EXHIBIT NO. ___(EMM-1HCT)
DOCKET NO. UE-06___/UG-06___
2006 PSE GENERAL RATE CASE
WITNESS: ERIC M. MARKELL

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UE-06____** **Docket No. UG-06____**

PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF ERIC M. MARKELL ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

FEBRUARY 15, 2006

PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY (HIGHLY CONFIDENTIAL) OF ERIC M. MARKELL

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PUGET SOUND ENERGY, INC.

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I. INTRODUCTION

Q. Please state your name, business address, and position with Puget Sound Energy, Inc.

A. My name is Eric M. Markell. My business address is 10885 N.E. Fourth Street Bellevue, WA 98004. I am the Senior Vice President Energy Resources 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. ___(EMM-2).

Q. What are your duties as Senior Vice President Energy Resources for PSE?

A. My present responsibilities include oversight of: (i) the operation and maintenance of the Company's electric generating facilities and the Jackson Prairie gas storage facility; (ii) contracts for electric supply, transmission service acquisition, long-term gas supply, and long-term gas transportation service; (iii) generation resource acquisition; and (iv) integrated resource planning.

Q. What is the nature of your testimony in this proceeding?

A. My testimony describes the Company's extensive need to acquire new resources in order to have enough power to meet the demands of PSE's electric customers. PSE anticipates that acquisition of such resources could require capital investments of up to $3.7 billion over the next 10 years. In addition to the need to raise capital for such acquisitions, PSE must have the financial strength to deal effectively with counterparties, to support long-term power purchases, and to support acquisition of fuel supplies in wholesale markets.

My testimony then presents an executive summary of the Company's long-term electric and gas supply portfolios and the acquisitions for these portfolios for which the Company is seeking the Commission's prudence determination in this case. As part of this discussion, I describe a number of investments the Company has made in its existing generation facilities to increase their capacity or reduce costs associated with their operation. These resource acquisitions and portfolio optimization activities demonstrate the outstanding success of the Company's expansive efforts to secure the power and gas supplies needed to serve our customers at the lowest reasonable cost.

The acquisition efforts presented in this case include the continuation of the Company's Request for Proposals process under the Commission's WAC Chapter 480-107 competitive bidding rules. This process has now concluded with: (i) the acquisition by PSE and construction of a 229 MW (nameplate capacity) wind

powered electric generation facility to be located in Kittitas County, Washington; and (ii) execution of a 20-year purchased power agreement for the output of a small waste heat generating project. The Company's efforts also include: (i) completion of a six-year collaborative process to reach agreement with all stakeholders for the terms of the new Baker Hydroelectric Project license; (ii) accelerated negotiation and analyses of a new contract for 25% of the output of the Rocky Reach and Rock Island hydroelectric projects consistent with a timeline imposed by the owner of those projects; and (iii) acquisition of pipeline capacity that the Company needs to transport natural gas to its gas customers.

Each of these activities involved very different types of resources, transactions, and timelines. But in each case, the Company focused on the task at hand, applied its extensive planning, analytical capabilities and market knowledge, and ultimately brought home for its electric and natural gas customers outstanding additions to the Company's electric and gas portfolios that will provide benefits to our electric and gas customers for decades to come.

II. PORTFOLIO SUMMARY

A. <u>The Company's Electric Supply Portfolio</u>

Q. Please describe the principal components of the Company's electric supply portfolio.

A. PSE derives most of its electric supply from a generation "portfolio" consisting of

a mix of resources representing technology, fuel, transmission and geographic diversity. This portfolio approach helps lower supply and cost risks by reducing reliance on any one resource type. All of the natural gas-fueled resources are located in western Washington. The Company purchases under long-term contracts significant quantities of hydroelectric power from projects located outside of its service territory, which projects are located along the middle section of the Columbia River in central Washington ("the Mid-C"). The Company also owns a 50% and 25% undivided interest in Colstrip Units 1 and 2 and Units 3 and 4, respectively. The Colstrip Project is a 2200 MW pulverized coal steam electric generating plant located in eastern Montana. The geographic location of the Company's electric portfolio resources is illustrated in Exhibit No. ___(EMM-3).

PSE's ownership share and contractual interests in the Colstrip Project provide approximately one quarter of its annual energy requirements. Hydroelectric generation, PSE's largest energy source, supplies approximately one third of the Company's annual energy requirements depending on the availability of water in any given year. Natural gas-fired generation resources provide another approximately one third of PSE's annual energy requirements, depending on market conditions. These natural gas-fired resources consist of contracted and owned facilities. Non-utility generator ("NUG") contracts include supply agreements with the Tenaska, Sumas and March Point projects. PSE owns the 169 MW Encogen gas-fired combined cycle project, and 49.85% of the 276 MW Frederickson 1 gas-fired combined cycle combustion turbine. The 150 MW

Hopkins Ridge Wind Project commissioned in November 2005 is expected to supply about 2 percent of PSE's 2008 energy load, and the 229 MW Wild Horse Wind Project is expected to supply another 3 percent of PSE's 2008 energy load. Short-term market purchases and various other contracts comprise the remaining resources. The relative contribution of these various resources in 2004 is shown in Exhibit No. ___(EMM-4). At that time, the Company did not have any wind resources in its electric portfolio.

Further detail regarding the Company's electric resource portfolio is found in PSE's April 2005 Least Cost Plan ("2005 LCP"), which was filed with the Commission under Docket No. UE-050664, at Chapter IX – Electric Resources. A copy is provided as Exhibit No. ___(EMM-5).

Q. Have there been changes to PSE's existing long-term electric resource portfolio since the Company's recent Power Cost Only Rate Case, Docket UE-050870 ("2005 PCORC")?

A. Yes. Subsequent to its acquisition of the Hopkins Ridge Wind Project, which was approved in the 2005 PCORC, the Company has committed to or anticipates committing to several other electric portfolio changes that will take effect by or during the rate year for this case, calendar year 2007. These include the major electric resource acquisitions for which the Company seeks a specific determination of prudence in this proceeding.

Q. For what electric portfolio resources is the Company seeking a prudence determination from the Commission in this case?

A. PSE is seeking a prudency determination in this proceeding with respect to the following resource acquisitions, along with their associated capital and operating costs:

1. acquisition of a 229 MW (nameplate capacity) wind powered electric generation facility to be located in Kittitas County, Washington ("the Wild Horse Project");

2. execution of a new purchased power agreement with OrSumas, LLC for the output of the Northwest Pipeline recovered heat generation resource at Sumas developed by ORMAT ("ORMAT PPA");

3. execution of a new purchased power agreement and related transmission agreement with Public Utility District No. 1 of Chelan County, Washington for the Rock Island and Rocky Reach Hydroelectric Projects ("Chelan Contract"); and

4. relicensing of the Company's Baker River Hydroelectric Project.

Q. Would you please summarize the estimated costs and benefits of these resource acquisitions?

A. The first two acquisitions on the above list were the next most attractive alternatives available to the Company arising out of PSE's formal RFP process under WAC Chapter 480-107 after the resources already acquired by the Company that were approved by the Commission in the 2005 PCORC.

The Company's analyses estimated that the Wild Horse Project has a 20-year levelized cost of approximately $[redacted]/MWh and a net present value benefit to

PSE's electric portfolio of greater than $50 million when compared with the cost of generic resources in the Company's 2005 LCP.

These analyses also estimated that the ORMAT PPA has 20-year levelized cost of approximately $[redacted]/MWh, including $[redacted]/MWh of imputed debt cost, and a portfolio benefit of $0.4 million when compared with generic resources from the 2005 LCP. In addition, both resources provide additional fuel supply diversity to PSE's portfolio.

The Chelan Contract will provide the Company with continued access to the operational flexibility and other power supply benefits of the Rocky Reach and Rock Island hydroelectric projects for the next 20 years at an estimated levelized cost of $[redacted]/MWh, including $[redacted]/MWh of imputed debt cost, with a net present value portfolio benefit of approximately $360 million when compared to a PSE portfolio that contains the 2005 LCP generic resources in place of the Chelan Contract.

