## **Request for Proposals**

from

**All Source Generation Suppliers** 

for

**Electric Energy** 

**Exhibit IV – Proposal Requirements** 

## **Proposal Requirements**

Mutual Confidentiality Agreement, Exhibit VII must be submitted two weeks in advance of proposal due date.

## PSE requests that respondents submit their proposal in the following format:

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List of Attachments

## 1 Summary Data Form (Exhibit III)

## 2 Project Description

The proposal should include a detailed description of the project including the project's features and development work completed to date. Include the following information, as applicable, or indicate if requested information is not known:

## 2.1 Project Location and Size

- Identify the site where the project will be located. Provide a map showing the location of key facilities. Show anticipated placement of all project facilities. Include a map that indicates the location of the transmission line with which the project will be interconnected.
- Describe the project size (in acreage) and the land area controlled relative to the project facilities. If the project can be expanded, please describe the potential scope and conditions for additional development at the site.
- Provide a list of leases, easements, and/or other ownership documents that demonstrate that
  the respondent has control of the intended project properties and the legal rights to construct,
  interconnect, operate and maintain the project as described.

## 2.2 Site Description

Provide a description of the site, including flora and fauna, proximity to inhabited structures, proximity to areas that may be sensitive from an environmental, cultural, commercial, security and any other perspective.

### 2.3 Project Capability, Availability and Heat Rate

- Provide the nameplate capacity and net capacity (in MW). If the project can be expanded, please describe the potential scope and conditions.
- Provide the net capability rating and net heat rates at full load, 90%, 80%, 75%, 50% and minimum sustainable load. If output will vary with ambient temperature, respondents shall specify the net capacities and net heat rates at average annual site conditions and 95°F, 80°F, 40°F, and 20°F. Include any must run information as appropriate.
- Include the estimated annual unit availability and any guaranteed minimum annual availability and level of production.
- In an Excel spreadsheet and graph, show the distribution of the expected annual and monthly output of the project (in MWh) including heavy load hour and light load hour production.
- As applicable, provide typical hourly energy production from the project for a one-year period in electronic format. This will be used to evaluate the hourly variability of the resource.

### 2.4 Operating Limits

- Describe any limits imposed on the number of startups that may be performed per year or per unit of time, any limits on the number of hours that a unit may be operated per year or unit of time, and any minimum run times or ramp rates. Regulatory constraints must also be stated, including operating constraints that are either implicitly or explicitly embedded in the permit application or final permit conditions.
- Provide any existing or proposed procedures for, or limitations on, dispatching or displacing the project (or individual units, if applicable), on a prescheduled basis or in real time, throughout its full operating range, for economic reasons or for system reliability.
- State the startup time for cold, warm, and hot starts including respondent's definition of those terms. Respondent shall also specify any specific costs associated with unit startups.

 Include a description of the AGC ramp rate (rate at which the unit responds to frequency changes while on control (MW/minute)), normal ramp rate (rate at which the unit can increase output while on manual control (MW/minute)), and emergency ramp rate (rate at which the unit can increase output only for emergency situations (MW/minute)).

#### 2.5 Generation and Pollution Control Technology

- Specify the type of generation equipment and provide a description, including the manufacturers of major equipment, date of manufacture or age of major equipment, hours of operation and major maintenance performed for any previously owned/operated equipment.
- Include type of heat rejection equipment (cooling towers, ponds, etc.) and manufacturer, age, hours of operation and major maintenance, as applicable.
- Specify the type of pollution control equipment, manufacturer, age, hours of operation and major maintenance, as applicable.
- State the terms of warranties and/or guarantees on major equipment.

#### 2.6 Permitting

- Identify any required environmental siting permits, wastewater disposal permits, air permits, or waste disposal permits.
- Describe source of process and/or cooling water, wastewater disposal plan, equipment and underlying contracts or permits for wastewater services.
- Outline waste disposal plan, if applicable, and indicate underlying contracts or permits for waste disposal.

## 3 Fuel Supply

For proposals that are dependent upon a fuel source such as natural gas, coal, biomass, or others, respondents may propose a long-term stable price and firm supply of fuel. Any proposal for fuel supply must be made in conjunction with a specific proposal that satisfies the criteria of this RFP (i.e., stand-alone or independent fuel supply proposals do not meet such criteria). Also, any such fuel supply provisions should be optional, to be included at PSE's election during the proposal selection process. If the price is "indicative", then an explanation of how the price would move up or down during the process should be included in the proposal.

The proposal should specify the source and pricing of fuel to be supplied to the project including backup alternatives. Respondents should describe and document (including copies of applicable agreements) their fuel supply plan and the extent to which they propose to provide fuel and transportation and other fuel-related services, including physical and/or financial hedges. Alternatively, respondents may propose a variable cost payment or tolling fee in which PSE would be responsible for all fuel and fuel-related costs. With respect to fuel supply proposals, PSE's preference is for proposals that address its need for reliability, mitigation of fuel price risk, and flexibility for fully dispatchable plant operations.

## 3.1 For proposals dependent on Natural Gas supply to be acquired and managed by the Respondent, please:

- Identify the maximum hourly and daily gas requirements of the plant at its rated capacity.
- Identify the location of the proposed pipeline interconnect and/or lateral.
- Provide a description of the pipeline interconnect, lateral facilities (size, length, etc.) and compression facilities.
- Provide an estimate of costs of the pipeline interconnect, lateral facilities, and compression facilities.
- Identify whether or not such costs are included in the bid price.

