EXHIBIT NO. ___(RG-1HCT)
DOCKET NO. UE-07___
2007 PSE PCORC
WITNESS: ROGER GARRATT

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	
Complainant,	
v.	Docket No. UE-07
PUGET SOUND ENERGY, INC.,	
Respondent.	

PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF ROGER GARRATT ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

MARCH 20, 2007

PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF ROGER GARRATT

CONTENTS

I.	INTE	RODUCTION	1
II.	PSE'	S EVALUATION OF RESOURCE ALTERNATIVES	2
	A.	Overview	
	B.	Phase I of the RFP Evaluation	4
		1. The Proposals	4
		2. The Criteria	5
		3. PSE's Initial Screening and Application of the Criteria	7
		4. The "Most Favorable Proposals" List and Ultimate Phase I "Candidate Short List"	13
	C.	Phase II of the RFP Evaluation	14
		1. The Criteria.	15
		2. PSE's Quantitative Evaluation of the Proposals	17
		3. PSE's Qualitative Evaluation of Proposals	17
		4. Due Diligence.	17
		5. Credit and Balance Sheet Issues With Respect to Power Purchase Agreements	19
	D.	PSE Also Considered a Self-Build Option	22
	E.	Results of the Phase II Evaluation	24
	F.	PSE's Efforts to Finalize Contracts	27

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt Exhibit No. ___(RG-1HCT) Page i of ii

III.	THE GOLDENDALE GENERATING STATION		28
	A.	Facility Description	28
	B.	Additional Due Diligence	33
		1. Commercial and Legal Due Diligence	35
		2. Real Estate Due Diligence	36
		3. Environmental Due Diligence	37
		4. Insurance Due Diligence	38
		5. Operations and Maintenance Due Diligence	39
		6. Technical Due Diligence	40
	C.	Board Approval of the Acquisition	42
	D.	Project Acquisition Process	43
	E.	Project Acquisition Costs	47
	F.	Operations and Maintenance Expenses	50
	G.	Power Costs	51
IV.	WIL	D HORSE WIND PROJECT UPDATE	51
V	CONCLUSION		52

PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF ROGER GARRATT

I. INTRODUCTION

- Q. Please state your name, business address, and position with Puget Sound Energy, Inc.
- A. My name is Roger Garratt. My business address is 10885 N.E. Fourth Street

 Bellevue, WA 98004. I am the Director of Resource Acquisition within the

 Energy Resource Group for Puget Sound Energy, Inc. ("PSE" or "the Company").
- Q. Have you prepared an exhibit describing your education, relevant employment experience, and other professional qualifications?
- A. Yes, I have. It is Exhibit No. ___(RG-2).

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- Q. What are your duties as Director of Resource Acquisition within the Energy Resource Group for PSE?
- A. My present responsibilities include oversight of: (i) the acquisition of electric resources for the Company, commencing with the Request for Proposal ("RFP") process and culminating in the execution and closing of all of the definitive agreements necessary to acquire a resource; (ii) the construction and operation of the Company's wind projects; and (iii) contracts for long-term electric supply and

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt Exhibit No. ___(RG-1HCT) Page 1 of 52 testimony of Mr. James Elsea. My testimony focuses primarily on the qualitative analysis undertaken by the Company.

During Phase I of the RFP, PSE evaluated proposals based on each individual proposal's cost and on specific qualitative criteria. This process was designed to screen out proposals with high costs, unacceptable risks, or feasibility constraints with the goal of creating a "Candidate Short List" for continued evaluation in Phase II.

In Phase II, the Company performed more extensive due diligence on the proposals on the Candidate Short List, including but not limited to data requests, bidder presentations and site visits. The Company also evaluated a potential self-build option. Additionally, PSE quantitatively tested each project on the Candidate Short List in a variety of portfolios, scenarios and in Monte Carlo analysis. *See generally* Exhibit No. ___(WJE-1HCT) at pages 29-38. In Phase II, the Company ultimately identified a "Short List" of projects that PSE would seek to acquire by reaching definitive agreements through additional negotiations and due diligence.

- Q. What processes did the Company put in place to organize and document its efforts?
- A. Company staff responsible for this evaluation worked extensively on the evaluation process from the time responses to the RFP were submitted in January 2006 and continue to work on the evaluation process for those projects

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still on the Short List.

Personnel involved in the evaluation met weekly to review and document progress made as of that time and to discuss any issues or questions that had arisen. In addition to its own staff, PSE used outside consulting firms to evaluate the technical and environmental attributes of the proposals.

During the course of the evaluation process, Energy Resources staff regularly updated the Company's officers and the Commission Staff on the status of the evaluation and any preliminary conclusions through presentations documented primarily in power point slides. The Company's management, in turn, regularly apprised PSE's Board of Directors of the status of the evaluation process.

The Company's evaluation process and conclusions, reached at various stages of its analysis, are further explained below, and were documented in reports prepared during the course of the evaluation.

В. **Phase I of the RFP Evaluation**

1. The Proposals.

Q. What proposals did the Company evaluate in Phase I?

In response to the RFP, PSE received 48 unique proposals from 38 different A. owners/developers. Many of the proposals contained multiple options such as power purchase agreements, asset ownership, and a combination of a power

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Strategic and Financial.