The Company anticipates that the Baker Hydroelectric Project relicensing will be approved by FERC by the end of 2006 under the terms of a new license proposed to FERC in a Settlement Agreement that the Company developed with 23 other parties over the past six years through FERC's Alternative Licensing Process. If approved as filed, the cost of power from this project is anticipated to be approximately $[redacted]/MWh (levelized) over thirty years, after which time the Company will still be entitled to generate power for 15 more years under the

proposed license.

B. The Company's Natural Gas Supply Portfolio

Q. Please describe the principal components of the Company's natural gas supply portfolio.

A. PSE's natural gas supply portfolio consists of:

(i) a mix of long-term natural gas supply contracts (more than 2 years) and short-term natural gas supply contracts (2 years or less) to meet the average loads of PSE's retail gas customers during different months;

(ii) natural gas peaking supply and capacity resources to meet peaking requirements or short-term operational needs for PSE's retail gas customers;

(iii) natural gas pipeline capacity resources (both "direct connect" capacity, which moves supplies from production areas, storage or interconnections with other pipelines directly into PSE's distribution system, and "upstream" capacity, which accesses production, storage and market centers further upstream from the direct connect capacity);

(iv) natural gas storage resources: Jackson Prairie and Clay Basin; and

(v) natural gas supply and transportation resources for power generation needs for PSE's electric portfolio.

Further detail regarding the Company's gas supply resource portfolio is found in PSE's 2005 LCP at Chapter XII – Existing Gas Supply-Side Portfolio Resources. A copy is provided as Exhibit No. ___(EMM-6).

Q. Have there been any significant changes to PSE's existing natural gas supply portfolio since the Company's recent general rate case, Docket UG-040640, *et al.* (the "2004 GRC")?

A. Yes. As described later in my testimony, the Company has entered into contracts with Duke Energy Trading and Marketing ("DETM") to acquire additional long-term pipeline transportation capacity for its gas portfolio.

Q. For what gas supply portfolio resources is the Company seeking a prudence determination from the Commission in this case?

A. PSE is seeking a prudency determination in this proceeding with respect to the Company's execution of the DETM capacity contracts mentioned above.

Q. Would you please summarize why the Company entered into the DETM capacity contracts?

A. As described in greater detail below, these contracts benefited the Company's natural gas customers by providing needed pipeline transportation capacity at a lower cost than other alternatives.

III. THE COMPANY'S NEED TO ACQUIRE ADDITIONAL ELECTRIC RESOURCES

A. The Company's Short Position

Q. Does the Company need to acquire additional power resources?

A. Yes. The Company's 2005 Least Cost Plan, which was filed with the Commission on May 2, 2005, in Docket No. UE-050664, concluded that the Company has a present need to acquire resources for approximately 305 aMW by 2008 growing to approximately 739 aMW by 2011 and to approximately 1,471 aMW by 2013. As shown in the 2005 Least Cost Plan, PSE is short on an energy basis in eight months during 2006, and that short position grows over time. By 2012, PSE will be short energy in every month.

The 2005 Least Cost Plan also concluded that PSE is short of peak capacity. By 2008, the Company is anticipated to be short resources to meet its peak load by approximately 1,400 MW of capacity. Like PSE's energy need, the Company's capacity need also grows over time.

In short, the Company has a significant near-term need for resources that grows significantly over time. *See* Exhibit No. ___(EMM-5) at 15-18.

Q. Given the new acquisitions described in your testimony, does the Company continue to have a significant electric resource need?

A. Yes. With one exception, the 2005 Least Cost Plan assumed that the Company would renew or acquire all of the resources described in my testimony. The exception is the continuation of the resources provided by the Chelan PUD's Rock Island and Rocky Reach Hydroelectric Projects. The new contracts executed by the Company, described below and in the testimony of Mr. Joel L. Molander, Exhibit No. ___(JLM-1T), are expected to provide approximately 37 aMW per year more than was assumed in the 2005 Least Cost Plan. The Company's projected resource need after taking all of these acquisitions into account is illustrated in my Exhibit No. ___(EMM-7).

Q. What is driving the growing need for resources?

A. The growing need for resources is primarily driven by load growth and the need to replace expiring energy supply contracts, as well as other reductions of generation from existing resources.

B. Projected Costs to Satisfy the Company's Short Position

Q. What is the Company's strategy to meet the growing needs noted above?

A. The Company determined in its 2003 and 2005 Least Cost Planning efforts that it should balance exposure to a variety of risks by adopting a strategy of acquiring a

diverse portfolio of resources to meet its needs. This portfolio includes a mix of energy efficiency, renewable and thermal resources. *See* Exhibit No. ___(WJE-4) at 51.[1] The Company has been pursuing and continues to pursue acquisition of resources consistent with this strategy.

Q. Has the Company projected the potential capital costs associated with meeting its growing energy needs?

A. The Company has projected that potential capital costs of these resource acquisitions could be as much as $3.7 billion dollars over the next ten years. Such estimate assumes the Company acquires all its needed resources through ownership, not through purchased power agreements ("PPAs"). In addition to such direct use of funds, additional credit capacity will likely be needed to provide credit to support portfolio risk management activities, including hedging of fuel supply costs, as described in the testimony of Mr. David Mills, Exhibit No. ___(DEM-1CT).

Q. If the Company were to acquire more PPAs and fewer "hard" assets, would the capital requirement be different than the estimated $3.7 billion?

A. Yes. To the extent the Company is able to meet its resource needs by acquiring PPAs at a lower cost for our customers than owning assets, the Company would acquire such resources. However, PPAs also place capital requirements on the

[1] *See also* August 2003 LCP Update, Chapter IX, p. 2, Chart IX-1.

Company. PPAs with terms longer than two years burden the Company with imputed debt and require equity capital support, as discussed in the testimony of Mr. Donald Gaines, Exhibit No. ___(DEG-1CT). Furthermore, as described below, the Company must have the financial strength to provide assurance to potential counterparties that it will meet its long-term obligations under such agreements.

Q. Does the Company's financial condition impact its resource acquisition program?

A. Yes. In order to fund the acquisition or construction of additional generation resources, the Company must have the capability to pay cash to asset sellers, contractors, or vendors engaged respectively, in the sale or construction of a facility. To the extent the Company were to wish to partner with others in development and ownership of generating projects, PSE's potential business partners are going to be concerned about the financial strength of the Company and its ability to continue to operate as a strong partner in a project. Similarly, if the Company is the purchaser of energy from a third party in connection with a PPA, the counterparty must have confidence the Company will be able to perform its obligations under the agreement over the long term. In particular, the Company must have the credit capacity to post cash or other security as may be required as markets move in relation to such purchase obligations.

A company with a strong balance sheet, strong earnings and cash flow and highly

rated debt is best positioned to offer such comfort and to transact on favorable terms and conditions. Debt ratings are one of the most widely accepted measures of a company's ability to perform its financial obligations. Generally speaking, the higher one's debt ratings, the more favorable the terms of such debt, including its cost as described by Mr. Donald Gaines and Dr. Roger A. Morin, Exhibit No. ___(RAM-1T).

IV. THE COMPANY'S ELECTRIC RESOURCE ACQUISITION PROCESS

A. Overview

Q. What is your understanding of the Commission's prudence standard?

A. My understanding is consistent with the description provided by Ms. Kimberly Harris in her prefiled direct testimony, Exhibit No. ___(KJH-1T). To summarize, a company must establish that it adequately studied the question of whether to purchase a resource and made a reasonable decision, using the data and methods that a reasonable management would have used at the time the decisions were made. A company must first determine whether new resources are necessary, then evaluate a potential resource against available alternatives. The Commission has also cautioned in the past that a company should keep its board of directors informed and document its decision making process.

Q. Do you believe that the Company's acquisitions that are presented for a prudency determination in this proceeding meet this standard?