- Describe the supply plan (source, terms, pipeline route, etc.).
- Identify all pipeline capacity contracts that support the provision of firm transportation to the plant.
- Identify all gas supply contracts that support the provision of firm gas to the plant.
- Identify the type and quantity of back-up fuel on site, if relevant.

# 3.2 For proposals dependent on Natural Gas supply to be acquired and managed by PSE, please:

- Identify the maximum hourly and daily gas requirements of the plant at its rated capacity.
- Identify the minimum and maximum gas pressure requirements at the plant inlet.
- Identify the location of the proposed pipeline interconnect and/or lateral.
- Provide a description of the interconnect and/or lateral facilities (size, length, etc.).
- Identify the minimum and maximum gas pressure commitments provided by the interconnecting pipeline at the interconnect facilities.
- Provide an estimate of capital costs and annual operating costs of the pipeline interconnect and/or lateral facilities.
- Identify whether or not the costs of the pipeline interconnect and/or lateral facilities are included in the bid price.
- Identify whether compression will be required given the pipeline pressure commitments.
- Provide an estimate of compression capital and operating costs.
- Identify whether or not the costs of the compression are included in the bid price.
- Identify and describe all pipeline capacity contracts included in the bid price.
- Identify and describe all gas supply contracts included in the bid price.
- Identify and describe any pipeline capacity contracts that are available through the respondent (but not included in the bid price) and the pricing available for such contracts.
- Identify and describe any gas supply contracts that are available through the respondent (but not included in the bid price) and the pricing available for such contracts.
- Identify and describe any gas supply pricing options available through the respondent or known by the respondent to be available through another party that, if exercised, would have the effect of reducing the volatility of the pricing of the gas supply.
- Identify the type and quantity of back-up fuel on site, if relevant.

#### 3.3 For proposals that use Wind:

- Provide the location of all anemometers used for wind resource assessment and the locations of all turbines or proposed turbines on a site topographic map.
- Provide a table illustrating the measurements made at each on-site anemometer. Include the
  parameters measured at each height, the date each mast was commissioned, the date each
  mast was decommissioned, the data recovery rate from each instrument, and the period of
  record used for the wind resource assessment.
- Describe the method of estimating the long-term energy resource characteristics of the site.
  If an off-site, long-term record or other technique, such as a long-term numerical modeling
  study, is used for the adjustment, provide details of the correlation or other study method and
  indicate the amount that such method raised or lowered an energy estimate based on on-site
  data alone.

- Provide a summary report of the energy estimate for the site, whether by independent
  meteorological consultant or in-house analysis. If in-house resources are used, provide a
  summary of qualifications of the organization and résumé of the analysts for performing such
  work.
- Provide a table which quantifies the adjustment factors used to adjust a gross energy estimate to the net energy estimate. Include estimates for the following:
  - > adjustment of on-site data to reflect a projected long-term resource
  - > topographic adjustments
  - array (wake) losses
  - electrical losses between the turbines and the point of project revenue metering, and specify clearly the point of metering (e.g., on the low side of the project transformer, or the point of interconnection with the transmission provider)
  - availability
  - icing and blade degradation
  - high wind hysteresis
  - substation and infrastructure maintenance
  - utility system downtime
  - power curve adjustment
  - wind sector management
- Wind turbine supply:
  - Indicate the preferred wind turbine vendor or vendors.
  - Describe the status of the turbine vendor review of the site plan.
  - Indicate the status of negotiations with the turbine vendor(s), including the date of the most recent pricing proposal and the date through which the vendor's proposal remains valid.
  - Describe the operations, maintenance, and warranty plans, and estimated costs.
- Provide the indicative site annual mean wind speed at hub height.
- Provide the projected average net output in MWh in an Excel a 12x24 matrix; that is, for each hour of each month, indicate the number of MWh expected to be generated in a typical hour. (See Exhibit V for suggested format.)
- Provide in Excel a representative year of energy production for each of 8760 hours of the MWh expected to be produced in each hour. The 8760 hours should be representative of the expected long-term behavior and therefore be consistent with the 12x24 matrix.
- In a table, a graph, and in Excel, provide a typical annual hub-height wind speed distribution in 0.5 m/s intervals. Such distribution should be consistent with the energy data supplied pursuant to the above requests.

### 3.4 For proposals that use Solid Fuel:

- Provide the following fuel specifications: fuel type, heat content, moisture content, sulfur content, ash content, ash fusion temperature and a description of any pre-use processing or conditioning required to make the fuel usable.
- Describe the type(s) and source(s) of the fuel. Is fuel source dependent on other contracts or purchasers?
- Describe the fuel procurement plan in terms of the percentage of total fuel that will be procured from the spot market versus total fuel that will be procured under a contract term of 5 years or longer.

- Describe the fuel transportation/supply plan, including all railroad(s), truck routes, quantities, and frequencies. Explain any highway or rail improvements that may be necessary to accommodate proposed transportation plan, such as paving, bridges, new rail spurs, etc., as well as plans for accomplishing such improvements.
- Identify all rail carriers and describe the status of any transport negotiations or agreements, including any known or anticipated freight rates.
- Describe any governmental approvals or permits required to complete fuel supply and transport.

