limit the use of the primary fuel? Please describe. Can secondary fuel types be used by the project? If so, are there any restrictions on their use? Please describe.
For the primary fuel, is there access to fuel delivery from multiple sources, e.g., interconnections with multiple gas pipelines? Does the project have contracts for firm fuel transportation for the primary fuel? If so, for what term? What percentage of the total fuel needs is covered under these contracts?
Is there any fuel storage capability at the project site or held by the project at other sites? For tolling agreements, please indicate whether the storage capability would be available to PGE, in what amount and at what cost?

Fuel Transportation

If the bid assumes PGE will use fuel or fuel transportation contracts held by the project: <input type="checkbox"/> Provide any documentation that will assist PGE in evaluating the supplier's financial strength and ability to meet its contract commitments.
For projects that are not already in commercial operation, identify new fuel transportation infrastructure needed before commercial operation of the project: What actions are needed to ensure that this new infrastructure is developed in a timely manner to support the scheduled in-service date of the project?
<input type="checkbox"/> Provide any additional information the Bidder believes is pertinent to evaluating access to fuels for the project.

Request Pro Forma (for equity bids only; note that ETO-eligible bids will be required to provide a pro forma to the ETO)

<p>Provide a summary of the major project capital and operating expenses and documentation to support the reasonableness of the estimates. Include a budget with a breakdown of projected capital costs.</p> <p>Provide <i>pro forma</i> financing projections showing the projected cash flow and financing. At a minimum the pro forma should include the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Annual energy production and assumed revenue. <input type="checkbox"/> Annual operating expenses including lease or royalty payments. <input type="checkbox"/> Planned or required reserve and contingency amounts. <input type="checkbox"/> Transmission costs, losses and ancillary services to deliver energy produced at the project to the POD. <input type="checkbox"/> Debt service and debt coverage ratios. <input type="checkbox"/> Depreciation. <input type="checkbox"/> Taxes. <input type="checkbox"/> Net Income. <input type="checkbox"/> Equity rate of return. <p>Provide the <i>pro forma</i> in hard copy and electronically as an Excel file.</p>
--

Biomass, Biogas and Solid Waste

Please fill out a separate copy of this section for each biomass, biogas or solid waste project used to support the bid.

Project name:
<input type="checkbox"/> Provide documentation that will enable PGE to evaluate project fuel suppliers for current and future production and delivery capabilities, and financial strength.
Discuss the status of fuel supply and transportation contracts with potential suppliers and any contingencies that could affect the availability of fuel supply to the facility:
<input type="checkbox"/> If contracts have not been signed, provide copies of correspondence or other materials from these parties that demonstrate their level of commitment to the project.
Projection of the price of fuel over the term of the proposed contract: <input type="checkbox"/> Provide the basis for the price projection.
Projection of annual fuel availability for the term stated in your bid: Include assumptions and associated variable costs necessary to operate the unit and tipping fees received in association with procurement of fuel.
For projects not already in commercial operation, describe any new fuel transportation infrastructure that would be needed before commercial operation of the project: What actions are needed to ensure this new infrastructure is developed in a timely manner to support the scheduled in-service date of the project?
<input type="checkbox"/> Provide any additional information the Bidder believes is pertinent to evaluating access to fuels for the project.

Hydroelectric

Complete a separate copy of this section for each hydroelectric project used to support the bid.

Project name:
For projects already in operation: Hourly net energy production records for the period that the project has been operating: <input type="checkbox"/> Also provide a projection of forward-going energy production.
For all hydroelectric projects: <input type="checkbox"/> Provide resource assessment reports for the project, and augment if necessary with the following information:
Water flow data and basis of the project head assumptions used in the development of the net annual and monthly energy projections. Include: <input type="checkbox"/> Identification of the organization responsible for data collection and analysis, the period over which the data was collected, a discussion of the approach used for collecting data, and data quality assurance procedures. <input type="checkbox"/> The analysis used to determine the project head assumptions. <input type="checkbox"/> A table of projected monthly and annual water flows (average, adverse, and favorable) over the term of the proposed power purchase contract, including any assumptions for such projections, and a conversion of such flows into kilowatts and kilowatt-hours.
Does the project have a certificate from the Low Impact Hydroelectric Institute indicating the project meets the requirements for classification as a low impact hydroelectric project? If not, is the project seeking a certification from the Low Impact Hydroelectric Institute?
Estimate the daily variability of flows which can be used to forecast the range in daily net energy output from the project:
Contingencies that could affect the availability of water flow and head to the facility: Include: <input type="checkbox"/> Present or future issues regarding fish or other concerns that could possibly place operational restrictions on the project. <input type="checkbox"/> Available hours of draw-down from any water storage at the project assuming full generator output, reservoir draw-down capability and downstream flow restrictions. <input type="checkbox"/> Any regulatory, including license conditions, restrictions that may impact operations.
<ul style="list-style-type: none"> ▪ Plant configuration: ▪ Year built: ▪ Equipment ratings: ▪ Number of units: ▪ Ending date of the current license:
<input type="checkbox"/> Provide the detailed analysis used to estimate the annual and monthly net energy output of the hydroelectric project. <input type="checkbox"/> List and individually quantify all sources of losses, and provide the basis for quantification.