A. Yes, I do. The Company's resource acquisition activities for which the Company seeks a prudency determination in this proceeding were similar to, and in some cases overlapped with, the Company's efforts with respect to its acquisition of the Frederickson 1 gas-fired generation facility that was the subject of the Company's 2003 power cost only rate case proceeding, Docket No. UE-031725 ("2003 PCORC"). The Commission determined in the 2003 PCORC that "PSE employed decision-making tools and processes that meet our expectations."[2]

The Company's acquisition of the Wild Horse Wind Project and ORMAT PPA resulted from the same formal request for proposals process under WAC Chapter 480-107 (the "2004 RFP Process") that led to the acquisition of the Hopkins Ridge Wind Project and the execution of the Arizona Public Service 2-year Purchase Power Agreement that were presented in the Company's 2005 PCORC proceeding. All parties to the 2005 PCORC agreed that the Company's acquisitions presented in that proceeding were prudent, and the Commission approved the settlement stipulation containing this finding.[3]

The other resource acquisitions for which the Company seeks a prudence determination in this proceeding took place against the backdrop of information

[2] Order No. 12, Docket No. UE-031725, at ¶ 29.

the Company had obtained through the 2004 RFP Process and were analyzed using the tools the Company developed in the course of that process, or with appropriate consideration of such information. The Company's efforts clearly meet the "adequate study" and "reasonable data and methods" standards applied by the Commission in determining whether an acquisition was prudent.

B. The Company's Resource Acquisition Strategy Is Informed By The Least Cost Planning Process

Q. What analyses did the Company undertake in determining that it needed to acquire additional power resources?

A. The acquisitions that the Company is presenting for approval in this proceeding were undertaken as a result of, or were developed contemporaneously with, the 2004 RFP Process that began shortly after the Company filed its April 30, 2003 Least Cost Plan and August 29, 2003 Least Cost Plan Update (collectively "2003 Least Cost Plan") with the Commission.

During the course of the 2004 RFP Process, the Company continued to inform itself about developments in the marketplace, worked to improve its analytical tools and updated analyses such as long-term resource needs, projected capital costs of generation technologies, and projected wholesale natural gas and electric prices for use in its on-going long-term planning process. Such analyses informed

[3] *See* Order No. 04, Docket No. UE-050870, at ¶ 30.

both the acquisitions presented in this case and the Company's 2005 Least Cost Plan.

Both the 2003 Least Cost Plan and 2005 Least Cost Plan demonstrated an ongoing need to acquire additional electric supply resources.

C. The Company Issued Requests For Proposals To Meet Its Resource Needs

Q. How did the Company pursue implementing its strategy to meet the growing electric supply needs noted above?

A. Shortly after completion and filing of its 2003 Least Cost Plan, the Company commenced the 2004 RFP Process by filing with the Commission three draft Requests for Proposals ("RFPs") under the Commission's competitive bidding rules (WAC Chapter 480-107): one for wind resources, one for all generation resources, and one for energy efficiency (conservation) resources. The Commission received and considered public comment on such draft RFPs and ultimately approved their issuance, with some revisions, in Docket No. UE-031353.

Q. Please describe the Company's Energy Efficiency RFP.

A. Prior to issuing this RFP, the Company had already been working closely with its Conservation Resource Advisory Group ("CRAG") to scope the elements and timing of an energy efficiency resource acquisition program. The Energy

Efficiency RFP was issued in addition to the ongoing efforts of the Company and the CRAG to acquire cost-effective energy efficiency projects. Because of the Company's ongoing work with the CRAG on the Company's energy efficiency programs, evaluation of responses to the Energy Efficiency RFP and contract finalization was assigned to the Company's Energy Efficiency Services Department. Mr. Calvin E. Shirley discusses energy efficiency issues in his testimony in this case, Exhibit No. ___(CES-1T).

Q. What response did PSE receive to its RFPs with respect to generation resources or PPAs?

A. In response to the Wind RFP, PSE received 13 proposals for new wind development projects. Many of the proposals contained multiple offer options such as PPAs, asset ownership, and a combination of a PPA and a partial ownership.

PSE subsequently received 47 unique proposals from 39 different owners/developers in response to its All Source RFP. Nearly all of the respondents to the Wind RFP resubmitted their proposals in response to the All-Source RFP. Some wind proposals were updated and others remained as initially submitted. Again, many of the proposals contained multiple offer options such as PPAs, asset ownership, and a combination of a PPA and a partial ownership. Considering all the options offered under each proposal, more than 80 different proposals were submitted.

D. The Company Evaluated The Resource Alternatives Proposed In Response To The RFPs Using Current Information That Adjusted For Appropriate Factors And Risks

Q. How did the Company go about evaluating the proposals that were submitted in response to the Wind RFP and All Source RFP?

A. I described the Company's 2004 RFP Process in my testimony in the 2005 PCORC proceeding, and those details are again presented in this case in Mr. Roger Garratt's Exhibit No. ___(RG-6HC) and Mr. W. James Elsea's Exhibit No. ___(WJE-8). Because this Commission and stakeholders are already generally familiar with the Company's evaluation process, I summarize that process at a very high level below.

Generally, the Company engaged in a comprehensive process to evaluate the costs and risks associated with each proposal, both as individual projects and when viewed as potential additions to the Company's resource portfolio. PSE evaluated the proposals in two stages based on the criteria set forth in its RFPs. These criteria were designed to take into account qualitative and quantitative factors impacting the decision whether to acquire a potential resource. They included consideration of end effects, dispatchability, transmission costs, capital costs, impact on the Company's credit quality, and project feasibility, among other factors.

Q. What analyses did the Company conduct during Stage One of the evaluation process?

A. During Stage One, PSE screened the proposals to eliminate any that were obviously infeasible or inconsistent with the Company's needs. The Company then applied a modified form of its Portfolio Screening Model called the Acquisition Screening Model to analyze the projected levelized cost of each potential project on a 20-year net present value basis. The Portfolio Screening Model and Acquisition Screening Model are described in detail in Mr. Elsea's Exhibit No. ____(WJE-8). The Company also evaluated the proposals based on qualitative factors such as permitting and other timing risks, feasibility risks including developer experience, and the availability or status of transmission rights.

Based on the Company's evaluation of qualitative factors as well as quantitative analysis performed with PSE's Acquisition Screening Model, the Company developed a short list of potential projects that advanced to Stage Two evaluation. In addition, the Company identified several projects that it felt were worth some continuing evaluation even though they did not make the formal short list.

Q. What analyses did the Company conduct during Stage Two of the evaluation process?

A. During Stage Two, PSE continued to apply the Stage One evaluation criteria and placed further emphasis on qualitative factors such as developers' experience and

ability to deliver, guarantees and security, comparison of PPAs and ownership alternatives, and transmission and integration issues. PSE further evaluated potential projects through application of its Portfolio Screening Model to look at the projected cost impact of adding each of the various proposals to PSE's portfolio.

Q. What resources did the Company ultimately pursue as a result of the All-Source and Wind RFP process?

A. The Company pursued acquisition of the resources listed below because they provided the best combination of low costs and risks:

Code	Project Name Owner/Developer
A02b	Wild Horse Wind Project
A03	Hopkins Ridge Wind Project
A19	2-yr PPA (Centralia Coal Plant) Arizona Public Service (APS)
A30	22-yr Seasonal On-Peak PPA
A39	NWPL Sumas Recovered Heat Project ORMAT Nevada, Inc.

Q. Did the Company enter into final contracts for the above-listed resources?

A. The Company ultimately acquired the Hopkins Ridge Wind Project and 2-year APS PPA, which were presented and approved in the 2005 PCORC. At the time, PSE was still pursuing the Wild Horse and ORMAT projects.

The Company subsequently signed definitive contracts for ownership of the Wild Horse Wind Project and executed a 20-year purchased power agreement for the full output of the Northwest Pipeline recovered heat generation resource at Sumas developed by ORMAT. These acquisitions are described below.

E. The Company's Efforts To Meet Its Resource Needs Are Not Limited To Issuance And Evaluation Of RFPs

Q. Were the Company's efforts to acquire the electric supply resources needed for its customers limited to issuances of these RFPs under WAC 480-107?