#### 3.5 For proposals that use Hydro:

- Provide the water exceedence curve.
- Provide a general description of the project and the project area. Include environmental
  factors such as the known or expected presence of protected, endangered or economically
  important fish and wildlife.
- Include a statement as to the availability of water rights for the project and the nature of any potentially conflicting uses.
- Include the number, type and characteristics of proposed or existing turbines including efficiency curves, minimum, most efficient and maximum generation outputs and the corresponding turbine discharges.
- Provide an estimate of the average generation expected to be produced for at least a thirtyto fifty-year time period, including a spreadsheet showing the total expected generation by month, for each year of the time period used.
- Include a hydrological record, observed or synthesized, showing the total daily average flows available each day for the period of record cited above and including flow duration curves for daily flows by month, for the period of record used.
- Describe any known or likely flow constraints (such as minimum instream flows for fish, wildlife, aesthetics or other purposes) that would affect overall water availability or constrain facility operations (such as minimum turbine releases or ramping rates).
- For those projects where a synthesized hydrological record has been used, please provide a
  description of the methodology used to create and calibrate the record. For those projects
  where observed flow records are used, please provide the source of the information and a
  brief description of how the record was collected.
- For those projects employing a reservoir, please provide a physical description of the reservoir and its expected operation. Indicate any known or anticipated constraints on its water surface elevations and operation.

#### 4 Emissions

Include estimates of emissions (air, liquid and solid wastes) in pounds per hour per pollutant and/or waste product at 100% load and tons per year per pollutant and/or waste product at a specified capacity factor as selected by the respondent. Any limits on emissions must be stated.

For each unit boiler or combustor (combustion turbine or reciprocating engine):

- Describe raw materials used in process.
  - Describe primary and secondary fuel type and consumption (mass flow rate/hr/day/year). Specify natural gas, propane, waste gas (landfill gas, sewage digester gas, process gas), gasoline, coal, coke, biomass, waste-derived fuel, syngas, kerosene (#1 fuel oil), diesel (#2 fuel oil), or residual fuel (#6 fuel oil).
  - Estimate how many million cubic feet of gaseous fuel or thousands of gallons of liquid fuel will be burned annually. Alternatively, specify how many billion Btu/yr.

- Specify upper heating value or heat content of any gas or syngas burned (Btu/Million ft<sub>3</sub>).
- ➤ Include chemical composition of any waste gas or process gas burned (%, ppmv). Specify the principle components in percent, and the trace constituents (H₂S, ammonia, hydrogen chloride, vinyl chloride, etc.) in parts per million by volume.
- Describe unit technologies and specific manufacturer-provided data including:
  - List rated heat input (MMBtu/hr). The heat input is equal to the maximum fuel firing rate times the upper heating value of the fuel.
  - Specify heat rate (Btu/kWh) and include the output (MW) at base and peak loads.
  - List stack exhaust flow rate (scf/min), exhaust temperature (F), exhaust stack height and diameter.
  - List make and model of unit. Specify the date when the boiler or combustor turbine or reciprocating engine was built by the manufacturer.
  - Describe the type of internal combustion engine. For turbines, specify the operating cycle (simple, regenerative, cogeneration, or combined) and the type of combustor (annular, can-annular or silo). For reciprocating engines, specify the ignition system (compression or spark ignition), the air scavenging cycle (2-stroke or 4-stroke), the fuel delivery system (injection or carburetor), the air-to-fuel ratio (rich-burn or lean-burn), the total cubic inch displacement and the number of cylinders. For steam cycles, specify combustor type, operating temperature and pressure, steam flow rate, and any pre- or post-combustion emission control devices.
  - Describe preventive maintenance including, but not limited to, the periodic maintenance recommended by the manufacturer and its frequency.
  - ➤ Describe emission rates under different fuels and different run rates as appropriate. Estimate the emissions of each pollutant and include your calculations. Include all criteria pollutants (NOx, SO₂, CO, PM, VOC, CO₂) and any toxic air pollutants. Provide projected lbs/hr and ppm; potential to emit at 8760 hours per year in tons per year. Emissions should be based on the manufacturer's warranties or measurements. For other pollutants, use emission factors from <a href="http://www.epa.gov/ttn/chief/ap42/index.html">http://www.epa.gov/ttn/chief/ap42/index.html</a>.
- Include Flow Diagram of Unit:
  - Flow diagram may be schematic. All equipment should be shown with existing equipment so indicated.
  - Show flow diagram of process starting with all raw materials used.
  - If more than one process is involved to generate energy, show each process and where they merge.
  - Indicate all points in process where gaseous liquid or particulate pollutants are emitted.
  - Show pick up and discharge points for handling or conveying equipment.
- Describe emission controls, including:
  - ➤ For all submittals, include type, manufacturer, technology methods, degree of redundancy or spares, pollutant removal rates or efficiencies include pre- and postemissions in ppm and lb/hr, emission rate guarantees by manufacturer, expected maintenance schedule and costs (including consumables).
  - For combustion turbines, specify if using water or steam injection, dry controls such as 2-stage lean/lean or 2-stage rich/lean (DLN, DLE, SoLoNOx) combustors, or add on controls such as selective catalytic reduction or other catalytic reduction systems (SCONOx, XONON).
  - For reciprocating engines, specify if using exhaust gas recirculation, ignition timing retard, pre-ignition combustion chambers, air-to-fuel ratio adjustments, engine derating, nonselective catalytic reduction (3-way catalyst), or selective catalytic reduction.