These criteria are described in greater detail below, as well as in Exhibit No. (RG-3HC) at pages 6-7.

- Q. What considerations were included under the "Compatibility with Need" criterion?
- A. This criterion focused on the Company's interest in meeting its long-term energy need while reducing the risk of excess capacity. The Company was interested in projects that would come on line sooner rather than later because of its ongoing exposure to wholesale market risks. Because the Company's loads are much higher in winter than in summer months, the Company was very interested in resources that were or could be shaped to balance the seasonality of its loads. The Company also considered its need to diversify its portfolio, pursuant to the conclusions of its 2005 Least Cost Plan.
- Q. What considerations were included under the "Cost Minimization" criterion?
- A. The Company sought to identify the lowest cost alternatives that would meet its energy and capacity needs, looking not only at prices that might be stated in proposals but at other factors that would ultimately impact the cost of the resource. Examples of such costs include the costs of transmission, emission costs, fuel transportation and energy firming.

3. PSE's Initial Screening and Application of the Criteria.

Q. How did the Company apply these criteria?

A. The Company first screened the 120 proposals to identify any that appeared clearly unsatisfactory because the project lacked viability. Several proposals were identified as clearly not feasible for a variety of reasons. PSE sent 18 projects that involved short-term opportunities to the Energy Risk Management Department for consideration. Jim Elsea discusses the analysis of these short-term projects in his prefiled direct testimony, Exhibit No. __ (WJE-1HCT).

The Company then performed quantitative analysis using the Company's

Portfolio Screening Model, to develop a cost ranking for each individual resource proposal. These results are presented as Exhibit No. ____(WJE-7HC) and Exhibit No. ____(WJE-8HC). For further description of the quantitative process, please see generally the testimony of Mr. W. James Elsea.

Q. Did the Company do anything in addition to this initial Portfolio Screening Model analysis?

A. The Company also conducted an extensive evaluation of qualitative factors related to its evaluation criteria. Such factors included availability and potential problems regarding fuel supply and transmission. The Company also evaluated whether the bidders' projections regarding their proposal appeared to be realistic, as the Company had concerns regarding the likely ability of bidders to actually

deliver what they proposed. Subject matter experts within the Company were assigned to closely review various project proposals or aspects of proposals with which they were familiar. After each team performed their evaluations, positive and negative comments were documented. Then, through the weekly evaluation meetings, the teams summarized their evaluations by assigning a qualitative evaluation rating for each of the proposals using a rating system of "Low," "Medium," and "High," with "High" being considered more favorable and "Low" being considered less favorable. This qualitative rating system was applied in order to identify the most favorable proposals. See Exhibit No. ___(RG-4HC) for the evaluations from Phase I.

Q. Please describe the evaluation teams.

A. In both Phase I and Phase II of the evaluations, subject matter experts within the Company were assigned to review project proposals and perform due diligence in order to assess the proposals or aspects of proposals within their specialized area. PSE's RFP evaluation process was a cooperative effort involving 40-50 individuals across the Company that were grouped in the following sixteen teams:

(i) Business / Commercial Issues; (ii) Fuel Supply; (iii) Transmission;

(iv) Technology; (v) Quantitative; (vi) Environmental; (vii) Real Estate;

(viii) Community Relations; (ix) Operations; (x) Credit/Finance/Tax/Accounting;

(xi) Regulatory; (xii) Insurance; (xiii) Legal; (xiv) Human Resources;

(xv) Government Relations (Federal); and (xvi) Government Relations (State).

See Exhibit No. (RG-3HC) at page 173 for the subject matter teams.

documentation of real estate rights related to a project. Projects at the earliest stages of real estate execution or with no real estate documentation provided for review received a "low" ranking with respect to this factor; proposals containing plans and/or discussion of real estate rights but with incomplete or insufficient documentation received a "medium" ranking, and those with fee ownership and/or signed real estate documentation (or where a plant was operational and assumed to have valid operating rights) received a "high" ranking.

Transmission issues provide another example. Company personnel evaluated the location of proposed projects in relation to PSE's system as well as transmission paths and known transmission constraints. Proposals that were not to be delivered directly to PSE's system were reviewed to determine whether the developer had already submitted a request for transmission rights and the status of that request in the transmission provider's queue.

Company engineers also evaluated the technologies proposed to be used for each project. They noted positive attributes such as the reliability or efficiency of a type of turbine as well as negative attributes such as lack of information on the type of equipment proposed to be used for a project, and ultimately assigned high, medium or low ratings to each project with respect to the technology evaluation.

Q. Did the Company do all of the Phase I evaluation in-house?

A. No. The Company retained Global Energy Concepts to perform an in-depth evaluation of the wind proposals that PSE received in the RFP. The report

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prepared by Global Energy Concepts is provided as Exhibit No. (RG-5HC). Additionally, PSE hired Altera Energy to assist in the RFP process.

Q. Why did the Company hire Global Energy Concepts?

A. The Company sought external assistance in evaluating wind projects because of its lack of technical experience with wind energy, especially meteorological expertise. Global Energy Concepts is recognized internationally as a leading authority on all aspects of wind energy. Global Energy Concepts has acted as project engineer on behalf of lenders, insurers and owners on numerous projects. As part of this work, it has performed due diligence with respect to wind turbine technology and wind resource assessment, and it has consulted with respect to various aspects of project design and construction including economic modeling. Global Energy Concepts maintains its independence by taking no equity stake in any development or technology and works purely on a consultancy basis.

