EXHIBIT NO. ___(DEM-1CT)
DOCKET NO. UE-09___
PCA 7 COMPLIANCE
WITNESS: DAVID E. MILLS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of **PUGET SOUND ENERGY, INC.** **For Approval of its March 2009 Power Cost Adjustment Mechanism Period 7 Report**	**Docket No. UE-09____**

PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF DAVID E. MILLS ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

MARCH 31, 2009

PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF DAVID E. MILLS

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I. INTRODUCTION

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

A. My name is David E. Mills. My business address is 10885 N.E. Fourth Street, Bellevue, Washington, 98004-5591. I am the Director, Energy Supply & Planning 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. ___(DEM-2).

Q. What are your duties as Director, Energy Supply & Planning for PSE?

A. My responsibilities include oversight of the Company's Power Supply Operations and Gas Supply Operations Departments, including the following: (i) managing all PSE short-term (intra-month) and medium-term (up to three years) wholesale power and natural gas portfolios; and (ii) working with the Company's Energy Resources Department to plan for long-term hedging requirements. My responsibilities also

include developing strategies to address risks related to PSE's electric and gas portfolios and developing the Company's Integrated Resource Plan.

Q. Please summarize the contents of your testimony.

A. I first provide some brief background information regarding the Power Cost Adjustment ("PCA") Mechanism and how it addresses the volatility of PSE's power costs. I then describe new resources and efforts undertaken by PSE to manage, control and moderate its power costs during the period that began on January 1, 2008 and ended on December 31, 2008 ("PCA Period 7"). Finally, I compare the Company's actual power costs for PCA Period 7 to its baseline power cost rate.

II. BACKGROUND REGARDING THE PCA MECHANISM

Q. Why does the Company have a PCA Mechanism?

A. The parties to the Company's 2001 general rate case were keenly aware from the experience of the Western Power Crisis in 2000-2001 how volatile power prices can be. In response to that potential volatility, uncertainty in the wholesale energy markets and PSE's need to add resources to meet its load obligations, the parties who participated in the PCA settlement collaborative in PSE's 2000-2001 general rate case agreed to a negotiated PCA Mechanism. The Commission approved the PCA Mechanism in its Twelfth Supplemental Order in Docket Nos. UE-011570 and UG-011571.

Q. Please describe why PSE's power costs can be volatile.

A. PSE's power supply portfolio contains a diverse mix of resources with widely differing operating and cost characteristics. Although there are many complex variables embedded in the portfolio, the major volume and price drivers of power cost volatility are (1) streamflow variation affecting the supply of hydroelectric generation; (2) weather uncertainty affecting power usage; (3) variations in market conditions such as wholesale gas and electric prices; (4) risk of forced outages; (5) variability of wind generation; and (6) transmission constraints. All of these factors affect load and resource volatility, which PSE balances with wholesale market purchases and sales.

Q. How does the PCA Mechanism work?

A. Generally, the PCA Mechanism sets forth an annual accounting process for a sharing of costs and benefits between PSE and its customers over four graduated levels (so-called "bands") of power cost variances for the first $120 million of power cost variances. On power cost variances over $120 million, the PCA sharing mechanism allocates 95% of costs or benefits to customers and the remaining 5% of costs or benefits to PSE.

Q. What do you mean by "power cost variances"?

A. Power cost variances are the difference between (1) the "baseline" fixed and variable power costs that are built into PSE's electric rates and (2) PSE's actual

variable power costs allowed under the PCA Mechanism, plus the fixed power costs as determined in the most recent rate proceeding.

The PCA Mechanism requires an annual true-up of PSE's actual power costs (in contrast to the projected power costs that are generally included in rates) and an accounting of the amount in the deferral account that tracks excess costs or benefits. See Order No. 04 in Docket No. UE-031389 (Jan. 14, 2004), in which the Commission approved PSE's 2003 PCA Annual Report regarding the true-up for PCA Period 1 and the Prefiled Direct Testimony of Mr. John H. Story, Exhibit No. ___(JHS-1T).

Q. How does the PCA Mechanism treat PSE's costs related to new resources brought into the Company's power portfolio?

A. Under the PCA Mechanism, new resources with a term less than or equal to two years are included in allowable PCA costs. The prudence of such resources is determined in the Commission's review of the annual PCA true-up. Some costs related to a new electric resource with a term of greater than two years are included in allowable PCA costs through a bridge mechanism until the prudence of such resources can be reviewed and approved in a power cost only rate case or general rate case.