A. No. Both prior to and after the formal 2004 RFP Process, PSE has been actively seeking out other resource acquisition opportunities that may be available in the marketplace. Examples of such ongoing efforts include the Company's pursuit of a new license for its Baker River Hydroelectric Project and new contracts for the Rock Island and Rocky Reach Hydroelectric Projects.

Q. Did the Company analyze a self-build option in addition to the projects proposed in response to the RFPs?

A. Yes. As described by Mr. Garratt and Mr. Elsea, the Company evaluated a self-build option against the proposals received in response to the RFPs, and concluded that self-build was not as attractive as other options that were available at this time.

Q. Has the Company taken steps to meet its resource needs other than pursuing acquisition of new long-term generating resources or PPAs?

A. Yes. In addition to the energy efficiency efforts described above and in the testimony of Mr. Shirley, the Company is taking steps to further increase the energy generated by its existing facilities or to reduce the long-term costs associated with such facilities. For example, the Company: (i) is refurbishing the steam turbines at the Colstrip Project; (ii) has installed additional duct firing equipment at the Frederickson 1 Plant; and (iii) has installed an auxiliary boiler at the Encogen Plant to convert it from a must-run plant to a dispatchable plant.

Q. Please describe the Colstrip Project steam turbine refurbishment.

A. Over time, the efficiency of the Colstrip units has been slipping due to the age of the equipment, which results in reduced electrical output for the same fuel input. Thus, the effective capacity at Colstrip has been falling. The refurbishment programs at the four units at Colstrip will essentially restore the ability of the unit to attain historic capacity levels by installing higher efficiency turbine components. PSE's share of this capacity restoration is anticipated to be about 16 MW from Colstrip Units 1 & 2 and 12.5 MW from Colstrip Units 3 & 4.

Q. What are the anticipated costs and benefits associated with such upgrades?

A. For Colstrip Units 1 & 2, the projected total cost of the upgrades is $13.6 million. PSE will pay 50% (or approximately $7.1 million) of this amount. For Colstrip

Units 3 & 4, the projected total cost of the upgrades is $12.7 million. PSE will pay 25% (or approximately $3.3 million) of this amount. The estimated 20-year levelized energy cost associated with these upgrades is $11.32/MWh, with a net present value savings to PSE's electric portfolio of $47 million. *See* Exhibit No. ___(EMM-8C).

Q. Please describe the Frederickson 1 duct firing expansion.

A. The Frederickson 1 duct firing expansion involved the installation of additional infrastructure that allows the facility to more fully utilize its duct firing capacity. This improvement was projected to increase PSE's share of the capacity of the Frederickson 1 facility 12.4 MW. The duct firing expansion was completed in July 2005, and the final power testing was completed during August 2005.

Q. Why did PSE undertake this project?

A. In deciding whether to go forward with the duct firing project, PSE anticipated that it would cost PSE approximately $562,000, which equates to about $45 per kW for the added capacity. This is very favorable, considering that the 2005 Least Cost Plan estimated the generic average capital cost of a new combined cycle facility to be $790 per kW. *See* Exhibit No. ___(WJE-4) at 11. PSE's actual capital cost for this expansion was $222,000, well under the $562,000 that PSE had projected.

Q. Please describe the Encogen auxiliary boiler upgrade.

A. PSE has a contractual obligation to Georgia Pacific to provide it steam from the Encogen facility. Therefore, PSE must occasionally run the Encogen plant to produce such steam even when the heat rates at the time make energy production from the Encogen facility uneconomic. Installation of the Encogen auxiliary boiler allows PSE the flexibility to shut down Encogen's combined cycle turbines when electricity generation is uneconomic, while continuing to produce steam for Georgia Pacific. PSE initially anticipated having the boiler commissioned by the end of 2005. Permitting issues, however, have delayed such commissioning. PSE currently anticipates having the boiler commissioned by June 30, 2006.

Q. Are the benefits of the Encogen auxiliary boiler expected to exceed the costs?

A. Yes. Adding the auxiliary boiler was expected to produce $5.1 million in net present value savings over the period January 1, 2006 through June 30, 2008. The $5.1 million in net present value savings was estimated by comparing revenue requirement with and without the auxiliary boiler, so includes the cost of the auxiliary boiler, which is just over $1 million.

F. The Company Informed and Involved its Board of Directors

Q. Has PSE actively involved its Board of Directors in its resource acquisition process?

A. Yes. PSE management made several presentations to the Board of Directors regarding the status of the Company's analyses of the many potential resource opportunities it was considering to meet its need for additional resources. The Board was thereby advised of the management teams' evaluation methods, key assumptions, and preliminary conclusions as the RFP evaluation progressed. *See* Exhibit No. ___(EMM-9HC); Exhibit No. ___(EMM-10HC); Exhibit No. ___(EMM-11HC); Exhibit No. ___(EMM-12HC); Exhibit No. ___(EMM-13HC)[4];Exhibit No. ___(EMM-14HC); and Exhibit No. ___(EMM-17HC).

G. The Company Kept Contemporaneous Records of its Evaluation and Decision Processes

Q. Did the Company keep contemporaneous records of its evaluation and decision processes?

A. Yes. The exhibits submitted with my testimony as well as with the more detailed testimonies I reference below represent some of this documentation. Such

[4] To avoid burdening the record, PSE has excluded pages of Board materials not relevant to the RFP process from these exhibits, as well as unnecessarily voluminous pages (such as draft forms of agreement).

exhibits are further supported by extensive documentation setting forth the details of the Company's evaluation and decision making process, which the Company will make available for review by other parties in this proceeding.

V. FINAL ACQUISITIONS RESULTING FROM PSE'S 2004 RFP PROCESS

A. The Wild Horse Wind Project

1. Overview of the Wild Horse Project, its costs and benefits

Q. Please describe the Wild Horse Project.

A. The Wild Horse Project is a wind turbine project that was developed by Wind Ridge Power Partners, LLC, ("WRPP") a special purpose entity created by its parent company, Horizon Wind Energy Company, LLC, (formerly called Zilkha Renewable Energy)[5] to own the development assets of the Wild Horse Project. To reduce confusion, I refer in my testimony to the Horizon Wind Energy family of entities, including WRPP, as "Horizon".

The Wild Horse Project consists of a 228.6 MW nameplate capacity wind powered electric generating facility to be situated on approximately 9,200 acres of open rangeland approximately 11 miles east of Ellensburg, Washington. *See*

Exhibit ___(EMM-14HC) at 9. It consists of 127 Vestas V80 1.8-MW wind turbine generators, wind turbine generator foundations, the electrical collection system, the Project substation, the Project interconnecting transmission line, and the roads and facilities necessary for operation of the Project. Of the total Project site, 6600 acres of private land is owned in fee by the Company.

Q. Is the Wild Horse Project expected to consistently produce 228 MW of wind power?

A. No. As described in Mr. Garratt's testimony, wind facilities are intermittent resources. The Project is expected to produce over 70 aMW ([redacted] aMW) annual average energy, with average energy production even higher than that ([redacted] aMW) in January of each year, as well as significant production during the months of November through March.

Q. Why did the Company ultimately decide to acquire the Wild Horse Project?

A. A number of factors led to PSE's decision to acquire the Wild Horse Project. The Wild Horse Project:

- Was the next most attractive project to emerge from PSE's 2004 RFP process after the Hopkins Ridge Project, with a 20-year levelized cost of approximately $[redacted]/MWh, and with a net present value benefit to PSE's electric portfolio greater than $50 million;

[5] The Goldman Sachs Group purchased Zilkha Renewable Energy in June 2005. On August 25, 2005, Zilkha Renewable Energy announced that it changed its name to Horizon Wind Energy.

- Offered a favorable wind resource that supports a relatively high capacity factor for the wind turbines as well as strong winter winds;
- Was sponsored by an experienced wind developer and construction contractor with a proven track record;
- Had a high likelihood that all necessary permits would be issued for its development;
- Could be completed before the expiration of laws creating production tax credits;
- Had a feasible transmission solution to transmit the energy to the Company's load; and
- Incorporated turbines from Vestas, the world's leading wind turbine supplier, with proven technology.

Details regarding the above factors are described further in the testimonies of Mr. Garratt and Mr. Elsea.