#### 5 Interconnection and Transmission

#### 5.1 Planned Interconnection

Proposals should include a clear statement of the proposed Interconnection Point, the name of the transmission provider, whether or not the proposal contemplates delivery to PSE, and the proposed entity to manage control area responsibilities. For purposes of this RFP, the term "Interconnection Point" shall refer to the point at which the project is connected to the high voltage transmission system. Proposals should also include all details of planned electrical interconnections including, but not limited to:

- Interconnection requests along with the date of the requests
- Feasibility studies
- System impact studies
- Facility studies
- Required upgrades
- Interconnection and related agreement(s)
- List of affected systems
- Potential alternatives to interconnection arrangements, if any
- Information to identify persons at the interconnecting utility who may be contacted by the review team
- One-line diagram of the interconnection

Based on the identified interconnection point to the Northwest transmission system, discuss all related construction plans, status and schedule for any required interconnection facilities, network upgrades, affected system upgrades and distribution upgrades including:

- New lines and facilities
- Line and facilities upgrades
- Switchvards and substation work required to complete the interconnection
- Metering and communications, both by the developer and the interconnecting utility
- Easements, rights of way, or property controlled for any new transmission facility or otherwise to interconnect the project

Include the status of control over required rights-of-way for any new interconnection facility/ transmission upgrade required. Include information on ownership and maintenance responsibility, and the availability of long-lead electrical equipment, such as transformers, that will be required to support the project. Metering information should include a detailed description of how the metering of the actual output of the project shall be determined and how the metering configuration was included in the determination of project output.

#### 5.2 Planned Transmission Services

Please provide status of transmission service and ancillary services secured and/or requested by respondent including, but not limited to:

- System impact studies
- Facility studies
- Expected availability of the transmission
- Detailed cost estimates of transmission services with supporting detail
- Loss factor from each transmission provider
- Availability of credits against transmission costs from the transmission provider for the capital costs of upgrades

- Information to identify representatives of the transmission provider who may be contacted by the review team concerning transmission arrangements
- Also include copies of any completed studies performed by and agreements signed with the applicable transmission providers. Provide all other information/correspondence obtained from those transmission providers as a result of interconnection and transmission requests and discussions that have been held to date. In the absence of formal studies, any information available concerning transmission/interconnection availability, costs and reliability should be provided with as much supporting documentation as possible. In any event, all available information should be provided regarding whether and to what extent firm transmission will be available, whether and to what extent the necessary transmission is subject to constraint, and the projected cost of relieving any transmission constraints.
- For remote and long lead-time resources such as wind or coal, which may require a long-term transmission solution, creative options may be proposed and will be considered. The developer may provide its own capital and transmission solution, or may work with PSE to determine how best to develop the needed transmission. Options could include participant funding to build transmission or the issuance of a separate RFP for transmission.

#### 5.3 Delivery Points

PSE's acceptance of the delivery of project energy and capacity at the respondent-proposed Interconnection Point or at PSE's system will depend in part on the project meeting all of the required interconnection standards. PSE prefers delivery to its system, particularly at points on its system at which the deliveries may be effected and used to serve load with no or limited transmission congestion, with the respondent assuming responsibility for firm transmission on third-party transmission systems to effect delivery.

#### Constrained

Custer Substation 230 kV
Bellingham Substation 115 kV
Sedro Woolley Tap 230 kV
Beverly Park Substation 115 kV
Monroe Substation 230 kV
Northwest Market Hub (Mid-Columbia)

#### Less Constrained

Maple Valley Substation 230 kV\*
Christopher Tap 230 kV\*
Covington Substation 230 kV\*
White River Substation 230 kV
C.W. Paul Substation 500 kV
Olympia Substation 230 kV\*
Kitsap Substation 115 kV\*
Fairmont Substation 115 kV

In its evaluation of proposals that exclude delivery to PSE's system, PSE will include an assessment of the likelihood of acquiring adequate transmission rights and a quantification of the costs to deliver project output to PSE.

### 6 Price

#### 6.1 Generally

- Price proposals must specify fixed and variable payments, escalation rates to be applied if any, and all other pricing information necessary for PSE to fully evaluate the proposal.
- PSE's overall weighted average cost of capital of 8.4% will be used in the quantitative evaluation of resource offers.
- Respondents should be aware that the prototype power purchase agreement, the prototype
  exchange agreement and the term-sheet for PSE's purchase of an interest in a project
  (Exhibits IX, X and XI, respectively), as applicable, will be the basis for any potential
  Definitive Agreement with PSE.

<sup>\*</sup> Most favorable delivery points

• As an option, respondents are requested to provide a proposal which requires respondent to fully assume the present and future costs of environmental mitigation required under existing or future local, state, or federal law. If provided, such proposal should specify the environmental risks that the respondent is assuming and the cost for assuming each one. Failure to provide such an alternative will not disqualify the respondent; however, if the respondent elects not to provide a proposal for assuming such risks, PSE requests that an explanation as to the reason be provided. Also, any such environmental risk provisions should be optional, to be included at PSE's election.

### 6.2 Power Purchase Agreements

For Power Purchase Agreements, respondents should provide the following information at a minimum, as applicable.