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III. PCA PERIOD 7 POWER COSTS

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A. New Resources During PCA Period 7

Q. What new long-term electric supply resources are included in the PCA Period 7 power costs?

A. There are four new resources in the PCA Period 7 power costs: (1) a winter on-peak purchased power agreement with [redacted] Corporation (150 MW of winter capacity); (2) the Sumas cogeneration station ("Sumas") (133 MW of additional capacity); (3) the Hopkins Ridge Infill project (7.2 MW of additional capacity); and (4) the Mint Farm Energy Center ("Mint Farm") (296 MW of additional capacity).

PSE began generating power in August 2008 at Sumas. In December 2008, PSE started receiving power from [redacted] Corporation under a 4-year on-peak power purchase agreement for winter months December through February. PSE expanded its existing Hopkins Ridge wind project with an additional 7.2 MW of capacity available August 2008. PSE has already received a prudence determination on these new resources in its General Rate Case filing, Docket Nos. UE-072300 and UG-072301, consolidated (the "2007 GRC").

Mint Farm was purchased and placed in-service in December 2008. After the purchase was completed, the Company took Mint Farm offline for capital and maintenance improvements to bring the plant to Company operating and insurance standards. Mint Farm provided no generation during the PCA 7 Period and was

brought back online January 19, 2009. PSE has filed for proposed accounting treatment for the Mint Farm Energy Center under Docket No. UE-082128 and is preparing to file for recovery and a prudence determination in its next rate proceeding.

Q. Were any of these new resources subject to the PCA bridge mechanism during PCA Period 7?

A. Yes. The PCA bridge mechanism I referred to above is Exhibit G, "New Resource Adjustment" provided on pages 8-9 of the Second Exhibit to the Prefiled Direct Testimony of Mr. John H. Story, Exhibit No. ___(JHS-3), in this proceeding. For some period of time during PCA Period 7, costs associated with new resources not yet recovered in rates were subject to the Exhibit G adjustment. This includes some of the costs for Sumas and for a purchased power agreement with Klondike Wind Power III, LLC, an affiliate of Iberdrola Renewables, Inc., formerly known as PPM Energy. Mr. Story's prefiled direct testimony, Exhibit No. ___(JHS-1T), discusses the PCA Period 7 Exhibit G calculation in more detail.

Q. Did PSE acquire any new resources during PCA Period 7 with a term of less than or equal to two years?

A. Yes. PSE acquired such resources in connection with short- and intermediate-term off-system physical or financial purchases and sales of power and/or fuel to generate power. The majority of such transactions during this period were short-term

balancing transactions of power and natural gas for power purchases and sale contracts. Such balancing transactions are made in response to changes in market heat rates, which guide decisions whether to hedge power versus natural gas for power, and changes in load or resource availability. Such transactions include intermediate term transactions entered into pursuant to PSE's programmatic portfolio hedging efforts.

The Company purchased winter on-peak index power and entered into power exchanges to improve the reliability of supply to PSE's system.

Q. Why did PSE enter into the various transactions described above?

A. These transactions were undertaken within a comprehensive portfolio and risk management system of organizational structure, technological tools, and human resources designed to allow PSE to (1) deliver reliable energy when its customers demand it; (2) serve its customers while mitigating price volatility; and (3) enhance the value of PSE's energy resources.

The Company has in place organizational structures, policies and overarching strategies to provide oversight and control of energy portfolio management activities, many of which must be undertaken on an hourly and daily basis by PSE's experienced energy traders. The Company also uses modeling tools that assist in projecting whether its power and gas portfolios will be surplus or deficit in future months. The Company uses these tools to develop and implement hedging

strategies to reduce the cost risks associated with portfolio volatility.

The following section of my testimony first provides a description of these systems and tools. I then illustrate their application to PCA Period 7 by describing actual hedging strategy decisions and their execution undertaken by PSE with respect to its power supply for May 2008.

B. PSE's Management of its Power Portfolio and Related Fuel Supply for PCA Period 7

1. Overview of PSE's Portfolio and Risk Management Systems

Q. What organizational structures are in place to provide oversight and control of power portfolio management activities?