Wave Energy

<p>For projects already in operation (or planned projects with test buoys deployed): Hourly net energy production records for the period that the project has been operating:</p> <p>Also provide a projection of forward-going energy production.</p> <p>In addition, please provide the following:</p> <ul style="list-style-type: none"> ▪ Plant configuration: ▪ Year built: ▪ Number of units: ▪ Ending date of the current license:
<p>Describe the equipment to be used and the layout of your wave project. Include the size, technology type and manufacturer of the individual wave turbine units:</p>
<p><input type="checkbox"/> Provide a resource assessment report which includes adequate information to develop net annual and monthly energy projection.</p>

Wind

Complete a separate copy of this section for each wind project used to support the bid.

<p>Project name:</p>
<p>Existing projects:</p> <p><input type="checkbox"/> Provide hourly net energy production records for the period that the project has been in operation.</p>
<p>All projects:</p> <p><input type="checkbox"/> Provide any assessment reports that have been prepared for the project and augment them if necessary with the following information:</p>
<p><input type="checkbox"/> Provide source and basis of the wind speed data used in the development of the energy projections for the project.</p> <p>Include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Purpose and location of the data collection. <input type="checkbox"/> Period of record. <input type="checkbox"/> Number of on-site and off-site meteorological stations used. <input type="checkbox"/> Data quality assurance procedures. <input type="checkbox"/> Levels of measurements. <input type="checkbox"/> Seasonal data recovery and the organization responsible for the data collection and analysis. <input type="checkbox"/> Methodology used to develop the estimated long-term, hub-height, average annual wind speed and wind speed frequency distribution for the project site.

<ul style="list-style-type: none"> <input type="checkbox"/> Time-of-day, monthly and annual representative hub-height wind frequency distributions at intervals of 0.5 m/s. Provide these tables on paper and electronically in an Excel file. <input type="checkbox"/> Duration of on-site measurements (minimum of one year strongly preferred).
<p>Describe the equipment to be used and the layout of your wind project. Include the size, technology type and manufacturer of the individual wind turbine units:</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Provide the detailed analysis used to estimate the net annual and monthly energy output of the wind project. All sources of losses should be listed and individually quantified, along with the basis for quantification. <input type="checkbox"/> Provide a typical hourly energy production from the facility for a one-year period electronically as an Excel spreadsheet. We will use this information to understand the hourly variability of the resource.

Solar

Complete a separate copy of this page for each solar project used to support the bid.

<p>Project name:</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Provide any available assessment reports for the project and augment them, if necessary, with a detailed description of the solar and climatic data that were recorded for the site, and how they were sampled and processed (minimum of one year of data strongly preferred).
<ul style="list-style-type: none"> <input type="checkbox"/> Describe in detail the analysis that used the solar and climatic data from the site to estimate the net annual and monthly energy output from the project. <input type="checkbox"/> Provide a typical hourly energy production from the facility for a one-year period electronically as an Excel spreadsheet. We will use this information to understand the hourly variability of the resource. <input type="checkbox"/> List and quantify all sources of losses, and provide the basis for the quantification.
<ul style="list-style-type: none"> <input type="checkbox"/> Describe the solar incidence data supporting project energy generation assumptions. <input type="checkbox"/> Describe source and location of the data obtained and, if different from project site, provide an engineering review of its applicability to the proposed site. <input type="checkbox"/> Identify locations of any operating sites where technology identical to that proposed is employed.
<p>Describe the physical layout of the plant:</p> <p>Proposed type of solar technology:</p> <p>Manufacturer and supplier of the photovoltaic panels:</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Provide operational history of the technology, and maintenance requirements.