- A stable price per kWh for energy and any environmental attributes produced.
- Fixed annual or monthly payments associated with operation, maintenance and ownership
  costs
- Fixed plus variable cost payments
- A combination of the above or other suitable alternatives that may be proposed
- All other things being equal, PSE prefers a pricing structure that closely mirrors the actual
  cost structure of the project. In this way, the developer's and PSE's interests with respect to
  scheduling and dispatch would be aligned.
- In addition to the project pricing, please provide a schedule of termination amounts, based on the year in which termination occurs for each contract year of such Power Purchase Agreement based on the assumption that upon a notice of termination provided by PSE and PSE's exercise of such election, Seller shall immediately transfer to PSE (i) all of Seller's rights, title and interests in and to the Project (including all project equipment), the Permits, all rights of Seller to real property included in or benefiting the Site and (ii) all of Seller's rights, title and interests in, to and under any agreements related to the Project to which Seller is a party.

Respondents should be aware that the quantitative cost screening of proposals received in response to the RFP will include costs associated with delivering the energy to PSE's system as well as the costs associated with financial and accounting regulations. An imputed debt component will be calculated for all PPAs pursuant to the methodology of the Standard and Poor's rating agency, as described below:

### Calculating Imputed Debt for PPAs

The debt rating agencies consider long-term take-or-pay and take-and-pay contracts debt-like in nature and have historically capitalized these obligations on a sliding scale known as a "risk spectrum." Hence there is a cost associated with issuing equity to rebalance the Company's debt/equity ratio in response to imputed debt if PSE is to maintain a current credit rating. Imputed debt in the Least Cost Plan and in the evaluation of responses to the RFP is calculated using a similar methodology to that applied by the Standard and Poor's ("S&P") rating agency. The calculation begins with the determination of the fixed obligations that are equal to the actual demand payments, if so defined in the contract, or 50% of the expected total contract payments. This yearly fixed obligation is then multiplied by a risk factor. PSE's current contracts have a factor of 30% along the S&P "risk spectrum." Imputed debt is the sum of the present value (using a 10% discount rate and a mid-year cash flow convention) of this risk-adjusted fixed obligation. The cost of imputed debt is the equity return on the amount of equity that would be required to offset the level of imputed debt to maintain the Company's capital and interest coverage ratios.

#### Sensitivity of Imputed Debt Cost

The cost impact of imputed debt on power purchase agreements varies with the term of the contract, the proportion of the PPA associated with demand payment, and with the escalation of the PPA rate or demand payments. Assuming a flat, un-escalated PPA rate and PSE's allowed cost of capital, the imputed debt cost will increase the levelized cost of the PPA by approximately 3.3% on a 3-year PPA, 4.8% on a 5-year PPA, 7.9% on a 10-year PPA and 12.5% on a 20-year PPA.

#### 6.3 PSE Ownership

For PSE ownership arrangements, respondents should address the following, as applicable:

- Purchase by PSE of the development rights at the completion of the development stage with design, procurement and construction being the responsibility of PSE with the possibility of a limited continuing role for the respondent
- Outright purchase and operation of the project by PSE at the date of commercial operation (respondent to provide training to PSE operating personnel)
- Joint development and ownership by PSE and the respondent
- Purchase of the project by PSE with respondent having principle responsibility for continued development and operation
- Purchase of the project by PSE at commercial operation with operation by the respondent for a specified time period during which time respondent would provide training to PSE operating personnel
- A combination of the above or other alternatives that may be proposed by the respondent
- As an option, respondents are requested to provide a proposal which requires respondent to fully assume the present and future costs of environmental mitigation required under existing or future local, state, or federal law. If provided, such proposal should specify the environmental risks that the respondent is assuming and the cost for assuming each one. Failure to provide such an alternative will not disqualify the respondent; however, if the respondent elects not to provide a proposal for assuming such risks, PSE requests that an explanation as to the reason be provided. Also, any such environmental risk provisions should be optional, to be included at PSE's election.

## 7 Legal and Financial

At a minimum, the proposal should contain the following information:

- A description of the structure and status of the project financing, the significant conditions on which the financing depends and the milestones that need to be achieved to secure both construction and term financing (as required) to support the project schedule
- Identification and contact information for all legal advisors, financial advisors and capital providers (debt and equity) for the project to the extent now known or anticipated
- A description of the project structure and capitalization during the development, construction
  and commercial operation phases. Describe all anticipated credit support arrangements and
  appropriate parental, subsidiary and venture relationships pertinent to the proposal.
- A description of any dependence of respondent on another entity, e.g., a fuel supplier or a steam host
- A deal diagram that shows all contractual parties, listed by their legal names, and their relationship with the project

- Commitment letters or letters of undertaking from corporations, investment bankers and/or commercial bankers indicating that the project has or is able to obtain the construction and permanent financing it will require. Describe any caveats and conditions to financing commitments that such parties may require.
- The qualifications of such parties to provide, arrange or assist in obtaining necessary financing and credit support arrangements
- Audited financial statements, if available, or if unavailable, unaudited financial statements for the most recent 12-month period for all entities, including affiliates involved in the proposed transaction and all entities that may provide credit support, credit enhancement, surety bonds, guarantees, or other security. This information is intended to provide an indication of the ability and willingness of the respondent to negotiate in good faith (and to cause its lenders and equity partners to do the same). The types of financial and control requirements PSE may require are listed in the Evaluation Criteria in Exhibit II.
- Clear identification of the respondent's investment advisor. The use of the term "financial
  advisor" or "investment advisor" in this RFP refers to third-party advisors, such as investment
  bankers or others assisting the project developer in the placement of debt and/or equity
  financing. If a proposal is selected by PSE for further discussion and possible negotiation
  towards a Letter of Intent and potentially a Definitive Agreement, PSE will require that the
  investment advisor be available to meet and discuss with PSE all aspects of project
  financing.
- A summary of the major project capital and operating expenses and documentation to support the reasonableness of the projections referred to below, including an itemized budget with a breakdown of projected capital costs, and operating and maintenance costs and a breakdown of all costs associated with site acquisition and improvement, permitting, project construction, testing and commissioning, compliance with environmental and other applicable federal, state, or local regulations, security, and routine operation and maintenance activities.
- Pro forma financial projections showing the project cash flow, income statement, and balance sheet, sources and uses of funds, construction draw schedule, and including all financing assumptions. At a minimum the pro forma should include the following:
  - Annual energy production and assumed revenue
  - Annual operating expenses including turbine and balance-of-plant operations and maintenance costs, G&A expenses, asset management fees, land leases, property taxes, insurance and other expenses
  - Transmission and ancillary services costs (if any)
  - Debt service requirements
  - Debt coverage ratios (highest year, lowest year, average)
  - Depreciation (tax and book)
  - Income taxes and tax credits
  - Other taxes
  - Working capital requirements
  - Net income
  - Book rate of return to average equity
  - After tax unlevered internal rate of return to capital
  - After tax levered internal rate of return to capital