A. PSE's Energy Portfolio Management Department ("EPM Department") includes certain employees from the Energy Supply & Planning Department ("ESPD") and the Structuring, Asset Optimization and Analytics Department. The EPM Department is composed of energy market analysts, quantitative analysts, seasoned energy traders, and other professionals. The EPM Department is responsible for identifying, quantifying, monitoring and recommending risk management strategies for the Company. The EPM Department performs these tasks and manages PSE's short- and medium-term portfolios. ESPD is led by the Chief Resource Officer.

Energy Risk Control ("ERC") Department includes the Credit Risk Management group, and is responsible for providing risk control oversight. Since April 2007, the

ERC Department and the Structuring, Asset Optimization and Analytics Department have been led by the Chief Financial Officer and Sr. Vice President of Finance, respectively.

PSE's Energy Management Committee ("EMC") – composed of senior PSE officers – oversees the activities performed by the EPM Department. The EMC is responsible for providing oversight and direction on all portfolio risk issues in addition to approving long-term resource contracts and acquisitions. The EMC provides policy-level and strategic direction on a regular basis, reviews position reports, sets risk exposure limits, reviews proposed risk management strategies, and approves policy, procedures and strategies for implementation by staff.

In addition, the Company's Board of Directors provides executive oversight of these areas through the Audit Committees.

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Q. What hedging strategies have been approved by the EMC?

A. With respect to hedging strategies for specific time periods or quantities of energy, the EMC has approved a programmatic hedging plan. The original programmatic hedging strategy was approved by the EMC on July 22, 2004, with a Staff transactional purview of [redacted] months. The term of the EMC approved strategy consisted of the last [redacted] months of the [redacted] months purview ("Programmatically Managed Hedge"). The first [redacted] months of the [redacted] months purview are actively managed ("Actively Managed Hedge") in accordance with the Energy Supply

Hedging and Optimization Procedures Manual ("Procedures Manual"). In October 2007, the Company extended Staff's transactional purview from [redacted] to [redacted] months. At that time, the first [redacted] months became actively managed "(Actively Managed Hedge") in accordance with the Procedures Manual. EPM Department staff utilize the Programatically Managed Hedge to systematically reduce the Company's net power portfolio exposure beginning months in advance of the month in which the power will be needed to serve PSE's load. This process is described in greater detail below and in Exhibit No. __(DEM-3C). Such exposure reduction is subject to minimum and maximum monthly limits to reduce timing and market risks associated with hedging activities. Staff can make recommendations to hedge further out in time, departing from this plan, but execution of such hedges are subject to EMC approval.

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Pursuant to the hedging strategies in effect during the PCA Period 7, by at least [redacted] months prior to delivery, the bulk of the hedging strategies and transactions have been made, leaving primarily only balancing transactions needed to respond to changes in market heat rates and hydro conditions. Decisions about hedges for delivery during the Actively Managed Hedge are made by EPM Department staff, within limits set out in PSE's Procedures Manual. The table below shows the term of the hedging strategies impacting the PCA 7 period.

Hedging Purview Impacting PCA 7	Total Months Managed	Programmatically Managed Hedge	Actively Managed Hedge
Pre-October 2007	[redacted]	[redacted]	Balance of the Current Month + [redacted]
Post-October 2007	[redacted]	[redacted]	Balance of the

			Current Month + [redacted]

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Q. How does PSE integrate hedging activities into its provision of electric power to customers?

A. PSE employs production cost modeling techniques to estimate future demand for on-peak power, off-peak power, and natural gas for PSE's fleet of gas-fired power plants through its KW3000 risk system. The KW3000 risk system permits PSE to model scenarios of price, hydro, load, generating resources and other inputs as required to represent future projected portfolio needs.

Q. Please further describe what the KW3000 risk system does.

A. In order to model a variety of scenarios regarding PSE's gas-fired generation, KW3000 takes into account each plant's individual operating characteristics, including conversion efficiency, start-up costs, variable operating costs, ramp rates, minimum run times, planned outages, and unit availability. KW3000 performs simulations of different market conditions and outages in order to develop an estimate of how much gas would be required and how much power would be produced. The plants are modeled on an hourly basis, and the information is aggregated into daily and monthly time frames for purposes of developing a forward-looking position.

