EXHIBIT NO. ___(EMM-1HCT)
DOCKET NO. UE-07___
2007 PSE PCORC
WITNESS: ERIC M. MARKELL

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 ERIC M. MARKELL ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

MARCH 20, 2007

PUGET SOUND ENERGY, INC.

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

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PUGET SOUND ENERGY, INC.

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

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).

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- 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 long-term electric supply, transmission service, long-term gas supply, and long-term gas transportation service; (iii) generation resource acquisition; and (iv) integrated resource planning.

Q. What has prompted the Company to file a power cost only rate case ("PCORC") at this time?

A. As described more fully later in my testimony, the Company has a well documented need to acquire additional generation resources. The Company has been actively monitoring the resource market looking for opportunities to fill this need that best serve our customers' needs. The acquisition of the Goldendale Generating Station was just such an opportunity.

With its purchase of the Goldendale Generating Station, PSE was able to acquire a nearly new, highly efficient plant for approximately one half of what the Company estimates it would cost to build such a facility if construction were commenced today and completed in about two years. While the acquisition of Goldendale was a great opportunity and will provide benefits to customers for many years to come, it also prompted the need to seek recovery of the costs of the plant.

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

A. My testimony describes the Company's need to acquire new or replacement resources in order to have enough power to meet the projected demands of PSE's electric customers.

My testimony then presents a summary of the Company's long-term electric supply portfolio and the strategies the Company is pursuing to address the

Company's need to acquire additional electric resources. I also address the Company's recent acquisition of the 277 MW gas-fired combined cycle electric generation facility in Goldendale, Washington (the "Goldendale Generating Station") for which the Company is seeking the Commission's prudence determination and rate treatment in this case. Finally, I describe the Company's resource acquisition process and how the Company has complied with the prudence standard set forth by the Commission.

II. REQUESTED RELIEF

- Q. What level of rate increase is the Company requesting in this case?
- A. The total requested rate increase for electric customers is \$64,680,804, an average 3.67 percent increase over the electric rates set in the Company's 2006 general rate case, Docket Nos. UE-060266 and UG-060267 (the "2006 GRC"), that became effective on January 13, 2007.
- Q. Please explain why the Company needs the proposed rate relief.
- A. The Company's current electric rates include costs that it projected would be incurred to generate or purchase the power PSE needs to serve its electric customers during the rate year for its 2006 general rate case: January 2007 through December 2007. These projections were partially updated in January 2007 for natural gas prices as of November 30, 2006, at the time the Company prepared its compliance filing in the 2006 general rate case.

Since that time, changes have occurred or will occur with respect to the Company's electric portfolio that, in total, are projected to increase the Company's revenue requirement and power costs during the proposed rate year for this case: September 2007 through August 2008. These changes, and the projected power cost increases, are discussed in the testimonies of John Story and David Mills.

Q. Is the Company requesting any other relief?

A. Yes. PSE seeks a prudence determination in this proceeding with respect to the acquisition of the Goldendale Generating Station and the costs associated with this project.

The Company also requests a waiver of the requirement that it file a general rate case within three months of the effective date of the rate increase resulting from this Power Cost Only Rate Case, as required by the PCA Settlement, executed by the parties in Docket Nos. UE-011570 and UG-011571, and approved by the Commission. PSE requests that it be granted an extension to file the general rate case to no later than April 15, 2008, as described in more detail in the motion accompanying this filing.

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III. PORTFOLIO SUMMARY

- 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, owned and purchased, representing technology, fuel, transmission and geographic diversity. This portfolio approach helps mitigate the risk of supply disruption and attendant cost volatility by reducing reliance on any one resource, fuel type or geographic location. All of the natural gas-fueled resources are located in western Washington except the Goldendale Generating Station, which is located near the Oregon border in south-central Washington. The Company purchases under long-term contracts significant quantities of hydroelectric power from projects located along the middle section of the Columbia River in central Washington ("the Mid-C"). The Company also owns a 50% undivided interest in Colstrip Units 1 and 2 and a 25% undivided interest in Colstrip Units 3 and 4. The Colstrip Project is a 2,100 MW pulverized coal/steam electric generating plant located in eastern Montana. The geographic locations of the Company's electric portfolio resources are 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 supplies approximately one third of the Company's annual energy