Q. What did Global Energy Concepts do?

A. Global Energy Concepts undertook its own evaluation of the wind projects. It applied PSE's Phase I criteria to the projects based on its knowledge of the wind generation industry. Its most significant contribution to the evaluation process was to look at each proposed project from the perspective of an independent engineer. By providing PSE feedback on the engineering and financial viability of the proposal (i.e., determining whether the information presented in the

proposal was sufficient for a lender or equity investor to proceed), Global Energy Concepts provided PSE with expert advice to supplement the Company's own judgment. Global Energy Concepts also employed its proprietary software for analyzing topographic and wind turbine wake effects on project output.

Additional detail regarding the Company's analysis of issues specific to the wind power proposals is discussed below.

Q. Why did the Company hire Altera Energy?

A. Altera Energy was retained to assist the PSE resource evaluation team with the review and evaluation of the business and commercial issues of the proposals.

Q. What did Altera Energy do?

A. Altera participated in evaluation meetings to discuss key findings, provided data analysis support in the evaluation of the proposals and to help document the process. In addition, they provided an outside and fresh expertise on the RFP process and evaluation. For example, Altera suggested that PSE use a new quantitative metric--the Portfolio Benefit Ratio--to better provide parity among projects of all sizes. Please see the prefiled direct testimony of Mr. W. James Elsea, Exhibit No. ___(WJE-1HCT), for a description of the Portfolio Benefit Ratio.

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4. The "Most Favorable Proposals" List and Ultimate Phase I "Candidate Short List".

Q. How did the Company then proceed?

A. The qualitative evaluation and rating, combined with the Portfolio Screening Model ranking, eliminated certain proposals with high costs, unacceptable risks, and/or feasibility constraints and showed others as favorable. PSE then selected sixteen proposals for a Candidate Short List.

Q. How did the Company proceed with respect to the Candidate Short List?

The sixteen proposals on the Candidate Short List appeared to offer the lowest cost and lowest acceptable risk for obtaining additional electric supply. The proposals selected for the Candidate Short List included a diverse mix of ownership types and fuel sources, specifically: Five natural gas-fired projects, four wind projects, three system power purchase agreements, two coal projects, one geothermal project and one hydropower facility. The proposals on the Candidate Short List and their ratings under the Phase I evaluation criteria are provided in Exhibit No. ___(RG-3HC) at pages 220-231. The Company presented the Phase I analyses and the Candidate Short List to Commission Staff. See Exhibit No. ___(RG-6HC).

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- Experience of Developers;
- Guarantees and Security; and
- Environmental and Public Benefit.

The Phase II criteria are described in further detail in Exhibit No. (RG-7HC).

Q. How did the Company apply these criteria

A. The Company reevaluated the proposals on the Candidate Short List against each other by combining quantitative cost rankings with extensive evaluation of qualitative criteria, which were again summarized in "High," "Medium," and "Low" qualitative ratings. The Company based this evaluation on information that had been provided in the initial proposals as well as on responses to information requests that PSE sent to the owners and developers of the projects on the Candidate Short List. The Company also considered information discovered through its due diligence efforts.

Q. What additional information did the Company request?

A. PSE requested information such as copies of existing permits or applications for permits, a list of agreements contemplated between PSE and the developer, information about contingency plans in the event certain assumptions did not materialize, and preliminary information about the commercial agreements and terms the bidder anticipated requesting of PSE. PSE also inquired as to certain projects whether the bidder would be willing to agree to terms such as price

4. <u>Due Diligence.</u>

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Q. Please explain what is meant by "due diligence"?

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A. Due diligence is the process by which a party investigates and evaluates a potential investment. This often involves the examination of business operations, engineering design, equipment performance, environmental conditions, permit status, real estate and other necessary property rights status, and the verification of other material facts. Due diligence may also assess factors that affect the future operation of a potential acquisition and the prospects that the acquisition will perform as expected.

Q. What due diligence did the Company perform with respect to the potential projects?

A. The Company conducted due diligence with respect to environmental issues and concerns, permitting status and conditions, real estate matters, counterparty credit, the wind resource projections made by project developers, legal agreements and technical matters associated with the engineering, construction and operation of potential projects that were asset based.

Q. How did the Company go about performing this due diligence?

A. PSE conducted much of this review in-house, through personnel experienced in legal, environmental and real estate matters, but also relied upon outside expertise

on environmental and permitting matters, real estate issues, and technical matters. With respect to wind projections, wind project feasibility, and technical compatibility, the Company continued to work with Global Energy Concepts, as described above.

The Company's due diligence efforts began during the Phase I evaluation process and continued thereafter as to projects that ultimately were selected to the Phase II Candidate Short List, as well as projects on the continuing evaluation list.

Q. What were some of the results of these due diligence efforts?

- A. These efforts caused PSE to decide not to pursue certain projects on the Candidate Short List and also confirmed the attractiveness of certain projects.

 For example, based on the Phase II analysis, PSE determined that there was too much uncertainty and risk around the complexity of a transmission solution for a storage hydroelectric project located in Southeast Alaska.
 - 5. <u>Credit and Balance Sheet Issues With Respect to Power Purchase Agreements.</u>
- Q. Do you have additional comments on other factors considered in the Company's evaluation?
- A. Yes. Creditworthiness, credit support and credit quality issues continue to be of importance in evaluating power purchase agreements as compared to ownership

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options.