The pro forma must be provided in an electronic Excel spreadsheet file with formulas intact (generally in the form set forth in Exhibit VI of the RFP document).

## 8 Accounting Regulations

### Power Purchase Agreements

To evaluate the accounting effects of FIN 46R, SFAS 133/149 and EITF 01.08 on a PPA, PSE may require additional information from the respondent. A description of each of the accounting regulations and the required information is contained below.

#### 8.1 Financial Interpretation No. 46R, Consolidation of Variable Interest Entities

FIN 46R provides guidance on the identification of, and consolidated financial reporting for, variable interest entities. Entities proposing power purchase agreements (PPAs) or power bridging agreements (PBAs) may be variable interest entities. Tolling arrangements may also fall under the consolidation requirements of FIN 46R, depending upon the power purchase term and the organizational structure of the responding entity. Pursuant to requirements regarding such consolidated financial reporting, respondents must provide their detailed financial information for determination of applicability of FIN 46R. PSE will make a preliminary assessment as to whether or not the respondent's entity would need to be consolidated and the impact of consolidation on PSE's financial statements using the required information listed below.

#### FIN 46R - Required Information to be Submitted with Offer

- Current ownership structure (by respondent entity along with respondent's ultimate parent)
- List of all generation resources owned by respondent entity, including location and ownership structure of each generation resource
- Megawatt capacity of each generation resource owned by respondent entity and proportion of ownership
- Megawatt capacity of the generation resources that would be sold to PSE
- Remaining design life of generation resource being proposed to PSE
- Information on all ownership and capitalization changes from respondent entity from inception to date
- If respondent entity is a Partnership, LLP or LLC, information regarding activities of the respondent entity which resulted in any of the following from inception to date:
  - Changes in entity's governing documents or contractual arrangement which result in change in partner investment at risk
  - Return of equity investment or some part thereof to the equity investors, and other interests becoming exposed to expected loss of the respondent entity
  - Respondent entity undertaking additional business activities or acquiring additional assets
- 2004 annual and guarterly financial statements and notes of respondent entity
- 2005 quarterly financial statements and notes of respondent entity
- List of derivatives instruments and treatment on the current financial statements and description of any intended derivative instruments as a result of the RFP by respondent entity

## <u>Additional Compliance Information Required at Time of Contractual Agreement and Quarterly Thereafter until Termination:</u>

- Descriptions of the following obligations for the latest quarter (probably October 31, 2005):
  - On-balance sheet obligations
  - Gas purchase obligations
  - Lease obligations and commitments

- Off-balance sheet commitments
- Contingent obligations
- All material contracts (or summaries, if the original contracts are not immediately available) in place since inception including side agreements, if any, but not limited to:
  - Equity-related agreements
  - > Debt and other borrowing documents
  - Material asset or stock acquisitions or dispositions
- Documents under which guarantees or indemnities have been provided:
  - Material supplier and customer contracts
  - Related party contracts
  - Documents related to material hedging activities
  - Contingent obligations and financial commitments
  - Leasing arrangements and off-balance sheet obligations
  - Management and outsourcing contracts

#### 8.2 Financial Accounting Standards Board (FASB) Emerging Issues Task Force 01-08

EITF 01-08 found that arrangements or contracts that traditionally have not been viewed as leases may contain features that would require them to be accounted for as leases under Statement of Financial Accounting Standard No. 13 (SFAS 13), "Accounting for Leases." Power supply agreements in which (a) PSE has the right to control the use of the underlying property, plant or equipment may be considered to constitute a lease for accounting purposes and will require lease accounting. Such right to control is to be assessed with respect to, among other things, the amount of power PSE may purchase from the generating facility, PSE's right to operate or direct the operation of the underlying property, plant or equipment, PSE's right to control access to the underlying property, plant or equipment, and the relevant contract pricing structure. Each PPA and PBA offered in response to the RFP will be evaluated to determine the impact of EITF 01-08 and SFAS 13 reporting. A listing of information required from each respondent for purposes of such evaluation is contained below.