At the September 13, 2005 meeting of PSE's Board of Directors, PSE management recommended that the Board approve the acquisition. *See* Exhibit No. ___(EMM-14HC). The Board approved this recommendation, PSE executed the necessary agreements, and completed the transaction on September 30, 2005.

Q. When will the Wild Horse Project be completed and begin generating power?

A. As described in Mr. Garratt's testimony, the Project will most likely begin generating test power in late 2006 as strings of wind turbine generators come on line. Commercial operation of the Project is expected to commence by the end of December 2006.

2. Description of the Wild Horse Project transaction and costs

Q. How was the Wild Horse Project acquisition structured?

A. The Company acquired the development rights to the Project from Horizon on September 30, 2005, upon the closing of the transaction (the "Closing"), pursuant to a Membership Interests and Notes Purchase Agreement ("Purchase Agreement"). The purchase price under the Purchase Agreement was $[redacted], of which $[redacted] was payable at Closing and the balance will be payable upon substantial completion of the Wild Horse Project – when the Project can safely and continuously operate in its intended capacity.

At Closing, PSE also contracted with Vestas-American for the purchase of the 127 wind turbine generators, and for the delivery, erection, installation, testing and commissioning of the wind turbine generators pursuant to a Turbine Supply and Installation Agreement (the "TSIA"). The contract price under the TSIA is $[redacted], payable by PSE pursuant to a payment schedule tied to the manufacturing, shipment, mechanical completion, electrical completion and final completion of the Project. Because the majority of the purchase price of the wind turbine generators was originally denominated in euros, Vestas, at PSE's direction, entered into a forward hedge contract with a major bank on PSE's behalf to fix the euro-based amount of the contract in dollars. Consequently all payments to Vestas over the course of the contract will be made in dollars regardless of subsequent exchange rate movements. A guaranty of the obligations

of Vestas-American under the TSIA was provided by its parent.

PSE also entered into a fixed-price, turn-key Balance of Plant, Engineering, Procurement and Construction Agreement (the "BOP Agreement") with Horizon for the construction of the balance of plant or "BOP". The contract price to Horizon for performing the work (which consists of the civil and electrical engineering of the Project such as the roads, wind turbine generator foundations, the electrical collection system, the project substation, and the project interconnecting transmission line) and performing its duties under the BOP Agreement is fixed at $[redacted], payable by PSE as Horizon reaches certain scheduled milestones on the construction schedule. To guarantee Horizon's performance of its construction obligations, Horizon delivered, for the benefit of PSE, a Goldman Sachs parent guarantee and a payment and performance bond issued by a surety meeting specified standards.

Also on the closing date, PSE exercised an Option and Real Estate Purchase and Sale Agreement and Assignment (the "Private Land Option") to purchase from American Minerals and Land Corporation approximately 6600 acres of private land upon which a majority of the Wild Horse Project wind turbines will be located (the "Private Land"). Such option, an asset of the developer acquired at closing, enabled PSE to purchase the Private Land for a total of $[redacted], payable at closing. Ultimately, 84 of the Wild Horse Project's wind turbine generators will be located on the Private Land.

PSE also obtained as part of the transaction all other necessary real property rights for the construction and operation of the Wild Horse Project, including a lease with the Washington State Department of Natural Resources (the "DNR Lease"), a lease with the Washington Department of Fish & Wildlife (the "WDFW Lease") and easements obtained from five private landowners (the "Transmission Easements"). Pursuant to the terms of the DNR Lease and the WDFW Lease, PSE will make payments during construction and afterwards to these two public landowners upon whose property wind turbine generators will be located.

Once the wind turbine generators are placed into service, Vestas-American will provide a power curve warranty, a five-year availability warranty and a five-year mechanical warranty pursuant to a Warranty Agreement (the "Warranty") and will provide five years of maintenance, operation, spare parts and service of the wind turbine generators under a separate Service and Maintenance Agreement ("Service Agreement") between PSE and Vestas-American.

Additional details regarding the terms of the definitive agreements for the Project are found in Exhibit No. ___(EMM-14HC). Copies of the primary agreements are found in Exhibit No. ___(EMM-15HC).[6] For a complete list of the definitive agreements, please see Exhibit No. ___(EMM-16HC).

[6] To avoid burdening the record, PSE has excluded certain voluminous schedules and exhibits to the Purchase Agreement, BOP Agreement, TSIA, Warranty, Service Agreement, Private Land Option, DNR Lease, WDFW Lease and Transmission Easements.

Q. What are the capital costs related to the Wild Horse Project acquisition?

A. The total Project capital cost amounts payable by PSE pursuant to the various agreements and other project costs aggregates to approximately $383 million, as described in Mr. Garratt's testimony.

Q. Are there other costs associated with the Wild Horse Project?

A. Yes. The total Project capital cost stated above does not reflect the cost of a production payment payable to Horizon of $[redacted]/MWh of energy generated for a period of 20 years, contingent upon the completed Project's energy production. PSE estimates that the net present value of this production payment is approximately $[redacted] million. By including a production payment as part of the consideration PSE agreed to pay for the Wild Horse Project (as opposed to a larger payment under the Purchase Agreement), PSE essentially is placing a significant portion of Horizon's compensation at risk with respect to Project operations. The Company believes this will serve to further align the interests of PSE and Horizon with respect to optimizing the production of the Project.

In addition, as with PSE's other generating units, PSE will have ongoing operations and maintenance costs for the facility. As with the Hopkins Ridge Wind Project, PSE will also incur costs associated with integrating a wind resource into its electric portfolio, because of the short-term uncertainty and variability of wind generation. Such costs are detailed in Mr. Garratt's testimony.

Q. Did the Company take reasonable steps to obtain favorable terms to these agreements?

A. Yes, the Company undertook aggressive efforts to negotiate more favorable terms and conditions than proposed by the developer in its response to the RFP. These efforts were successful in improving the value of and reducing risks associated with the Wild Horse Project.

Q. Would you please provide some examples?

A. Certainly. The production payment described above is one example. By structuring a significant portion of the Wild Horse Project purchase price in the form of a production royalty, PSE will be able to share operational and availability risks with Horizon (including wind resource risk), as compared to a purchase price structure whereby Horizon realized all of its compensation at closing without risk. The Company also negotiated Horizon's agreement to absorb $[redacted] in PSE's transaction costs associated with the acquisition as well as a performance guarantee from Horizon's parent, Goldman Sachs. In addition, PSE's negotiations with Vestas resulted in more favorable warranty provisions than Vestas had initially proposed.

Q. Are there other examples of Company efforts to obtain a favorable result with respect to the Wild Horse Project?

A. Yes. PSE's obligation to acquire the development assets and rights was

contingent on a number of items, including acquisition by Horizon of all necessary permits and real estate rights related to the Wild Horse Project. PSE staff worked actively with Horizon in an effort to ensure that the environmental, permitting, and real estate contingencies were met and that the relationships with key community leaders were established on a sound foundation. PSE did so to increase the likelihood of the Wild Horse Project going into service by year-end 2006.

Q. How is PSE proposing to recover the Wild Horse Project costs?

A. The Company seeks to have the Wild Horse Project's acquisition costs capitalized and recovered in rates over a 20-year period, together with the Company's authorized return on rate base. In this case, the Company is seeking to re-set the power cost baseline rate to include recovery of a portion of these capital costs as well as the projected costs associated with the operation and maintenance of the Project during the rate year for this proceeding. Mr. Story's testimony and exhibits show how costs associated with the Wild Horse Project will be recovered through this case and how such costs will be treated in the Company's PCA Mechanism.

3. Renewable Energy Credits

Q. Are you aware of additional arguments that have been made in support of utility acquisitions of wind resources?

A. There are other favorable factors related to wind acquisitions, such as comparatively few environmental concerns and the avoidance of possible emissions taxes that may be imposed in the future on fossil fuel resources. Additionally, there are considerable efforts in the environmental and power communities underway to create markets for Renewable Energy Credits, which credits could increase the relative value of wind energy. Such prospective benefits were not included in our formal resource analyses. The Wild Horse Project was an attractive long-term energy resource to acquire at this time, even without taking into consideration these criteria. However, such benefits related to wind projects do hold the potential for an additional "upside" and may become more important in future resource acquisition evaluations.