Geothermal

Complete a separate copy of this page for each geothermal project used to support the bid.

Project name:
Provide:
<input type="checkbox"/> Project overview, site location and geological summary of site. <input type="checkbox"/> Resource assessment reports that have been prepared for the project and augment them if necessary with the following information.
<input type="checkbox"/> Status of the exploration program at the site, including information on the organizations performing the field work, a summary of the various data collected at the site, and the approach used for validating that data.
<input type="checkbox"/> Describe the analysis used to convert data obtained from the geothermal site into a reservoir model. <input type="checkbox"/> Identify if the resource is in a known geothermal resource area, and include an assessment of the resource potential, an estimate of the annual production from the resource, an estimate of resource life, and uncertainties associated with the development and life of the resource.
<input type="checkbox"/> Discuss the proposed geothermal power production technology appropriate for the site and the proposed long-term drilling program for the site. <input type="checkbox"/> Identify any innovative design or special operational features that will be required at this site. <input type="checkbox"/> Discuss the nature of the geothermal resource, and any challenges, including environmental, in drilling or conversion of the resource as a result of the geothermal characteristics.
<input type="checkbox"/> Provide the detailed analysis used to support the estimate of net annual and monthly energy output of the geothermal project. <input type="checkbox"/> List and quantify all sources of losses, and provide the basis for the quantification.
<input type="checkbox"/> Describe the type of the proposed geothermal conversion technology, the plant technology to be used, operational characteristics and maintenance requirements.

O&M Reliability – All Projects (Renewable and Non-Renewable)

For each project used to support a bid, provide the following information.

Project name:
Describe the experience and expertise of the project’s current (or proposed, if applicable) O&M operator and the recent operating experience(s) of the plant(s).
<input type="checkbox"/> Describe any training program for the plant staff. <input type="checkbox"/> Does the project have access to support from a centralized engineering staff? If so, please describe. <input type="checkbox"/> Provide a list of the major critical spare parts held in inventory by the project, either at the site or at a common inventory location, or indicate if such parts are readily available from the vendor. <input type="checkbox"/> Are spare transformers installed at the site for backup? <input type="checkbox"/> Does the project have a long-term service agreement with the vendor for major equipment?

Describe the level of participation that PGE would be given in capital and O&M decisions that could affect reliability of plant operations.

Would PGE have any rights to require replacement of the plant operator?

If so, under what conditions would PGE have such rights?

Describe the Bidder's asset management strategy for future operation of the project.

4. Power Product Characteristics

Resource Output

For all proposals, provide the following information on the quantity of firm energy and peak capacity, if applicable, offered to PGE from the project. The amount offered must be the quantity of firm energy and capacity metered at the POD.

Project name:

Guaranteed Availability Factor

Provide a Guaranteed Availability Factor (GAF) for all proposals:

- Products that can supply the contracted quantity of megawatts per hour on a firm basis during all hours of the contract term will be deemed to provide a 100 percent GAF. The GAF should be a monthly value, and not include annual scheduled maintenance.
- Annual maintenance outages must not be scheduled between November 1 and February 28, and between July 1 and September 30.
- For year-around products, scheduled maintenance shall not exceed 400 hours per year, except for major overhauls required under a manufacturer's long-term service agreement.
- Scheduled maintenance outage hours in excess of this requirement will be charged against the GAF.
- Provide detailed information, including proposed dollar amounts, on how Bidder proposes to compensate PGE if the generating project fails to meet its GAF, *i.e.*, full compensation for replacement power, liquidated damages or other mechanisms (see PGE sample Contracts)

Monthly Energy and Peak Capacity

- Provide a table displaying by month (typical 24-hour period within the month for variable or intermittent resources) for the entire term of the bid, as well as the peak capacity in MW (if applicable) to be supplied under the bid proposal, as metered at the POD. If appropriate, include the guaranteed heat rate (Btu/kWh-HHV) at rated output in the table, accompanied by a heat rate curve.

Power Product Quality:

For energy service from intermittent, non-dispatchable sources such as wind and solar, describe Bidder's approach for obtaining the integration services needed to firm their products (if any):

Temperature Variability

For each project used to support a bid, provide if appropriate, the following information.