KW3000 incorporates the inter-relationship between gas and power prices in developing its probabilistic gas and power positions. In different market scenarios, PSE would have different gas or power requirements. The reason for this is twofold. First, the plants have different heat rates and become economic to dispatch at different price differentials between power and gas. Second, the forward market prices for power and gas are volatile, and the price relationship between power and gas, the "implied market heat rate," changes as well. At certain implied market heat rates, PSE will expect to run each plant at an expected rate, and the total of all the plant requirements can be calculated. But if market conditions change, then PSE will expect to adjust its gas and power purchases and sales in order to serve load with the most economic resource. For example, it may be more economic to purchase power than to purchase gas to generate the power PSE needs to serve its load. KW3000 also incorporates the hedges that PSE has already executed as part of PSE's resource stack.

Q. How does PSE use KW3000 to help make hedging decisions?

A. KW3000 generates a probabilistic volumetric position report, comprised of one hundred scenarios, for on- and off-peak power and gas for power. The position report shows, for each of the months following the date of the report, the resource types in PSE's power position grouped by: short-term purchase and sale transactions, long-term contracts, combustion turbines ("CT") grouped by heat rate efficiency of the facilities, NUGs/QFs, coal plants, wind projects and hydro (both

PSE-owned and Mid-Columbia ("Mid-C") contracts).

Based on this volumetric position for each month, KW3000 also generates a report showing the potential exposure associated with the "open" positions (defined as any net surplus or deficit amount). *See* Exhibit No. ___(DEM-4).

Once PSE's aggregated energy position and net exposure are defined for a particular period, the EPM Department evaluates and develops risk management strategy proposals and/or executes transactions around the purchase or sale of gas or power, as appropriate to balance the position and reduce the exposure. Execution entails entering into specific transactions with approved counterparties, using both approved instruments and executed master agreements.

Q. How does PSE's staff develop a view of appropriate hedging strategies for the power portfolio?

A. The EPM Department utilizes a wide set of tools and sources of information to help its members make informed decisions about dispatching plants, purchasing fuel, executing hedges approved by the EMC and optimizing excess capacity in the power portfolio. The EPM Department also holds weekly strategy meetings so that the combined teams can review operational events, discuss market trends, and review supply/demand information. With this context, the teams work together to understand the greatest exposures in the portfolio and discuss where hedging priorities occur.

The EPM Department collects a wide range of data to monitor supply/demand factors, which include but are not limited to weather trends; macro economic factors; crude oil complex; gas storage inventories across the U.S., Canada and in the western U.S.; hydro run-off forecasts; reservoir storage; precipitation and snowpack. Additionally, PSE staff review other energy companies' forecasts of price and supply/demand fundamentals, such as trading firm newsletters and consulting service forecasts.

EPM Department staff also receive real-time information from a variety of sources including information feeds, email newsletters from industry sources such as: McGraw Hill (Gas Daily, Megawatt Daily), Future Source, Genscape, 3 Tier, Intercontinental Exchange (live price data), and broker lines that act as PA systems where current transactions are communicated though a speaker system. In addition, EPM Department staff receive live data from the systems operations staff so they can view real-time load data and real-time generation dispatch.

Q. Does the Company use any other tools to manage its energy portfolio?

A. Yes. PSE also uses a counterparty credit risk management system to assist the Credit department and the EPM Department staff in evaluating potential transactions regarding credit issues. With this tool the reader can review data including Moody's and Standard and Poor's ratings of the entity, applicable information about the entity's parent, amount of parental guarantee credit provided to PSE, if applicable, the entity's amounts payable and receivable, the aggregate

mark to market exposure of all open forward transactions with the entity (the dollar value of the difference between the original contract price and current market price), the credit line assigned to the entity, the existence of netting terms, and FAS 149 designation for accounting purposes. Such information is calculated daily.

Furthermore, PSE traders can model the effect an incremental trade could have on a specific counterparty. The counterparty credit risk management system models the impact on the credit exposure of the Company and the counterparty of the incremental trade itself, as well as the impact that would result if the market moved significantly away from the price at which the deal was struck.

Q. What guidance does the Company have in place for approaching risk management strategy proposals?

A. Over the past several years, PSE moved from a more "discretionary" model of making hedging decisions to a more "programmatic" approach to hedging. The dollar-cost averaging strategy established a disciplined approach to purchasing a defined volume of gas or power on a monthly basis. In applying this strategy, PSE typically established plans to purchase hedges for specific forward time periods, with the goal of purchasing a defined amount of power and of gas in order to ratably reduce the deficit positions by a small amount each month.