Q. Could you elaborate on issues related to Renewable Energy Credits?

A. Renewable Energy Credits ("RECs") are the intangible attributes ascribed to the production of one megawatt hour of renewable energy. When the RECs are unbundled from the energy, the energy is then considered system energy or grid power. The owner of the REC can claim the "renewable energy". These RECs have certain unique characteristics, including:

- RECs are temporarily bankable
- RECs do not require expensive transmission and scheduling
- RECs can lead to greater economic efficiency as buyers can pursue a "best fit" of renewable resources
- RECs allow retail consumers to buy renewable energy independently
- RECs provide financial support for new renewable energy projects

A number of states have, by law, established Renewable Portfolio Standards ("RPS") for utilities that set forth a date by which a certain percentage of a utility's energy requirement must be provided by renewable energy resources. Under many RPS regimes, a utility can meet such requirements by purchasing RECs if the utility does not have sufficient renewable resources in its portfolio actually providing renewable energy to its customers.

There is a relatively short history associated with RECs that can be summarized as follows:

- 1996 – As part of California's RPS discussions at the CPUC
- 1997 – In New England in discussions about "Electricity Labels"
- 1999 – Texas RPS provided for first REC trading program in the U.S.
- 2000 – Bonneville Environmental Foundation makes first sale of RECs (through *Green Tags*)
- 2001 – PSE contracts with Bonneville Environmental Foundation to buy *Green Tags* for its voluntary "Green Power" program
- November 2005 – PSE begins generating RECs at its Hopkins Ridge Wind Project

Q. How do these issues currently impact PSE?

A. The Company's recent acquisition of wind projects marks its first real entry into REC generation. The Hopkins Ridge Project is expected to produce over 385,000 MWh per year starting in 2006 and Wild Horse is expected to produce over 700,000 MWh per year starting in 2007. PSE will own the RECs associated with these megawatt hours of generation. While this is happening, the voluntary PSE Green Power Program is projected to grow to 100,000 MWH per year in 2006. All of this creates several new issues to address.

- Renewable Portfolio Standards are spreading across the U.S., with different rules in each state and an RPS initiative launch in the State of Washington
- RECs markets (particularly in the Northwest) are in their infancy
- RECs lose their value over time – they have a shelf-life of about 20 months
- RECs sales are new regulatory ground in the State of Washington
- There is little guidance regarding strategies for banking or sale of RECs

PSE is wary about selling its RECs in markets that are so young and volatile. In addition, there is significant uncertainty as to whether the State of Washington will mandate an RPS in the near future through an initiative effort that is currently underway. Of particular concern would be any long-term commitments to sell RECs when market prices may well increase significantly in the near term and when PSE may soon need such RECs to meet an RPS requirement in the State of Washington.

Q. What is the Company doing in the face of such uncertainties?

A. PSE is continuing to "bank" its RECs as they are produced while it actively considers how best to approach issues related to RECs. To this end, PSE has created an Emissions Markets Opportunity Committee ("EMOC") to develop a REC strategy for the Company, monitor market developments, track legislative and regulatory developments nationally and at the state level, and to be an active participant in industry efforts to discuss and develop cost effective REC strategies.

B. ORMAT Recovered Heat Project PPA

Q. Please describe the ORMAT Project.

A. The ORMAT Project is a new 4.95 MW recovered energy generation power facility at the site of Northwest Pipeline Corporation's Sumas Compressor Station located at Sumas, Washington, that has been developed and is being financed and constructed by ORMAT. The Project will be an ORMAT closed loop, air-cooled power plant, which utilizes the organic Rankine cycle to extract heat from three existing gas turbine exhaust stacks in a 3-on-1 configuration. Northwest Pipeline will be the host for the heat source and will provide day-to-day operations and maintenance for the Project.

Q. Please describe generally the transaction that the Company has entered into with respect to the ORMAT Project?

A. On January 18, 2006, PSE entered into a 20-year Power Purchase Agreement with ORMAT for all of the output of the Project (the "ORMAT PPA") once the Project is constructed. Under the ORMAT PPA, ORMAT will sell to PSE the entire output of energy from the Project (including all environmental attributes related to the generation of energy, should any exist) on an "as produced" basis. Due to the nature of the host heat source there may be times when the output is less than the full 4.95 MW capacity of the Project; therefore, no firm or guaranteed energy is offered and no capacity payments are to be made. Thus, the ORMAT PPA is a "take-and-pay" contract and PSE will pay only for the energy produced by the Facility.

Assuming the Project is completed such that energy deliveries begin in 2007, the price for the energy provided to PSE under the ORMAT PPA begins at $[redacted]/MWh and is subject to an increase of [redacted] on January 1 of each calendar year starting on January 1, 2008. PSE has the option to extend the contract for two five-year terms beyond the initial 20-year term of the PPA. The Company also has the option to purchase the Project from ORMAT after the fourth contract year.

Q. Please summarize the costs and benefits of the ORMAT PPA.

A. As described by Mr. Elsea, the Company's analyses showed that the ORMAT PPA has an estimated 20-year levelized cost of approximately $[redacted]/MWh, including $[redacted]/MWh of imputed debt cost, and a portfolio benefit of $0.4 million in the base price scenario when compared with generic resources from the 2005 LCP.

In addition, this resource, through the productive use of waste heat from Northwest Pipeline compressor turbines, provides additional supply diversity to PSE's portfolio. Because the energy is delivered to PSE's system, transmission risks are also reduced.

Q. Why is the ORMAT transaction in the form of a PPA rather than PSE ownership of the Project?

A. In its original response to the Company's All-Source RFP, ORMAT offered both a 20-year PPA and a PSE ownership option. The Company's economic analysis of the Project pro forma showed that the ownership option, as proposed, was a low cost resource. Thus, the Project made the 2004 RFP Process short list in that form and PSE entered into a Letter of Intent with ORMAT for the purchase of the Project.

However, subsequent due diligence efforts led to some concerns about the proposed capacity factor for the Project. Additionally, negotiations with

Northwest Pipeline on the Waste Heat Host Agreement for the Project pushed cost, regulatory, and heat supply risks solely to PSE. PSE shifted these risks to ORMAT by changing the deal from a PSE ownership structure to a PPA structure.

VI. OTHER LONG-TERM POWER RESOURCE ACQUISITIONS

A. New Contracts for the Rocky Reach and Rock Island Hydroelectric Projects

Q. Please describe the new contracts for the Rocky Reach and Rock Island Hydroelectric Projects that the Company is presenting for review in this proceeding.

A. The Company's electric portfolio currently includes output from the Chelan Public Utility District's (the "District") Rocky Reach and Rock Island hydroelectric projects through long-term purchased power agreements that expire in 2011 and 2012, respectively. On January 10, 2006, PSE's Board of Directors approved the recommendation of PSE's Resource Acquisition team that PSE enter into a new 20-year purchased power agreement and related transmission agreement with the District (collectively referred to herein as the "Chelan Contract"). *See* Exhibit No. ___(JLM-4). As of February 3, 2006, both PSE and the District had executed the definitive agreements under which PSE will purchase and take delivery of electrical output from these hydroelectric projects

following expiration of the existing contracts.

Details regarding the Chelan Contract, the process leading to its execution, and PSE's analysis of the costs and benefits of the Chelan Contract are presented in the testimonies of Mr. Joel L. Molander, Exhibit No. ___(JLM-1T), and Mr. W. James Elsea, Exhibit No. ___(WJE-1HCT). A brief summary is provided below.

Q. What are the anticipated costs and benefits of the Chelan Contract?

A. The estimated levelized "all-in" costs of the Chelan Contract are $[redacted]/MWh, including $[redacted]/MWh of imputed debt cost. This makes it a lower cost alternative than the lowest cost projects to emerge from the Company's 2004 RFP Process.