Project name:
<input type="checkbox"/> To the extent that the guaranteed quantity of energy, peak capacity (if applicable) or heat rate in the bid is dependent on ambient temperature, clearly identify and describe the relationship and provide estimates for the range of variation. <input type="checkbox"/> At a minimum, provide an estimate for the quantity of energy, peak capacity (if applicable) and heat rate for a hot summer day and a cold winter day.

Resource Variability

Project name:
<input type="checkbox"/> Proposals that offer a delivery schedule other than a flat schedule as requested by the product term sheets must include a clear description of the proposed delivery schedule and its relationship with the actual production of the project. <input type="checkbox"/> Supply in a table the variation in energy output by month during on-peak and off-peak hours (see sample table, below). <input type="checkbox"/> Expand upon the information provided in the table if this format is insufficient to fully describe the output variability of the bid.

Monthly Output Variability of the Bid (MWh)

<i>Month</i>	<i>Average Energy On-Peak (MWh)</i>	<i>Average Energy Off-Peak (MWh)</i>
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Information for Cogeneration Projects

Name:
Corporate owner:
Industrial process at the site:
Describe in detail the effects that the loss of the cogeneration host would have on continued

operation of the cogeneration project, including output, operational flexibility and price.
Pertinent operational information concerning the steam host:

Other Factors Affecting Resource Variability

For each project used to support a bid, provide if appropriate, the following information.

Project name:
Identify and describe in detail: <ul style="list-style-type: none"><input type="checkbox"/> Environmental restrictions.<input type="checkbox"/> Operational limitations.<input type="checkbox"/> Other factors relevant to resources supporting a bid that may prevent the resource from meeting its guaranteed monthly quantities of energy (or peak capacity, if applicable).

Power Product Flexibility

Project name:
<input type="checkbox"/> Completely describe all dispatch and operating schedule flexibility that will be available to PGE by contract.
Describe any restrictions or limitations on PGE’s right to dispatch, curtail, or schedule reduced energy output from the product. For dispatch or curtailment describe: <ul style="list-style-type: none">▪ Minimum run time per dispatch call:▪ Minimum down time per curtailment:▪ Startup time and costs for a cold start:▪ Startup time and costs for a hot start:▪ Cost impact of dispatch, if any:▪ Ramping rates:▪ Multiple party output issues:
For turn-down (operation at below 100 percent of base output), provide the following: <ul style="list-style-type: none">▪ Minimum turndown value:▪ Maximum hour-to-hour adjustment:▪ Cost impact of turndown, if any:▪ Multiple party output issues:

Please provide Information about heat rate degradation for plant turn-down:
Will PGE have the right to make real time adjustment to pre-schedules? If so, under what conditions will this right be limited?
Will PGE have the right to request inter-hour shaping? If so, under what conditions?
Is Bidder willing to give PGE the discretion to schedule annual maintenance? If so state any conditions on such scheduling.

How will the operating flexibility associated with dispatchability, turndown, real time adjustments and inter-hour shaping affect O&M costs and capital replacements?
How does the Bidder envision PGE communicating its needs for operational flexibility to the project, and how will the project respond to such needs:
What other operating flexibility is provided by the project that is not adequately described above?
<input type="checkbox"/> Describe in detail the features in project design that will enable the project to provide this operating flexibility.

Bid Option for Additional Capacity from Energy Products

For each project used to support a bid, provide if appropriate, the following information.

Project name:
<input type="checkbox"/> Describe in detail any option bundled within an energy product bid that would enable PGE to exercise the right to take additional output using duct-firing, power augmentation or some other characteristics of the Bidder’s resource or portfolio.

Rights to Firm Energy

For each project used to support a bid, provide if appropriate, the following information.

Project name:
<input type="checkbox"/> If the Bidder is offering only a portion of the project's firm energy to PGE, describe each entity’s rights to the firm energy produced by the project.
<input type="checkbox"/> Describe the process for coordinating the differing operational requirements of the purchasers.

Additional Project-Specific Benefits

Project name:
<input type="checkbox"/> For all bids, if you believe that there are other project-specific benefits that PGE would find attractive, describe such benefits and the basis for your belief that PGE would find them attractive.