#### EITF 01-08 Required Information to be Submitted with Offer

- Does PSE have the right to operate the underlying property, plant and equipment (PP&E) or direct others to operate the PP&E while obtaining or controlling more than a minor amount of the output or other utility of the PP&E?
- Does PSE have the right to control physical access to the PP&E while obtaining or controlling more than a minor amount of the output or other utility of the PP&E?
- Proportion of generation output to PSE and proportion to others during the term of the arrangement.
- Clarify offer terms to specify whether the price paid by PSE for the output is fixed or equal to current market price per unit of output at the time of delivery.

### 8.3 Financial Accounting Standards Board (FASB) Statement 133 (SFAS 133)

Established accounting and reporting standards for derivative contracts and hedging activities, SFAS 133 defines derivative financial instruments very broadly and requires all derivative instruments not exempted from the statement to be recorded at "fair value" as either assets or liabilities in the company's financial statements. Each PPA offered in response to the RFP will be evaluated to determine the impact of SFAS 133 reporting based on the proposed contract.

#### 8.4 Financial Accounting Standards Board (FASB) Statement 149 (SFAS No. 149)

Amends SFAS 133 to require an energy marketing company to have the capacity to back a forward sales contract for normal purchase normal sale (NPNS) treatment and evidence must be obtained that demonstrates that the seller has the available capacity either through direct ownership of a generating plant or by contract. For example, if the seller is a power broker that does not have access to a pool, the buyer would have to obtain evidence supporting a conclusion that the seller has access to capacity at or near the delivery point (e.g., a long-term power purchase contract or tolling agreement) to back the contract. Similarly, such evidence would have to be obtained if the seller or a sister company is a known owner of generation but the delivery point in the contract is a location that cannot be served from their owned capacity. Each PPA offered in response to the RFP will be evaluated to determine the impact of SFAS 149 reporting based on the proposed contract.

PSE recommends that the respondents consult with their accounting professionals with respect to the above accounting guidelines. (Web address to the .pdf document of FIN 46R: <a href="http://www.fasb.org/pdf/fin%2046R.pdf">http://www.fasb.org/pdf/fin%2046R.pdf</a> and to FAS 133 and 149: <a href="http://www.fasb.org">http://www.fasb.org</a>.)

#### 9 Environmental

#### 9.1 Inspections, Orders and Suits

- Provide copies of any state/federal environmental inspection reports or audits from the last 3 years.
- Provide a list of all Notices of Violations, environmental fines or penalties paid by the company during the past 3 years.
- Provide a summary of any active enforcement orders, audits, notices of violations, consent decrees or other enforcement actions relating to environmental regulations, site cleanup or liability.

#### 9.2 Air

- Provide copies of active air permits or permit applications (Title V, Acid Rain, etc.).
- Provide emissions data for the last 3 years. Include emission rates under different fuels and different run rates as appropriate.
- Indicate consent decrees/orders/agreements still in effect. Provide copies of these orders and related correspondence.
- List any reportable and non-reportable air incidents that have occurred in the last 2 years?
- Has the facility been audited for compliance with NSR and/or PSD compliance? If so, please
  provide a copy of any relevant written audit results or electronic or written correspondence
  between the facility and the auditing agency.
- Does the facility meet required operation and maintenance requirements for installed continuous emission monitoring system (CEMS), and is it following a compliance assurance monitoring plan?
- Has the facility undertaken an analysis of the impact of the Clean Air Mercury Rule on its operations? If so, please provide a copy of this analysis.
- What are the facility's plans for implementation or adherence to the regional haze rule?
- What kind of operational changes are planned or contemplated at the facility that may increase production or emissions?
- Does the facility have a greenhouse gas or renewable energy program? If so, describe.

#### 9.3 Solid Waste

 Provide a description of the solid wastes produced by the project and the disposal plan for these wastes. Include a copy of the permits for solid waste disposal. The plan should include estimated costs of the disposal, including transportation and tipping fees.

#### 9.4 Wastewater and Stormwater

- Indicate the type of wastewater treatment system used by the facility.
- Provide a description of the wastewater disposal plan and include a copy of the permits for wastewater disposal, including any applicable Clean Water Act permits (NPDES or POTW) and/or underground injection permits, Publicly Owned Treatment Works (POTW) permits or authorizations, discharge to groundwater permits, underground injection permits or land application authorization. The plan should include estimated costs of the wastewater disposal.
- Provide a copy of any stormwater permit and application.

#### 9.5 Emergency Planning (CERCLA/EPCRA)

- Provide the most recent Form R report (TRI report).
- Provide a copy of the most recent Tier I/II hazardous chemical inventory.
- Provide a copy of the facility's Risk Management Plan and indicate any changes to facility
  processes or operations that have changed conditions described in the RMP.

## 9.6 Spills and Spill Prevention Control and Countermeasures (SPCC)

- Provide a copy of the facility's SPCC plan and any other oil spill plans required under state or federal regulations.
- Provide a list of reportable spills at the facility or associated facilities in the past 5 years. Indicate the status of any cleanup actions associated with those spills.
- Indicate the types of dikes and dike liners used for tank farm secondary containment areas.

## 9.7 Environmental Siting, Land-Use and Construction

- Provide a copy of any final or draft environmental impact study, environmental assessment or environmental checklist related to the project.
- Provide a copy of any local (county or city) land-use permit (such as a conditional use permit or development agreement) and application.
- Provide a copy of any EFSEC site certification and application.
- Provide a copy of any federal permit and application related to project siting or construction (such as a Special Use permit or a Clean Water Act permit) and application.
- Provide copies of all wildlife and other environmental studies, assessments or reports related to the site or project.
- Provide copies of any other permits or other governmental approvals and applications or requests related to project siting or construction.