Q. What were the Company's concerns about creditworthiness and credit support?

A. The Company's concerns regarding the financial condition of potential counterparties and the credit required to support long-term, fixed price energy contracts were extensively documented in the Company's prior rate proceedings.

It is very common for companies to include in power purchase agreements a requirement that credit assurances be provided to better protect a party from the risk that the other will not perform its obligations under the contract. Credit provisions are generally reciprocal, that is, the counterparty or PSE would provide to the other contractual access to immediately available funds in the form of a letter of credit or cash to cover the daily market-to-market exposure (above a certain threshold level).

- Q. Did bidders of power purchase agreements request such credit support from PSE?
- A. Yes. Among various proposed terms and conditions, bidders of power purchase agreements requested that the Company post credit support to secure its obligations to pay for purchased power under the long-term power purchase agreements. Potential counterparties requested credit support from PSE in the form of a demand letter of credit or cash.

 Q. Did the Company have concerns about the creditworthiness of any counterparties?

- A. Yes, the Company had creditworthiness concerns with entities not financially rated or of speculative grade. Further, project companies held as a special purpose entity, such as a limited liability company, wherein the project is the only asset, were of particular concern. In those cases, the Company requested credit support, generally in the form of a parental guarantee.
- Q. Did the Company seek to address these concerns without rejecting the resource proposal?
- A. Proposals are selected based on their ability to meet the established criteria that PSE has outlined in its RFP solicitation, and that are offered at the lowest reasonable cost with the lowest reasonable risk. In Phase I, no project was eliminated based on credit. Once the selection of the Candidate Short List is identified at the conclusion of Phase I, credit becomes significant to the analysis and evaluation of the proposal.
- Q. Did the Company have other concerns about power purchase agreements?
- A. Yes. Credit rating agencies view electric utility power purchase agreements as debt-like in nature and, in their analysis of the Company's financial strength and risk factors, treat a portion of the Company's obligation under such contracts as debt. This "imputed debt" is a significant concern for the Company because of its

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impact on the Company's credit quality. Moreover, the Commission's 1994 prudence order expressly instructed the Company to consider "rating agencies' views of purchased power" and "to quantify the impact of future resource acquisitions on capital cost and capital structure."

- Q. Did the Company consider the impact of imputed debt when comparing power purchase agreements to ownership options?
- A. Yes. The Company's quantitative analysis of the competing resource proposals took into account costs related to debt that would be imputed to the Company if it entered into various proposed power purchase agreements, as described in the prefiled direct testimony of Mr. W. James Elsea, Exhibit No. ___(WJE-1HCT).

D. PSE Also Considered a Self-Build Option

- Q. Did the Company analyze a self-build option in addition to the projects proposed in response to the RFP?
- A. Yes. The responses to PSE's 2005 All-Source RFP included several self-build alternatives. The self-build proposals can be divided into two types—each requiring different levels of PSE involvement in both the development activities and the construction build-out. The two types of proposals offered are those in which:

¹ WUTC v. Puget Sound Power & Light Co., Docket No. UE-921262, et al., Nineteenth Supplemental Order (September 27, 1994) at 35-36.

- i) PSE plays a key role in the remaining development activities and funds
 the cost of completing the project with the developer; or
- ii) PSE purchases the existing development assets from the developer and PSE completes the project on its own.

Both types of self-build proposals result in PSE ownership of the project. In some cases project ownership is transferred to PSE early in the development stage and in other cases the ownership transfer occurs at the completion of the project.

Q. Please describe the self-build analysis that was performed.

A. As defined by the RFP evaluation criteria, the self-build proposals were evaluated in the same manner as all other proposals. However, greater diligence was observed when analyzing the costs of the remaining development activities and construction build-out. PSE relied on costs supplied by the developer. Where costs were not defined, PSE solicited pricing from the original equipment manufacturers. Where feasible, PSE used costs based on its existing operational experience from recent asset purchases including a half interest in EPCOR's combined cycle gas plant, Frederickson I, and more recently, PSE's acquisition of two wind farms. Also, additional costs that PSE would be required to fund in order to self-build the project were added to the project economics during the quantitative evaluation.

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E. Results of the Phase II Evaluation

Q. What did the Company do with the qualitative, quantitative, and due diligence analyses discussed in your preceding testimony?

Of the thirteen projects that were included on the Candidate Short List, nine of the

- A. Combining the qualitative, quantitative, and due diligence analyses led PSE to develop a Short List of proposals that combined low projected levelized costs (as compared to other proposals) with acceptable evaluations with respect to qualitative factors.
- Q. What did the Company conclude as a result of the Phase II evaluation?
- A. PSE ultimately selected the following resources for inclusion on the Short List of potential acquisition opportunities.

Project Name Owner/Developer	Size (MW)	Fuel	Proposal Type
		Geothermal	PPA
		Wind	Ownership
		Gas	PPA
Goldendale	277	Gas	Ownership
		Gas	Ownership
		System Power	PPA

Q.