5. Credit Support and Quality of Credit

<p>Provide the following:</p> <ul style="list-style-type: none"><input type="checkbox"/> A corporate organizational chart identifying the Bidder and, if applicable, the Bidder's credit support provider.<input type="checkbox"/> A list describing the relationship of the Bidder to its credit support provider, the developer and development team, or the thermal host, as applicable.<input type="checkbox"/> The unsecured credit ratings of the Bidder, the Bidder's credit support provider, the developer and the development team, or the thermal host, as applicable.<input type="checkbox"/> The most recent summary, opinion or update by S&P, Moody's, Fitch and DBRS, as applicable.<input type="checkbox"/> The DUNS number of the Bidder, the Bidder's credit support provider, developer and the development team, or the thermal host, as applicable.<input type="checkbox"/> Bidder's audited financial statements for the three most recent fiscal years (Fiscal YE 2005 – 2007). In the event Bidder cannot provide the information, Bidder shall provide that information for its credit support provider.<input type="checkbox"/> Audited financial statements for the three most recent fiscal years from the developer and development team.<input type="checkbox"/> Audited financial statements for the three most recent fiscal years from the thermal host associated with a cogeneration resource, if applicable.<input type="checkbox"/> Performance Assurance Draft: Letter of Credit or Guaranty (if applicable) <p>All transactions are contingent upon the Bidder, or its credit support provider, meeting and maintaining the credit and performance assurance requirements established by PGE's Credit Risk Management Department.</p>

6. Environmental Characteristics

<p><input type="checkbox"/> Bidders supplying the product from a portfolio of resources and contracts should provide an estimate of energy production from the portfolio in terms of fuel type, e.g., 60 percent natural gas, 20 percent coal, 10 percent wind, 10 percent hydro. If the fuel source for contracts is unknown, list contracts as a separate category.</p>
<p>If supplying the product from one or more specific resources, provide the following information for each resource.</p> <p><input type="checkbox"/> Project name:</p> <p><input type="checkbox"/> Discuss known environmental issues related to the development and operation of the project.</p> <p><input type="checkbox"/> Describe environmental impacts of, and existing environmental constraints on, existing and proposed projects.</p> <p><input type="checkbox"/> Provide the information requested in the following subsections for <i>existing and proposed</i> projects.</p>

Air Quality

Complete the following table, and provide the information requested below.

Emission Disclosures

<i>Emission</i>	<i>Lbs./MWh</i>
Sulfur Dioxide:	
Nitrogen Oxide:	
Carbon Dioxide:	
Carbon Monoxide:	
Particulate:	
Solid Waste (i.e. ash):	

Project name:
Describe the following: <ul style="list-style-type: none"> <input type="checkbox"/> Air pollution controls used on the project, e.g., type, emissions controlled and removal efficiency. <input type="checkbox"/> Whether the proposed project will exceed any criteria of the National Ambient Air Quality Standards (NAAQS) for any pollutant when operating on either primary or backup fuel. Also describe the "Prevention of Significant Deterioration Increment Consumption" due to this project, as applicable.
State whether the project requires a federal, state or local "air permit": <ul style="list-style-type: none"> <input type="checkbox"/> If relevant, Include a copy of this permit, if approved, or a copy of the permit application, if submitted.
Describe any significant toxic air pollutants that may be released from the project:

<i>Land Use (for proposed projects only)</i>
Project name:
Please specify the total acres disturbed by your project.
Is the proposed project consistent with the recommended uses of adopted local and state land use plans?
Will the project need a zoning change?
If there is likely to be public controversy related to the proposed project, please explain.

<i>Water use:</i>
Describe any type and quantity of wastewater discharge.
Describe any water requirements for production or cooling and the water rights/ plans associated with meeting these needs.

<i>Waste:</i>
Please describe the total amount of waste directly related to power production (e.g. ash):

<i>Noise (for proposed projects only)</i>
Project name:
Characterize the ambient day and night sound environment in the area surrounding the project site.
Provide estimates for the day and night noise levels of the proposed project.
Describe proposed sound attenuation strategies or equipment planned for the project.

<i>Project name:</i>	
<i>Scenic Visibility (for proposed projects only)</i> Give the distance in miles that the project, or its effect, will be visible from any of the locations described in the following table:	
<i>Feature</i>	<i>Distance from Project (Miles)</i>
<ul style="list-style-type: none"> ▪ State parks or state forest preserves. ▪ National wildlife refuges or state game refuges. ▪ National natural landmarks or other outstanding natural features. ▪ National park service lands. ▪ Rivers designated as wild, scenic or recreational. ▪ Designated wilderness areas. 	