By spring 2003, the EMC had approved expansion of this concept to an "Exposure-based Dollar Cost Averaging." This refinement moved the Company from defining

a specific commodity and volume to be hedged every month to a dollar amount of risk reduction to be accomplished every month. Under this approach, the EMC would approve a dollar figure of risk to be reduced, and PSE staff would determine whether it was better to hedge gas or power. As markets moved up or down, the dollar amount would allow for less or greater volumetric purchases.

During PCA Period 2, the Company began to employ a metric called Margin at Risk ("MaR"), which measures risk reduction as a result of incremental hedging. *See* Exhibit No. ___(DEM-4). PSE has incorporated the MaR concept into the evaluation process for hedge strategies to measure risk reduction for various alternatives. A series of hedge strategies (transaction types) are run through the portfolio, providing a table of how much risk reduction is gained by month and by strategy. The MaR concept assists with deciding how to allocate dollars in a credit-constrained environment, thus providing an additional tool for choosing between available commodities. *See* Exhibit No. ___(DEM-7C).

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In July 2004, the EMC approved a continuation of a dollar cost averaging strategy informed by MaR. However, the EMC directed that PSE staff monitor and more actively address the exposure associated with PSE's power portfolio position [redacted] months ahead of the time the power would be needed. On January 7, 2006, the Rolling [redacted] Month Hedging Plan was amended to be a Rolling [redacted] Month Hedge to guide hedging decisions for the [redacted] to [redacted] month time frame. In October 2007, this hedging plan was extended and now covers the [redacted] to [redacted] months time frame

("Programmatically Managed Hedge"). This hedging plan increased staff's ability to react to position changes as a result of forecast customer demand, stream-flow variations, forced thermal plant outages, and changing market conditions.

EPM Department staff currently follow the Programmatically Managed Hedge to systematically reduce the Company's net power portfolio exposure (including natural gas for power generation) beginning [redacted] months in advance of the month in which the power is needed to serve PSE's load. As noted above, both hedging strategies were utilized during this PCA Period 7 as well as for the specific month analyzed here, May 2008.

REDACTED

Q. How does the Rolling [redacted]-Month Hedging Plan work?

A. The plan is set up to systematically reduce the total net exposure for each month of the [redacted] months beyond the Actively Managed Hedge timeframe, within maximum and minimum limits on the amount of hedging that can or must be done each month, so that the total net exposure for a month will fall within existing exposure limits when each month falls into EPM Department staff's Actively Managed Hedge purview.

The maximum monthly hedge is calculated by dividing the total net exposure by the remaining months before the position enters the [redacted]-month purview. The minimum monthly hedge is calculated by dividing the total net exposure – minus the Director's limit authority ($[redacted] million) – by the remaining months before the

position enters the [redacted]-month purview. For example, in [redacted] the total net exposure for May 2008 was approximately [redacted] million. With [redacted] months remaining before May 2008 fell into staff's [redacted]-month purview, the maximum reduction in exposure to be undertaken by EPM Department staff would be [redacted], and the minimum reduction in exposure to be undertaken by staff would be [redacted]. In addition, EPM Department staff review market fundamentals, hydro conditions, and other available information, as well as the MaR analysis to determine which commodity to hedge (and for which month, given a credit constrained environment) and whether to hedge to the minimum or maximum exposure reduction level (or somewhere in between).

Additional illustration of the application of the Rolling [redacted] Month Hedging Plan and PSE's other risk management tools and systems are provided in Exhibit No. ___(DEM-3C).

REDACTED

Q. How does the current Programmatically Managed Hedge Plan work?

A. In October 2007, the Company extended Staff's transactional purview from [redacted] to [redacted] months. At that time, the first [redacted] full months became the Actively Managed Hedge in accordance with the Procedures Manual and the remaining [redacted] months became the "Programmatically Managed Hedge" in accordance with the EMC approved

strategy. The revised strategy retained many of the same features as the previous hedging strategy. These include

(i) a required ratable reduction of monthly commodity exposure removed each month;

(ii) the volume of monthly hedging and intra-month timing for hedging is informed by market fundamentals; and

(iii) hedging targets are established on the basis of the minimum or maximum amount of commodity exposure allowed under the Company's Procedures Manual.