## 10 Experience and Qualifications of the Project Team

The proposal should contain the following minimum information indicating the qualifications of the proposed project team to implement and execute a proposal in response to this RFP:

 The organizations (including organization charts) and key personnel responsible for implementing the project including identification of the project manager, his/her tenure, and scope of responsibility

- A legal entity organization chart
- Existing projects owned, developed and/or operated by the respondent
- The personnel or organizations responsible for the following areas:
  - Project energy resource assessment and projections
  - Project financing
  - Project design, engineering, procurement and construction specifications
  - Interconnection and substation design
  - Project environmental assessments
  - Environmental management including a management organizational chart for the facility's environmental functions and the name of the environmental manager for the facility. If project uses consultants to supplement environmental staffing, please specify their responsibilities.
  - Project land use and zoning approval
  - Permits and related approvals
  - Regulatory compliance
  - Project construction and commissioning
  - Risk management and insurance
  - Project asset management and operations
  - > Project maintenance
- A brief description of the relevant experience of key personnel and organizations for their responsibility area listed above
  - Contacts and references (name, title, address, telephone, e-mail and fax numbers), who are knowledgeable about the previous project experience of the key project participants

## 11 Development Status and Schedule

The proposal should provide the following information concerning the status of project development activity:

#### 11.1 Schedule

Provide, in a format such as a Gantt chart, the most accurate schedule estimates available on the various project activities covering the period from the initiation of development activities through the project's proposed commercial operation date. Include a schedule item for each significant activity including:

- Project development
- Permitting
- Interconnection
- Engineering
- Construction
- Startup
- Testing
- Commissioning

Provide any additional timelines applicable to the project that will demonstrate its status and plans.

Indicate what actions have been taken to ensure the schedule is met (such as placing orders for equipment with long lead times) and potential opportunities to improve the schedule.

#### 11.2 Site Control

Provide documentation of site control, including access road and transmission corridor easements needed to construct, interconnect and operate the facility. Provide evidence of water rights, as applicable. Examples of such documentation include copies of letters of intent, property title, purchase option or purchase agreements, lease or lease option agreements with landowners and other documents that demonstrate control over the intended project site and properties, and the legal rights to execute the project as described.

## 11.3 Environmental Siting (for projects under development)

Discuss known environmental issues relative to the development and operation of the project, including impacts to air, water, flora and fauna, energy and natural resources, environmental health, shoreline use, housing, aesthetics, recreation, historic and cultural preservation, transportation, public service and utilities. Describe measures that will be taken to mitigate all impacts of the project.

Provide copies of all wildlife or other environmental studies and assessments that have been performed related to the site and the project (including, but not limited to, wildlife monitoring reports, biological assessments, environmental assessments, environmental impact statements, environmental media sampling reports (air, soil or groundwater)). Describe methodologies for such studies and identify the person(s) or firm(s) who conducted and completed the work. If such studies are planned or in progress, describe the scope and schedule for completion, identify the person(s) or firm(s) performing the studies, and identify the methodologies to be employed. Describe measures that will be taken, or that have been taken, to mitigate all impacts of the project.

Discuss plans to engage community and environmental stakeholders to support the proposed project, or for existing projects. Discuss ongoing community relations and environmental stakeholders relations.

Identify and provide copies of all project permits and any other governmental approvals or authorizations required to build and operate the project, and all permit or other governmental approval applications and requests. Discuss the current status of applications and proceedings, the schedule and the approach to be used to obtain necessary permits and approvals. For existing projects, also discuss any permits that will be up for renewal in the next five years. Outline the process planned to involve local residents and other affected parties in the planning/permit process or the permit renewal process.

## 11.4 Permits

Identify and provide copies of all project permits and applications with special emphasis on the key discretionary permits (such as a conditional use permit, site certificate and major air, wastewater and/or waste permits) required to build and operate the project. Discuss the current status of applications and proceedings, the schedule for obtaining or renewing key permits and approvals, and the approach to be used.

Outline the process planned to involve local residents and other affected parties in the planning/permit process.

If the project is located in an area that is ceded land, may have been historically used by a Native American tribe, or if the project may impact tribal interests, describe any contacts that have been made with the tribe (include names and phone numbers) or plans to consult the tribe regarding the project.

#### 11.5 Construction

Describe arrangements and commitments (contracts, letters of intent, memoranda of understanding) that have been made, if any, for the construction of the project.

Describe the contractual structure (including any existing agreements or forms of agreement) proposed for project design, procurement, and construction; e.g., turnkey, EPC, multiple lump-sum purchase, etc. For any approach other than turnkey, provide information on the organization and responsible individual for project management during this phase. If construction is completed, identify all open warranty issues.

#### 11.6 Testing

Summarize the testing planned to be conducted prior to acceptance of equipment from the manufacturer and completion of the project, and the testing to be conducted prior to commercial operation of the project. Possible tests should include, without limitation, power performance, SCADA acceptance, distribution system acceptance, emission and others that demonstrate performance of the project and associated facilities in accordance with applicable laws, regulations, permits and any applicable power purchase agreements.

#### 11.7 Operation and Maintenance

The proposal should clearly describe the operations and maintenance plan for the project including the identity of the entities or persons responsible for key activities; a listing of initial spares and their value; the procedures to assure the availability of spares and other operations, maintenance and logistics issues, including whether a long-term service agreement is contemplated and, if so, the principal commercial terms associated with such an agreement.