<i>Threatened and Endangered Species</i>
<i>Project name:</i>
If the project site or contiguous areas contain any species of plant or animal life identified as threatened or endangered, please list and explain mitigation measures.
If the project site contains any plants or animals being proposed or considered as candidates for threatened or endangered lists, please list and explain mitigation measures.

<i>Fish and Wildlife</i>
<i>Project name:</i>
<ul style="list-style-type: none"> <input type="checkbox"/> Provide copies of wildlife studies that have been performed for the project. <input type="checkbox"/> For wind generation projects, discuss any avian issues, and describe proposed solutions. <input type="checkbox"/> For proposed hydroelectric projects, discuss whether in-steam flow studies will be required, or have been performed, and the results from such studies. <input type="checkbox"/> For proposed hydroelectric projects, discuss major license conditions affecting resource management including, but not limited to, whether fish passage facilities will be required.

<i>Mitigation</i>
<i>Project name:</i>
Briefly describe any environmental mitigation methods, both required and volunteered, that are included as part of an operating project or will be included as part of a proposed project. Include cost of meeting the State of Oregon’s carbon dioxide standard, through payments to the Climate Trust, or similar payments in other states.

Appendix I – Energy Trust of Oregon

The Energy Trust of Oregon (ETO) began operation as a nonprofit organization in March 2002 to fulfill a mandate to invest public purpose charge monies for energy efficiency, conservation and renewable energy resources in Oregon. The mandate emerged from 1999 energy restructuring legislation (Senate Bill 1149) that included a three percent public purpose charge added to the rates of the two largest investor-owned utilities.

Subsequent action by the Oregon Public Utility Commission (OPUC) encouraged the startup of a new nonprofit organization to administer the funds created by the legislation. The ETO was formed as an independent, private corporation operating under a contract with the OPUC that dedicates funds collected by utilities to the ETO. The ETO receives funding every year from monies collected from PacifiCorp and PGE ratepayers to support a broad range of renewable resources for projects under 20 MW in size.

Role of the ETO in PGE's RFP

PGE will review bids based on renewable generation that may or may not presume ETO funding. PGE will subsequently forward all bids to the ETO that PGE is recommending for its initial short list, along with our ranking and recommendations regarding funding. Our recommendations will be based on pre-qualification assessments, and scoring of price and non-price factors. The ETO will make its own assessment of the bids that PGE recommends for funding, and will agree or negotiate funding levels. PGE's initial short list will be finalized after ETO funding has been determined.

Funding From the ETO

The ETO funds the above-market costs of new renewable resources. The market cost for energy with the same power characteristics as that produced by the proposed renewable resource can be defined as the regulatory forward price curve, the utility's published avoided cost, the average result from this RFP or an alternative. PGE and the ETO will agree on the relevant market cost for determining subsidy levels, if any are required.

If market prices are lower than the prices needed to justify construction of the preferred renewable resource(s), the ETO will support the project(s) under a Project Support Agreement. Support can take one of several possible forms: subsidizing the initial costs of a project, committing available funds to subsidize the energy price on a per unit basis over time, and other options that may be

proposed. The ETO has indicated that it is more interested in providing support that is associated with some form of performance guarantee.

The ETO expects to have limited funding to help support one or more projects through this RFP with PGE. The ETO is able to fund new renewable energy projects, or new additions to existing renewable energy projects. They are able to fund resources that are³:

- Fueled by geothermal, solar, wave, wind, or by biomass that use organic wastes from plant, animal or human sources to generate electricity.
- Hydroelectric facilities located outside state and federally protected areas.

The ETO will not provide funds to the project prior to completion of construction and testing, but has indicated a willingness to place funds in an appropriate escrow account to assure project sponsors that the funds will be available at the appropriate times.

Ownership of Tradable Renewable Energy Credits (TRCs)

Pursuant to a contract to be entered into between PGE and the ETO, PGE will own, as trustee, and control all the TRCs and environmental attributes of a project supported by the ETO during the term of any PPA or project executed by PGE. Under this RFP, if the ETO receives TRCs, it will transfer them to PGE for the benefit of PGE's customers. The ETO does not and cannot claim rights to TRCs arising from projects it does not fund.