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requirements, depending on the availability of water in any given year. Hydro resources also provide valuable ancillary services to "firm" the Company's growing portfolio of wind resources. 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. Contracted facilities include purchased power agreements with three non-utility generators ("NUGs"), which are the Tenaska, Sumas and March Point projects. PSE owns three gas-fired combustion turbine combined cycled projects: (i) the 169 MW Encogen Generating Station; (ii) the 277 MW Goldendale Generating Station; and (iii) 49.85% of the 276 MW Frederickson 1 Generating Station. The Company's 149 MW Hopkins Ridge Wind Project and its 229 MW Wild Horse Wind Project are expected to supply about 5 percent of PSE's 2008 energy load in an average wind year. Short-term market purchases and various other contracts comprise the remaining resources. The relative contributions of these various resources in 2006 is shown in Exhibit No. (EMM-4) at page 46. Because the Company's Wild Horse Wind Project did not enter commercial service until December 20, 2006, its energy contribution in 2006 was minimal. Also, the Goldendale Generating Station was acquired by the Company on February 21, 2007, and thus is not shown among the 2006 resources.

Further detail regarding the Company's electric resource portfolio is found in PSE's 2005 Least Cost Plan ("2005 LCP") at Chapter IX – Electric Resources,

addition, the Company keeps careful track of certain opportunities placed on its "watch list" in the event issues identified with such projects are resolved and they merit further consideration. Each of these commercial undertakings involves different types of counterparties, resources, transaction structures and timelines. In each case, PSE is focused on the task at hand, is applying its extensive analytical, commercial and legal capabilities, and will continue to finalize the transactions that will best serve our customers for decades to come.

- Q. What are the new electric portfolio resources for which the Company is seeking a prudence determination from the Commission in this case?
- A. PSE seeks a prudence determination in this proceeding with respect to the acquisition of the Goldendale Generating Station, including its associated capital costs, operating costs, transmission costs and costs for natural gas pipeline capacity.

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- Q. Would you please summarize the estimated costs and benefits of the Goldendale Generating Station?
- A. The Goldendale Generating Station is among the most attractive alternatives available to the Company arising out of PSE's market monitoring activities and its RFP process under WAC Chapter 480-107.

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benefit to PSE's electric portfolio of greater than \$104 million when compared with the cost of generic resources in the Company's 2005 Least Cost Plan filed with the Commission on May 2, 2005, in Docket No. UE-050664. PSE purchased the Goldendale Generating Station for approximately one half of what the Company estimates it would cost to build such a facility if construction were commenced today and completed in about two years. In addition, the purchase price paid by PSE for the Goldendale Generating Station represents slightly more than one-third of its actual construction cost four years ago. Detailed quantitative benefits are described in Mr. Elsea's testimony, Exhibit No. ___(WJE-1HCT).

As an existing facility, the ability for the Goldendale Generating Station to immediately enter PSE's fleet was also a strong match with PSE's resource needs. See generally Exhibit No. ___(EMM-5HC).

- Q. Have there been any significant changes to PSE's natural gas transportation supply resources that serve its electric supply portfolio since the 2006 GRC?
- A. Yes. The Company will enter into a contract to acquire additional long-term pipeline transportation capacity to serve the Goldendale Generating Station. In addition, as part of the Goldendale Generating Station, PSE acquired the rights for gas transportation on a 5.1 mile lateral from Northwest Pipeline Company's mainline facilities to the Goldendale Generating Station. Please see the prefiled direct testimony of Roger Garratt, Exhibit No. ___(RG-1HCT), for a more complete discussion of this arrangement.

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

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

A. Yes. In several proceedings over the past six years, the Company has extensively documented its need to acquire additional power resources now and well into the future. That need was uncontested in the 2003 PCORC, the 2004 GRC, the 2005 PCORC and the 2006 GRC. Nevertheless, I provide below an overview of the analyses underlying the Company's determination that it needed to acquire additional long-term power resources.

A. The Company's Short Position

- Q. What analyses did the Company undertake in determining that it needed to acquire additional power resources?
- A. PSE engaged in an extensive process to analyze its long term power resource needs, which are documented in the 2005 Least Cost Plan. *See generally* Exhibit No. ___(EMM-4). PSE is currently preparing its 2007 Integrated Resource Plan which will be filed with the Commission later this year. However, the need for the resources addressed in this proceeding were documented in the 2005 Least Cost Plan.

The Company's 2005 Least Cost Plan 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 on page 44 of Exhibit No. ___(EMM-4), PSE was short on an energy basis in eight months during 2006, and PSE's short position grows over time. By 2012, PSE will be short energy in every month, increasing its dependence on the spot markets for both power and short term transmission services. In summary, the Company has a significant near-term need for resources that grows materially over time. *See* 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 with non-utility generators, as well as other further reductions of generation from existing Mid-C hydroelectric contracts, as discussed in the 2006 GRC.