Q. Does the Chelan Contract provide other benefits to PSE and its customers?

A. Yes, additional benefits include the following:

- **The Chelan Contract Helps PSE to Achieve Low Overall Resource Portfolio Costs.** PSE's evaluation of the Chelan Contract using the Company's Portfolio Screening Model showed a net present value benefit to PSE's electric portfolio of approximately $360 million.

- **The Chelan Contract Reduces PSE's Projected Long-term Energy and Capacity Deficit.** The Chelan Contract secures 487 MW of hydroelectric capacity and 243 aMW energy that PSE had no contractual rights to beyond expiration of the current contracts. With respect to PSE's resource planning efforts, the Chelan Contract secures more resources than PSE assumed in its 2005 Least Cost Plan -- an additional 70 MW of hydroelectric capacity and 39 aMW of energy.

- **The Chelan Contract Secures Critical Operational Flexibility.** The Chelan Contract assures PSE of continued access to one of the region's most valuable and scarce hydroelectric resources. Historically the output from these projects has been foundational to PSE's long-term energy supply portfolio and its daily operational flexibility. Continued access to this large hydro resource is a critical step toward assuring a stable, reliable, and low cost electric supply, including certain ancillary services, and helps to ensure PSE's ability to meet base-load, daily and seasonal peaking requirements, integrate existing and/or incremental wind or other variable production resources into the Company's supply portfolio, and provides increased certainty related to modeling and determination of PSE's future resource needs and supply alternatives.

Q. Why did the Company enter into the Chelan Contract now, more than five years in advance of the expiration dates of PSE's current contracts with the District?

A. Output from the District's Rocky Reach and Rock Island hydroelectric projects has for decades provided important energy, capacity and operational flexibility to PSE's electric portfolio. Given these important attributes and PSE's extensive electric supply resource needs, PSE has understood for some time that continued access to the output of the District's projects would likely be a critical component of PSE's long-term electric portfolio management strategy. However, PSE's existing long-term contracts with the District contain no provisions for any right of first refusal, right of first offer or extension beyond their current terms. Thus, PSE began discussing potential extension or renewal of its purchased power agreements with the District as early as 2002.

In mid-2005, the District proffered a term sheet to PSE and informed PSE that it wished to reach an agreement in principle with PSE by the end of 2005 as to any

new contracts for the output from these projects. PSE essentially had no choice at that point but to undertake negotiations with the District and to work toward the District's deadline if PSE wished to have the opportunity to retain access to the project output.

Q. Since deliveries under the Chelan Contract commence in 2011, why is this acquisition being presented in this rate case?

A. The Company is not requesting immediate rate recovery in the revenue requirement for this proceeding of the costs associated with the Chelan Contract. Such recovery will be requested in future rate cases as appropriate depending on the timing of future rate cases as related to the November 1, 2011 date of commencement of deliveries under the Chelan Contract. However, the Company is requesting that the Commission determine the prudence of PSE's entry into the Chelan Contract in the current proceedings. PSE is also seeking the Commission's approval in this proceeding of the Company's proposed rate treatment for an $89 million upfront capacity reservation charge that the Company is required to pay the District in 2006 under the Chelan Contract. I provide additional information regarding this payment below, and the requested rate treatment is described in the testimony of Mr. John Story.

By seeking such approval in this general rate case, the first rate case filed after PSE's decision to enter into the Chelan Contracts, PSE seeks to avoid a situation in which the prudence of the transaction is first addressed years after the decision

has been made, in what may be a different industry context with information that is not and cannot be known to PSE at the time of its decision to enter into the transaction. PSE's request is consistent with the Commission's direction that "a more or less contemporaneous prudence review is easier for Staff and others, and for the Commission.…[I]t is materially better to review prudence closer in time to when the decisions are made than to wait until some future date when it is more challenging to apply the reasonableness standard." 2003 PCORC, Docket No. UE-031725, Order No. 12 (April 7, 2004) at ¶ 40.

Q. Why did the Company agree to pay in 2006 an $89 million capacity reservation charge for new contracts under which delivery only commences in 2011?

A. As stated above, PSE's current contracts with the District simply expire at the end of their term. The current contracts do not provide PSE with rights of first refusal, first offer, or any extension. The District was thus in a sufficiently strong negotiating position to demand an up-front charge for the Company to reserve its rights under a new purchased power agreement.

Q. Was the District's demand for the $89 million capacity reservation charge unreasonable?

A. No. Generally, the concept of a capacity reservation charge is not unusual in the energy industry. Moreover, PSE's current contracts with the District require the

District to fund capital projects with the proceeds of debt issued by the District, and PSE estimates that practice will result in an outstanding principal District debt of approximately $790 million at 2011/2012, when the current contracts expire. The District's demand for an up-front capacity reservation payment as a condition of entering into the new contracts appears to stem from a desire to reduce its current and anticipated near-term debt levels associated with the projects.

Q. What is the current status of the $89 million capacity reservation charge?

A. PSE estimates that the various conditions required prior to payment of the $89 million will be satisfied in early 2006 such that PSE will be required to pay the $89 million during this rate case. As stated in Mr. Bert Valdman's testimony, PSE will be required to utilize its existing credit lines or other capital sources to fund this payment.

Q. What is the Company requesting with respect to the capacity reservation charge?

A. At or about the same time as it prefiles its direct testimony in this rate case, PSE will file an Accounting Petition with the Commission requesting the Commission's approval of (a) deferred accounting treatment of the $89 million upfront payment and (b) the booking of carrying charges on that payment at PSE's approved net of tax rate of return. The Accounting Petition will further

request that the Commission consider two issues as part of this general rate case: (i) the prudence of PSE's decision to enter into the Chelan Contract; and (ii) the rate treatment for recovery of the $89 million capacity reservation charge payment and carrying charges on that payment.

In particular, PSE is requesting in this rate case that the Commission approve at this time the recovery in rates during the 20-year life of the Chelan Contract of the $89 million capacity reservation charge payment and carrying charges on that payment commencing as of the date Chelan Power System output begins to be provided to PSE under the new power contract, on November 1, 2011.

B. The Baker River Hydroelectric Project Relicensing

Q. Please generally describe the Baker River Hydroelectric Project.

A. The Baker River Project consists of two dams and related facilities for generating hydroelectric energy located on the Baker River in Skagit and Whatcom Counties, north of, and partially within, the Town of Concrete. The present installed capacity of the Baker River Project is approximately 170 MW. The Project is owned and operated by the Company under a FERC license that expires on April 30, 2006.

Q. What is the Company seeking in this proceeding with respect to the Baker River Project?

A. For the past several years, the Company has been working toward obtaining a new FERC license for the Project to replace the license that expires in 2006. During that time, the Company has incurred costs related to the relicensing effort that have been accrued as Construction Work In Progress ("CWIP"). As described in Mr. John Story's testimony, recovery of those costs and related carrying charges is appropriate as of the time the Company begins operating the Project under the new license. The Company anticipates that it will begin doing so by January 2007, the start of the rate year for this case.

In addition, the new license is expected to contain terms of operation that will increase the operations and maintenance costs for the Project. The Company's revenue requirement request in this proceeding reflects these projected additional costs.

Details regarding these costs and the Baker River Project are provided in the testimony of Mr. Kris Olin, Exhibit No. ___(KO-1T).

Q. What is the basis for the Company's projections that it will be operating the Baker River Project under specific new license terms by January 2007?

A. As described in Mr. Olin's testimony, the Company has been involved in an extensive, collaborative process to obtain a new license for the Project since the

spring of 2000 under a FERC-approved Alternative Licensing Process. The Company entered into a Settlement Agreement with all stakeholders in that process setting forth the terms of a new license in an offer of settlement to FERC. The Company filed the Settlement Agreement with FERC as an offer of settlement on November 30, 2004. The requisite final approval processes by state authorities and FERC have been underway since then. The Company expects FERC to approve the new license by the end of 2006, such that the Company must operate the Baker River Project in compliance with the terms of the new license as of January 2007.

Q. What assumptions did the Company's 2003 Least Cost Plan and 2005 Least Cost Plan make with respect to the Baker River Project?