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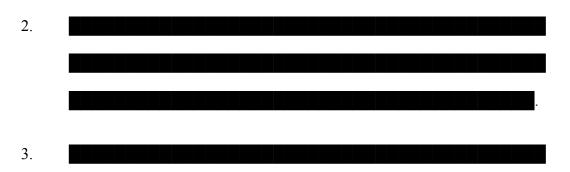
Please describe why the Company determined

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A. PSE determined that it should pursue the resources included in the Short List based upon the full range of analysis conducted in Phase I and Phase II.

Favorable aspects of each project on the Short List are briefly described below:

1.	
	. It is a baseload renewable resource that would
	help satisfy PSE's I-937 obligations ² and diversifies PSE's fuel supply.



² Initiative 937, passed by Washington voters in November 2006, requires electric utilities with more than 25,000 customers to use new renewable energy, such as wind and solar power, to serve at least 15 percent of their customers' needs by 2020, with benchmarks in 2012 and 2016 to demonstrate progress.

Page 28 of 52

(Highly Confidential) of

Roger Garratt

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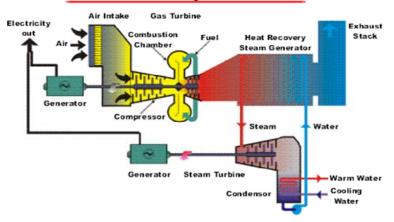
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The following diagram depicts the combined cycle process.

How a Combined Cycle Plant works



The combined cycle process using a natural gas cycle and a steam cycle is a highly efficient process that results in greater operating efficiencies and lower fuel costs and emissions.

The primary components of the plant consist of (i) a General Electric ("GE")

Frame 7FA model combustion turbine and generator, (ii) a Babcock-Hitachi heat recovery steam generator, (iii) a Hitachi steam turbine, and (iv) a Siemens generator. Goldendale's low heat rate makes it one of the most efficient generating facilities in the Western Energy Coordinating Council ("WECC") region.

The GE 7FA is a mature technology, proven and well understood. GE's 7FA dominates the F-class combustion turbine market with the largest installed base of any manufacturer. GE's F-class fleet includes more than 900 units in operation worldwide and has compiled more than ten million hours of commercial operation. Independent operating data confirms that fleet average reliability is about 98% with an availability of 93%. The availability of parts and service is excellent.

The plant was originally designed for baseload operation. The Babcock-Hitachi heat recovery steam generator has a number of design features that allow for improved operating profiles compared to a conventionally designed heat recovery steam generator, such as its improved readiness capability and reduced tendency to trip the steam generator. Although supported by a smaller installed base, the Hitachi steam turbine and Siemens generator are each recognized as reliable equipment. The availability of parts and service is considered good.

Q. Please describe the electric transmission arrangements for the Goldendale Generating Station.

A. As part of the Station acquisition, PSE acquired long-term, firm, point-to-point transmission service agreements with Klickitat County Public Utility District ("KPUD") and the Bonneville Power Administration ("BPA"). The Project is interconnected at the E.E. Clouse Substation, which is owned and operated by KPUD. The substation is located on a 4.04 acre parcel owned by KPUD within the Station's borders, but exclusive of the Station's 41.65 acres. KPUD provides approximately ten miles of 230 kV transmission access to the interconnection point with the BPA transmission system at the Harvalum Substation. KPUD also provides station service power for the Station. The cost of this power has been included in the quantitative analysis.

Under the Station's point-to-point transmission agreement with BPA, the power received at the Harvalum Substation is then delivered to the Mid-Columbia

trading hub ("Mid-C"). While Mid-C provides the greatest liquidity for wholesale trading in the Pacific Northwest, particularly for a merchant generator, PSE's need, as a load-serving entity, is to have power delivered directly to its system. Moving power from Mid-C across the Cascades can pose constraint problems in the winter.

BPA has completed its public process to reassess and evaluate its transmission capability across its system. As a result, PSE expects to receive a redirect from the Station's Mid-C point of delivery directly to PSE's load centers at Covington and Maple Valley in April, 2007. The transmission costs included in this case assumes this redirect will occur. This redirect provides both enhanced reliability and significant financial benefits to PSE customers of an estimated \$30 million net present value savings over 20 years or a \$5.35/MWh reduction on a levelized cost basis, and was taken into consideration when establishing PSE's bidding strategy. See Exhibit No. (WJE-1HCT) for further details.

- Q. Please describe the gas transportation arrangements for the Goldendale Generating Station.
- A. The Company will enter into a contract with a third party to acquire additional long-term pipeline transportation capacity to serve the Goldendale Generating Station on Northwest Pipeline Company.

Although the primary delivery point for this pipeline is not at Goldendale, PSE will reassign (or "Flex") the delivery point to the Goldendale Generating Station

when possible. Northwest Pipeline is required to accommodate requests to flex delivery points if operationally feasible. There may be times when Northwest Pipeline may not be able to accommodate requests to flex the delivery points. Such conditions could occur if Sumas gas prices are trading at a significant discount to Rockies, in the event of maintenance or if some unforeseen physical event should occur.

As part of the Goldendale Generating Station, PSE also acquired the rights for gas transportation on a 5.1 mile lateral from Northwest Pipeline Company's mainline facilities to the Goldendale Generating Station.

A.