▪ _____
³ For a complete list of renewable resource eligible for ETO funding, see <http://www.energytrust.org/RR/index.html>

eDockets

Docket Summary

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Docket No: UM 1345

Docket Name: PORTLAND GENERAL ELECTRIC REQUEST FOR PROPOSALS FOR ENERGY RESOURCES

[Print Summary](#)

Subject Company: PORTLAND GENERAL ELECTRIC

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Application to Open Docket for Request for Proposals for E Resources. Filed by Patrick Hager. (No electronic version available. This "draft" filing was replaced by filing on 10/2/07)

Filing Date: 9/18/2007

Case Manager: LORI KOHO

Phone:

Email: lori.koho@state.or.us

[Email Service List \(semi-colon delimited\)](#) [Email Service List \(comma de](#)
 If you experience problems with the *above* 'Email Service List' links,
 please try one of these:
[Service List Popup \(semi-colon delimited\)](#) [Service List Popup \(comma de](#)

ACTIONS		SERVICE LIST (Parties)	SCHEDULE
W=Waive Paper service	C=Confidential HC=Highly Confidential	Sort by Last Name	Sort by Company Name
W	SUSAN K ACKERMAN ATTORNEY	9883 NW NOTTAGE DR PORTLAND OR 97229 susan.k.ackerman@comcast.net	
W	PACIFIC POWER OREGON DOCKETS	825 NE MULTNOMAH STREET, STE 2000 PORTLAND OR 97232 oregondockets@pacificcorp.com	
W	CITIZENS' UTILITY BOARD OF OREGON		
	LOWREY R BROWN (C) UTILITY ANALYST	610 SW BROADWAY - STE 308 PORTLAND OR 97205 lowrey@oregoncub.org	
	JASON EISDORFER (C) ENERGY PROGRAM DIRECTOR	610 SW BROADWAY STE 308 PORTLAND OR 97205 jason@oregoncub.org	
	ROBERT JENKS (C)	610 SW BROADWAY STE 308 PORTLAND OR 97205 bob@oregoncub.org	
W	DAVISON VAN CLEVE PC		
	MELINDA J DAVISON	333 SW TAYLOR - STE 400 PORTLAND OR 97204 mail@dvclaw.com	
	DEPARTMENT OF JUSTICE		
	MICHAEL T WEIRICH ASSISTANT ATTORNEY GENERAL	REGULATED UTILITY & BUSINESS SECTION 1162 COURT ST NE SALEM OR 97301-4096 michael.weirich@doj.state.or.us	

W	ENERGY STRATEGIES INC RICK ANDERSON PRINCIPAL	215 SOUTH STATE ST - STE 200 SALT LAKE CITY UT 84111 randerson@energystrat.com
W	ESLER STEPHENS & BUCKLEY JOHN W STEPHENS	888 SW FIFTH AVE STE 700 PORTLAND OR 97204-2021 stephens@eslerstephens.com
W	NW INDEPENDENT POWER PRODUCERS ROBERT D KAHN EXECUTIVE DIRECTOR	7900 SE 28TH ST STE 200 MERCER ISLAND WA 98040 rkahn@nippc.org
	OREGON PUBLIC UTILITY COMMISSION LISA C SCHWARTZ SENIOR ANALYST	PO BOX 2148 SALEM OR 97308-2148 lisa.c.schwartz@state.or.us
W	PACIFIC POWER & LIGHT MICHELLE R MISHOE LEGAL COUNSEL	825 NE MULTNOMAH STE 1800 PORTLAND OR 97232 michelle.mishoe@pacificorp.com
	PORTLAND GENERAL ELECTRIC PATRICK HAGER RATES & REGULATORY AFFAIRS (C)	121 SW SALMON ST 1WTC0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com
	PORTLAND GENERAL ELECTRIC COMPANY J RICHARD GEORGE (C) ASST GENERAL COUNSEL	121 SW SALMON ST 1WTC1301 PORTLAND OR 97204 richard.george@pgn.com
	PUBLIC UTILITY COMMISSION OF OREGON LORI KOHO SR UTILITY ANALYST	PO BOX 2148 SALEM OR 97308 lori.koho@state.or.us
W	RENEWABLE NORTHWEST PROJECT KEN DRAGOON	917 SW OAK, SUITE 303 PORTLAND OR 97205 ken@rnp.org
	ANN ENGLISH GRAVATT SR POLICY ASSOCIATE	917 SW OAK - STE 303 PORTLAND OR 97205 ann@rnp.org
W	RFI CONSULTING INC RANDALL J FALKENBERG	PMB 362 8343 ROSWELL RD SANDY SPRINGS GA 30350