B. Strategy for Addressing 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 Plans 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. ___(EMM-4) at 279-280.

Overview Α.

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

In the Company's 2003 PCORC proceeding, Docket No. UE-031725, the A. Commission reaffirmed the standard it applies in reviewing the prudence of power generation asset acquisitions:

> The test the Commission applies to measure prudence is what would a reasonable board of directors and company management have decided given what they knew or reasonably should have known to be true at the time they made a decision. This test applies both to the question of need and the appropriateness of the expenditures. The company must establish that it adequately studied the question of whether to purchase these resources and made a reasonable decision, using the data and methods that a reasonable management would have used at the time the decisions were made.1

In addition to this generic reasonableness standard, the Commission has cited several specific factors that inform the question whether a utility's decision to acquire a new resource was prudent. These factors include the following:

- First, the utility must determine whether new resources are necessary.²
- Once a need has been identified, the utility must determine how to fill that need in a cost-effective manner. When a utility is considering the purchase of a resource, it must evaluate that resource against the standards of what other purchases are available, and against the standard of what it

¹ Order No. 12, Docket No. UE-031725, at ¶ 19.

² See e.g., WUTC v. Puget Sound Power & Light Co., Docket No. UE-921262, et al., Nineteenth Supplemental Order (September 27, 1994) ("Prudence Order") at 11.

would cost to build the resource itself.³ The utility must analyze the resource alternatives using current information that adjusts for such factors as end effects, capital costs, impact on the utility's credit quality, dispatchability, transmission costs, and whatever other factors need specific analysis at the time of a purchase decision.⁴

- The utility should inform its board of directors about the purchase decision and its costs. The utility should also involve the board in the decision process.⁵
- The utility must keep adequate contemporaneous records that will allow the Commission to evaluate its actions with respect to the decision process. The Commission should be able to follow the utility's decision process; understand the elements that the utility used; and determine the manner in which the utility valued these elements.⁶

Q. Did the Company's acquisition of the Goldendale Generating Station meet this standard?

A. Yes. As discussed in more detail below and in the testimonies and exhibits in this case, the Company had a clear documented need for power in both the near and long term. The Company's decision to acquire the Goldendale Generating Station was evaluated in the context of formal requests for proposals issued pursuant to the Commission's competitive bidding rules, WAC Chapter 480-107, shortly after completion of the Company's 2005 Least Cost Plan.

The Company also had a deliberate, organized process for evaluating bids and other acquisitions available in the marketplace. The acquisition of the Goldendale Generating Station was the result of an extensive process through which the

 $^{^3}$ Id

⁴ *Id.* at 2, 33-37, 46-47.

⁵ *Id.* at 37, 46.

⁶ *Id.* at 2, 37, 46.

Company evaluated the relative costs and risks of many potential alternative resource opportunities. It examined purchased power agreements and ownership of new resources. The Company also examined a self-build option, which is discussed in more detail in the testimony of Mr. Garratt, Exhibit __ (RG-1HCT). The evaluation process also included significant modeling that can be replicated. Consistent with the Commission's prior orders, the Company kept detailed records in connection with this evaluation process and the management decisions that resulted from that process.

The acquisition of the Goldendale Generating Station followed closely, and built upon, the thorough evaluation and decision-making activities used by the Company to acquire its interests in the Frederickson 1 gas-fired generation facility, the Hopkins Ridge Wind Project, the Chelan hydroelectric contract and the Wild Horse Wind Project, which investments the Commission determined were prudent and were made at reasonable costs. The Company's efforts in acquiring the Goldendale Generating Station accordingly, meet the "adequate study" and "reasonable data and methods" standards applied by the Commission in determining whether an acquisition was prudent.

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⁷ See Order No. 12, Docket No. UE-031725, at ¶¶17-18; Order No. 04, Docket No. UE-050870 at ¶¶21, 30; Order No. 8, Docket No. UE-060266, et al., at ¶¶165, 170, 185.

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In the meantime, the Company's long-term electric acquisition program continues to succeed in bringing into the Company's portfolio acquisitions – like the Goldendale Generating Station acquisition – that meet the customers' load requirements, that have been thoroughly analyzed in a process that meets the Commission's prudence standard and that accordingly should be approved for recovery in rates.

Q. Does that conclude your testimony?

A. Yes, it does.