Q.	Please describe the fuel supply arrangements for the Goldendale Generating		
	Station		

Natural gas is the primary and only fuel supply for the Goldendale Generating

- Station. The Station is not capable of dual fuel use (without equipment retrofit) and has no distillate storage capability or an air permit that allows distillate use. Such limitations are common to almost all gas-fired facilities of recent vintage.

 The fuel supply requirements for the Goldendale Generating Station will be managed in a manner consistent with the Company's well-documented and established hedging strategies. PSE's operations and trading group closely monitors and continuously evaluates the need for additional fuel supplies based
- Q. Please describe the water supply arrangements for the Goldendale Generating Station.

on daily updates of its dispatch models.

A. Raw water supply is provided by the City of Goldendale under a 30-year agreement. To reduce the consumption of water, the plant employs an advanced condensing system that includes a conventional condenser and an air-cooled condenser operating in parallel. Two water storage tanks hold about 2.2 million gallons each; a smaller tank holds de-mineralized water that has been treated to protect the equipment.

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Q. Did PSE evaluate the Goldendale Generating Station prior to the RFP?

A. In June 2005, through an informal solicitation, Calpine solicited potential bidders in a reverse auction process for sale of its Northwest generation assets, including the Goldendale Generating Station. Previously, Calpine had publicly announced that as part of its strategic plan to meet its debt reduction, it would divest assets that were no longer strategic to its core markets, which it defined as California and Texas.

PSE submitted an indicative non-binding bid on June 29, 2005, and was selected by Calpine in early July 2005. PSE and Calpine first negotiated and then entered into a non-binding Letter of Intent at the end of August 2005. At the conclusion of the Company's exclusive 90-day due diligence period set forth in the Letter of Intent, Calpine's much publicized deteriorating credit condition caused PSE to suspend negotiations. On December 20, 2005, Calpine and its affiliate companies filed for a reorganization bankruptcy under Chapter 11 of the U.S. Bankruptcy Code. PSE's interest in the Station remained as a potential purchase out of bankruptcy.

In early January 2006, after the ground rules of the Calpine bankruptcy were set by the court and Calpine commenced the process of selling some of its generation assets, PSE and Calpine restarted discussions for the potential purchase of the Station. Throughout those discussions, PSE evaluated the acquisition of the

Goldendale Generating Station against the other resource alternatives revealed in PSE's RFP solicitation and against other resources apparent in the marketplace.

- Q. What additional due diligence did PSE conduct with respect to the Goldendale Generating Station?
- A. The Company conducted a comprehensive review of legal, commercial, environmental, real estate, insurance, operations and maintenance, and technical concerns related to the Goldendale Generating Station.

1. <u>Commercial and Legal Due Diligence</u>

- Q. Please describe the commercial and legal due diligence conducted by the Company.
- A. The Company and its outside counsel reviewed the various contracts pertaining to the ownership and operation of the Goldendale Generating Station, with a particular focus on identifying potential liabilities and provisions that could be implicated in the acquisition, such as consents, assignments and accrued liabilities, and taking into account the special rules that apply to sales in bankruptcy. These included, for purposes of illustration, interconnection, transportation, operating and maintenance, water supply and similar types of agreements. The Company considered the application of the bankruptcy rules to the treatment of these agreements and the Company's obligations thereunder. In the course of these investigations, PSE discovered that Goldendale Energy

Center LLC (the previous owner of the Goldendale Generating Station) owed significant payments to a variety of business partners. Goldendale Energy Center LLC satisfied these obligations during negotiations with PSE.

2. Real Estate Due Diligence

Q. Please describe the real estate due diligence conducted by the Company.

A. The real estate due diligence included title review and a survey of the entire site to confirm the site is contiguous, without significant encroachments, and that there were not any additional real property interests needed for the Goldendale Generating Station.

The Goldendale Generating Station is located within the Goldendale Industrial Park in Klickitat County, Washington, on previously undeveloped land. The property consists of four contiguous parcels of land that total 41.65 acres.

Within the borders of, but exclusive of the 41.65 acre plant property, KPUD owns and occupies a 4.04 acre site which is improved with an electrical switchyard. Easements for ingress and egress, overhead and underground electrical systems in favor of KPUD encumber the property. Additional easements granted to the City of Goldendale for a flood control channel and utility infrastructure, which includes Pacific Telephone and Telegraph for a telephone line and Northwest Pipeline for a 100 foot by 100 foot metering station and related gas delivery pipeline, occupy portions of the plant property.

The plant property is bordered on the north and east by industrial zoned lands. Property to the south is owned by Calpine Corporation and is General Rural residential zoned vacant land. West of the plant property is rural residential housing.

The property south and adjacent to the Plant Property is a 141.5 acre parcel, which PSE acquired from Calpine Corporation as part of the Goldendale acquisition. The north border of the 141.5 acre parcel borders the south property line of the plant property as noted above as well as other industrial zoned lands. South, east and west of the 141.5 acre parcel is rural residential and agricultural property. While vacant of any formal structures, the 141.5 acre property is occupied with easements for telephone, natural gas pipelines and overhead and underground electric and transmission and distribution lines. PSE acquired this adjacent property as part of the transaction. The 141.5 acre property is currently zoned General Rural (5 acre minimum) and is currently used for agricultural purposes under a farming lease. PSE expects to continue this lease.