A. The 2003 Least Cost Plan and 2005 Least Cost Plan assumed that the Baker River Project would continue to be a part of the Company's electric resource portfolio during the 20 year horizon of each Plan.[7] Thus, the Company's conclusions regarding its need for additional resources, as described above, are in addition to the generation supplied by the Baker River Project. If PSE were not issued a new license for the Baker River Project, it would need to replace this energy and capacity in addition to acquiring the resources called for in the 2003 and 2005 Least Cost Plans.

[7] *See* April 2003 LCP, Chapter VIII, p. 6; 2005 LCP, Chapter IX, p. 4.

Q. What are the anticipated costs and benefits of the new license for the Baker River Project?

A. The Settlement Agreement license terms would enable PSE to continue generating low-cost hydropower at the Project for 45 more years. The cost of power associated with the terms of the new license proposed in the Settlement Agreement is anticipated to be approximately $[redacted]/MWh (levelized) over thirty years, after which time the Company will still be entitled to generate power for 15 more years under the proposed license. This makes the levelized Baker River Project costs even lower than the Chelan Contracts. The Settlement Agreement also would enhance other public benefits, such as improvements to fish and wildlife habitat and recreational facilities for the public, flood control, and cultural resources.

Q. Did the Company consider potential alternatives related to the relicensing of the Baker River Project?

A. Yes, the Company considered four distinct alternatives as part of the Baker River Project relicensing project: (i) potential relicensing under the terms contained in the Company's initial Application for the New License with FERC (the "Company Alternative"); (ii) potential relicensing under the terms preferred by resource agencies, Native American tribes and other interested parties (the "Agency/NGO Alternative"); (iii) potential relicensing under a settlement proposal that seeks to resolve differences between the Company's Alternative and

the Agency/NGO Alternative (the "Settlement Alternative"); and (iv) a "Decommissioning Alternative" that would have required decommissioning of the Baker River Project and acquiring replacement power.

Q. Why did the Company pursue the Settlement Alternative?

A. The Company concluded that the Settlement Agreement alternative should be pursued as it substantially reduced the Company's risk that much less favorable license terms and conditions would be imposed by FERC. If PSE were to pursue the Company Alternative, then a contested FERC proceeding could commence. In this context, some of the regulatory agencies advocating the Agency/NGO Alternative (e.g., U.S. Forest Service, the U.S. Fish and Wildlife Service, NOAA Fisheries, and the Washington Department of Ecology) have mandatory conditioning authority (arising under authorities such as § 4(e) and § 18 of the Federal Power Act, the Endangered Species Act and the Clean Water Act). These agencies could simply have imposed their desired terms and conditions, had PSE not adopted a collaborative approach toward settlement.

Additionally, as contested proceedings moved forward, all parties would likely take positions that would significantly depart from terms that were potentially available under a settlement agreement. These factors very likely would have resulted in less favorable license conditions, a cost of power well in excess of the Settlement Alternative, and further uncertainty, cost and delay associated with protracted regulatory proceedings and litigation. It is not unusual for a contested

FERC proceeding to extend for several years. These substantial costs, risks and potential delays needed to minimized and avoided as much a possible, and pursuing the Settlement Alternative was the best way to achieve this objective.

The Company rejected the Decommissioning Alternative because of the uncertainty and high costs that would likely be required as part of any decommissioning.

Q. Why did PSE ultimately enter into the Settlement Agreement filed with FERC?

A. All parties invested substantial time and resources in crafting the Settlement Agreement. The Company believes that the Settlement Agreement reflects the best and final offer of all parties and represents a reasonable compromise between the Company Alternative and the Agency/NGO Alternative. Ultimately, the terms of the Settlement Agreement will provide for continued operation of the Baker River Project for another 45 years at a very favorable levelized cost compared to other resource alternatives available to the Company.

Q. Did the Company keep its Board of Directors informed with respect to the Baker River Project process and analyses?

A. Yes, the Company management regularly updated the Board of Directors and involved the Board in the decision to relicense the Baker River Project. *See* Exhibit No. ___(EMM-17HC).

VII. DUKE ENERGY TRADING AND MARKETING GAS TRANSPORT CONTRACTS FOR GAS CUSTOMERS

Q. What is the purpose of this section of your testimony?

A. I provide an overview of the Company's acquisition at the end of 2005 of pipeline transportation capacity formerly held by Duke Energy Trading and Marketing ("DETM") on the Westcoast Energy Pipeline and Northwest Pipeline. As set forth in greater detail in the testimony of Mr. William F. Donahue, Exhibit No. ___(WFD-1T), the Company concluded through extensive analyses that such transportation capacity was needed and that the transactions with DETM would provide such capacity at significantly lower cost than other alternatives.

Q. Please describe the capacity transactions with DETM.

A. The opportunity to acquire the DETM pipeline capacity arose in the fall of 2005 when Duke Energy announced that it would discontinue its entire operations of DETM and liquidate its pipeline capacity holdings. PSE and DETM subsequently negotiated agreements under which PSE would take permanent release of:

(i) 56,000 Dth/day of firm capacity on the Westcoast Energy, Inc. ("Westcoast") pipeline from the northern British Columbia supply hub known as "Station 2" to the Sumas Export interconnect with Northwest Pipeline in exchange for a one-time payment from DETM to PSE of $13 million; and

(ii) 55,000 Dth/day of firm capacity on the Northwest Pipeline from the Sumas interconnect with Westcoast south to the Grays Harbor Meter Station (near Olympia, Washington) in exchange for a one-time payment from DETM to PSE of $42 million.

The transactions were concluded at the end of 2005 and both capacities were acquired effective January 1, 2006.

Q. What are the anticipated benefits to PSE's gas customers of the natural gas pipeline capacity contracts acquired from DETM?

A. The Westcoast capacity provided PSE with access to Station 2 supplies that are immediately needed (and will be needed in the future) at a discount to prices that PSE's natural gas customers would otherwise have to pay for such transportation. With respect to the Northwest Pipeline capacity, PSE concluded in its 2005 LCP that additional Northwest Pipeline capacity would be needed commencing in the 2011 to 2013 time period, and was a least cost long-term resource alternative for PSE's gas customers. *See* Exhibit No. ___(WFD-8) at 1-5 and Exhibit No. ___(WFD-9) at 27-41.

PSE updated this analysis with respect to the proposed Northwest Pipeline capacity transaction with DETM and determined that the capacity would be needed as of 2010-2011. PSE's analyses also demonstrated that the DETM acquisition was lower cost than other alternatives for obtaining such capacity. Moreover, the accounting treatment related to the $42 million payment from DETM that PSE proposed and the Commission approved in Docket No. UG-060019 will hold current customers harmless from the costs of such capacity until the capacity is needed beginning in approximately 2010-2011.

Q. What is the Company requesting from the Commission with respect to these DETM capacity acquisitions?

A. On January 5, 2006, the Company filed an Accounting Petition with the Commission, in Docket No. UG-060019, requesting an order that authorized accounting and ratemaking treatment related to PSE's receipt of funds from DETM for the capacity transactions. That accounting and ratemaking treatment was approved in the Commission's January 25, 2006 order in Docket No. UG-060019.

PSE did not request in its Accounting Petition that the Commission address the prudence of PSE's assumption of the additional pipeline capacity from DETM. PSE stated at that time that it would present its case on that issue in this general rate case. The Company is now requesting in this rate case that the Commission explicitly approve the prudence of PSE's acquisition of the DETM pipeline capacity.

IX. CONCLUSION

Q. Would you please summarize your testimony?

A. PSE is facing substantial capital expenditures over the next several years in order to acquire the new resources it needs to meet the demands of PSE's electric customers. During this time of resource deficit, it is especially important that the Company has the financial strength to support its resource acquisition efforts.

In the meantime, the Company's long-term electric acquisition program, as well as its ongoing attention to the needs of its natural gas supply portfolio, continues to succeed in bringing into the Company's portfolios least-cost acquisitions that meet the Commission's prudence standard and that should be approved for recovery in rates.

Q. Does that conclude your testimony?

A. Yes, it does.

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