3. Environmental Due Diligence

Q. Please describe the environmental due diligence conducted by the Company.

A. The environmental due diligence review consisted of a site visit, interviews with facility employees, review of all available environmental documentation (including environmental agency correspondence, permit applications, final permits, environmental plans and policies, etc.) at the plant, review of Department

of Ecology files pertaining to the Station and interviews with an Ecology representative and a Goldendale Fire Department representative by PSE staff and/or its agents.

No significant environmental issues were identified during the environmental due diligence. The Station appears to be properly sited and constructed and in good condition. There are comprehensive programs in place to address air emissions, wastewater discharge, stormwater discharges, solid waste management, hazardous materials handling and hazardous waste management. Although no sampling was performed, there is no indication of any groundwater, surface water or noise issues associated with the Station.

4. <u>Insurance Due Diligence</u>

- Q. Please describe the insurance due diligence conducted by the Company.
- A. PSE hired a property insurance engineer for an assessment of the Goldendale Generating Station. The comments from PSE's property insurance engineer were generally good and included the following findings: 1) All equipment and systems are fully commissioned and the installed fire protection systems are at industry standard or better; 2) the plant management and operators are considered highly competent; and 3) the water supply for the existing fire protection systems is excellent.

In addition, there are four loss control recommendations requiring action, and any one of the identified exposures could result in a significant fire loss. The recommendations include: (i) extending CO2 protection to additional components of the gas turbine generator; (ii) adding fire protection, oil containment and drainage piping for the combustion turbine; (iii) upgrading the fire protection, oil containment, and drainage for the steam turbine; and (iv) confirming the generator building has a class 1 roof, or installing fire sprinklers. PSE has included these costs in its assessment and pro forma and plans to make these improvements.

PSE will add the Station to its permanent property insurance program with a \$1,000,000 deductible and an insured replacement value of \$260 million. PSE projects a \$10,000 increase in premium by its excess general liability carrier associated with the new facility.

5. Operations and Maintenance Due Diligence

- Q. Please describe the operations and maintenance due diligence conducted by the Company.
- A. The Company reviewed the operating reports, maintenance inspection records, software being used at the project and conducted site visits to the Station and found no significant problems.

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PSE developed an Asset Management Plan to transition Calpine employees, all software and vendor contracts, as well as the operations and maintenance policies and procedures of the Station. PSE worked with Calpine Operating Services Company, Inc., a Calpine subsidiary, which operated and maintained the Calpine Generating Station. Staffing at the Station is similar to the Frederickson I project, with approximately 19 employees. Staff size is projected to remain constant over the life of the Station. Nearly all of the personnel at the Station have become PSE employees.

6. <u>Technical Due Diligence</u>

Q. Please describe the technical due diligence conducted by the Company.

A. The Goldendale Generating Station is a conventional one-on-one combined cycle power plant. The plant achieved commercial operation in September 2004 and is rated at approximately 252 MW base load and approximately 277 MW with duct firing. A General Electric ("GE") Frame 7FA+e Model 7241 combustion turbine provides electrical power via a GE generator and exhaust heat to a Babcock-Hitachi heat recovery steam generator, which is used to generate high, intermediate, and low pressure steam. Steam generated by the heat recovery steam generator drives a triple pressure Hitachi steam turbine, similar in design to a GE AT10 steam turbine but with better vibration characteristics. A Siemens generator converts the mechanical energy from the steam turbine into electrical energy.

The GE 7FA gas turbine is a mature, well-understood machine with hundreds of units installed around the world amassing more than five million operating hours. The availability of parts and service is considered to be excellent with both original equipment manufacturer and third party after-market support. The plant does not require fuel gas compression as gas is delivered at sufficient pressure for use in the combustion turbine. Although supported by a smaller installed base, the Hitachi steam turbine and Siemens generator are recognized as reliable equipment.

Raw water supply is provided by the City of Goldendale. To reduce the consumption of water, the plant employs a condensing system that includes a conventional condenser and an air-cooled condenser operating in parallel. The manufacturer of this system has five other similar condenser cooling systems in operation around the world. The level of maintenance for the parallel condensing system is believed to be minimal.

The electrical equipment on-site appears to originate from reputable manufacturers and be in good operating order. KPUD owns and operates the substation on the Station site. KPUD ownership begins at the high voltage side of the generator step-up transformer. The power plant is controlled by a system of local control panels, local instrumentation, and a central distributed control system supplied by ABB Bailey.

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In general, the plant has a high level of equipment redundancy, (2 x 100% pumps, fans, etc.) so the number of spare parts required on site can be minimized.

The overall conclusion of PSE's technical due diligence team is that the plant is clean, quiet, and well-designed. The plant has the latest emission controls that meet or exceed regulations. Operations and maintenance at the plant appear to have been carried out by conscientious and experienced personnel guided by good procedures.

C. Board Approval of the Acquisition

- Q. Was PSE able to finalize contracts for acquisition of the Goldendale Generation Station?
- A. Yes. Negotiations with Calpine produced definitive agreements for PSE's acquisition of the Station. At the November 3, 2006, meeting of PSE's Board of Directors, PSE management recommended that the Board approve the acquisition as set forth in the summary documentation to the Board of Directors. *See* Exhibit No. ___(EMM-5HC) and Exhibit No. ___(EMM-6). The Board approved the recommendation, and PSE executed the necessary agreements and closed on the transaction on February 21, 2007.

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Q. What does it mean to be the "Stalking Horse Bidder" and why did PSE seek to establish itself as such?

A. The Stalking Horse Bidder is the bidder that sets the floor price for an auction. PSE offered a Stalking Horse Bid of \$100,000,000. By establishing itself as the Stalking Horse Bidder, PSE was able to negotiate the terms and conditions of the sale and help shape the bidding procedures and conditions applicable to the bankruptcy auction. In addition, by being the Stalking Horse Bidder, PSE was entitled to a "break-up fee" of \$2,500,000 if another qualifying party cast the high bid at the auction. Likewise, PSE received a credit equal to the "break-up fee" for all bids the Company submitted in the auction. A "break up fee" essentially provides an advantage to the stalking horse bidder since it is entitled to "credit" such fee against its purchase price.

- What concessions was PSE able to secure from the seller of the Goldendale Q. **Generating Station?**
- Through negotiations, PSE was able to win concessions that included, payment of A. only 50% of the Real Estate Excise Tax, (whereas in most bankruptcy sales the purchaser typically assumes all transaction taxes like this); the allocation to Calpine of most of the risk of so-called "Cure Costs" under Calpine contracts with third parties (which essentially need to be paid to assign contracts); and various contractual provisions in favor of the Company designed to protect the Company in the event unexpected Cure Costs arose prior to the closing for which it would

Roger Garratt

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- Q. Has the Federal Energy Regulatory Commission approved the disposition of the Goldendale Generating Station?
- A. Yes, the Federal Energy Regulatory Commission issued its "Order Authorizing Disposition of Jurisdictional Facilities and Acquisition of Generating Facilities" on February 1, 2007. *See* Exhibit No. (RG-17).
- Q. Have PSE and Goldendale closed the sale of the Goldendale Generating Station?
- A. Yes, the transaction closed on February 21, 2007.

E. Project Acquisition Costs

REDACTED VERSION

- Q. Please describe the acquisition costs for the Goldendale Generating Station.
- A. The Company's total purchase price for the Goldendale Generating Station was \$120,000,000 or approximately \$433 per kW. In addition, there were additional acquisitions costs as indicated in the following table, which resulted in a total acquisition cost of \$100,000 costs.

Goldendale Generating Station	Project Costs		
Facility Purchase Price	\$120,000,000		
Real Estate Excise Tax (50%)	\$		
Facility Improvements	\$		
Transaction & Due Diligence	\$		
Property Taxes	\$		

Goldendale Generating Station	Project Costs
AFUDC	\$
Total Project	\$ 3

Q.	Please	describe	the	line item	"Facility	Purchase	Price."
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- A. The Facility Purchase Price represents the Company's auction bid price less the "break-up fee."
- Q. Please describe the line item "Real Estate Excise Tax."
- A. The Real Estate Excise Tax ("REET") is a Washington State tax levied on the portion of property classified as "real" in which a controlling interest of the property is transferred. The combined tax rate for Klickitat County and Washington State is 1.53%. The seller will bear 50% of this cost.
- Q. Please describe the line item "Facility Improvements."

costs, please see Exhibit No. (EMM-5HC) at page 103.

A. Facility improvements include funds (1) to bring the roof into insurance compliance and provide adequate fire protection, and (2) for a computer maintenance and management system, security upgrades and integration with PSE's IT infrastructure.

³ PSE is also seeking rate recovery for an estimated \$ in capitalized parts for a major maintenance overhaul required for Goldendale in 2007. This brings the total estimated plant cost to \$130,952,698, as described in the testimony of John Story. For a description of the major maintenance required for the Goldendale Generating Station and treatment of the related

Prefiled Direct Testimony (Highly Confidential) of Roger Garratt Exhibit No. ___(RG-1HCT) Page 48 of 52

REDACTED VERSION

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I described above the concept of due diligence and the due diligence efforts undertaken by the Company with respect to the Goldendale Generating Station.

The category "Transaction & Due Diligence Costs" reflects (i) the costs paid by

Transaction and due diligence costs are PSE's internal costs for due diligence and

negotiations, title insurance, third party expert consultants and legal fees

L.L.P. for negotiating, drafting and documenting the definitive agreements for the

PSE to third parties who assisted in PSE's due diligence efforts for the Station

and (ii) the legal fees paid to the law firm LeBoeuf, Lamb Greene & McRae,

Station.

Q. Please describe the line item "Property Taxes."

A. In Washington State, property is assessed at the end of each calendar year with taxes paid in April and October of the following year, in arrears. It is customary in real estate transactions in Washington for property taxes to be prorated based on taxes payable in the year of closing. Since PSE utilizes accrual accounting, the property taxes paid by it subject to the proration as well as that portion of the property taxes incurred in the current calendar year attributable to the time period that the Goldendale Generation Station was owned by Goldendale Energy

Center, LLC, that would have been accrued for payment next year are capitalized.

Roger Garratt

completion; and (iv) the forecast at completion amounts for the project.

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Q. How has the Wild Horse Wind Project performed since it was placed into service?

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A. Since December 21, 2006, the Wild Horse Wind Project has operated at a capacity factor of \(\), below its projected capacity factor of \(\) due to lower winds in the first quarter of 2007.

V. CONCLUSION

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Q. Does that conclude your testimony?

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A. Yes, it does.