The revised plan requires that on or before [redacted] months ahead of delivery, the bulk of the hedging strategies and transactions have been made per this programmatic plan. These revisions enable the Company to monitor and more actively address the exposure associated with PSE's power portfolio position [redacted] months ahead of the time the power would be needed to serve load.

REDACTED

Q. Why did the Company extend its hedging strategies?

A. Prior to extending the term of the hedging strategies, the Company engaged in a very detailed best-practices benchmarking and market research initiative. These efforts revealed that customers prefer a longer period of rate stability and that industry leading companies were engaged in longer term hedging practices than PSE. Given this and other information, PSE determined it could be beneficial to

expand its hedging horizons. The line of credit requested and approved in PSE's 2006 general rate case provides the Company increased flexibility to monitor and more actively address the exposures associated with its power and core gas portfolio positions, as well as its natural gas for power position.

2. Application of PSE's Risk Management System to PCA Period 7 Power Costs

Q. Would you please provide some examples of how PSE applied the risk management systems, tools and strategies described above with respect to PCA Period 7 power supply and costs?

REDACTED

A. Yes, I would be pleased to. Take, for example, PSE's energy requirements for May 2008. Beginning in [redacted], PSE's EPM staff began to actively reduce spot market price exposure for the delivery period May 2008. From [redacted] through [redacted], on a monthly or bi-monthly basis, EPM Department staff developed strategies to reduce PSE's exposure with respect to its electric supply needs for May 2008. Such strategies were based on updated Position and Exposure Reports generated by KW3000, market heat rates, hydro conditions and weather fundamentals, and other available information. In accordance with the EMC approved Rolling [redacted] Month Hedging Plan, and within the limits described in PSE's Procedures Manual, PSE staff executed these strategies by entering into hedging transactions. EPM Department staff can make recommendations to depart from this plan, but execution of such hedges is subject to EMC approval. With respect to the

May 2008 power supply, EPM Department staff did not make any such recommendations, but instead kept the EMC informed of its analyses and activities. See Exhibit No. __ (DEM-3C) for discussion of the hedges transacted for May 2008 which are presented in Exhibit Nos. __ (DEM-9C) and __(DEM-10C).

Beginning in [redacted], the power supply for May 2008 rolled into staff's newly extended [redacted] purview, allowing staff to more actively manage the position by responding to short-term market fundamentals. Staff analyzed PSE's position for May 2008 on a monthly or bi-monthly basis and, based on market conditions and other information available to them at the time, took actions to reduce PSE's exposure under the authority and limits of the Procedures Manual.

Documenting these activities requires detailed description and explanation of the information and reports used by the Company at each stage of its consideration, decision making, and execution of PSE's risk management strategies. Thus, this description and documentation is separately presented as Exhibit No. ___(DEM-3C).

REDACTED

Q. Are the activities described in Exhibit No. ___(DEM-3C) the only risk management activities that PSE undertook for PCA Period 7?

A. No. Similar activities were undertaken with respect to managing PSE's portfolio and exposure for the entire PCA Period 7. Some of that information is apparent from the materials presented in the Second Exhibit to my Prefiled Direct Testimony,

Exhibit No. ___(DEM-3C), and the other exhibits filed with my Prefiled Direct Testimony. However, describing and documenting all of the details of such activities for the entire PCA Period 7 would be a monumental task.

Q. How did the Company manage gas supply for Tenaska during PCA Period 7?

A. The Company managed gas supply for Tenaska as part of its overall power portfolio by applying the risk management tools and systems described above. The Company ultimately hedged the financial exposure associated with its power portfolio taking into account the probabilistic dispatch rate of the Tenaska and other plants. This means that the Company hedged fuel supply in the financial gas derivatives market over time as necessary to reduce open position exposure and ultimately balance the position on a probabilistic basis. The Company then acquired only the estimated physical fuel requirement in the monthly or daily spot market, whichever was determined to be most advantageous at the time.

3. Winter Peaking Contracts and Exchanges

Q. Why does PSE enter into winter peaking contracts?

A. Winter peaking contracts are procured so that PSE will be able to reliably serve high loads that occur during an extreme winter peak event.

Q. How else does PSE plan for winter peaking events?

A. In the power market, most of the transactions relevant for PSE occur at the Mid-C trading hub. Therefore, during an extreme cold event, PSE purchases incremental power in the day ahead or real time Mid-C markets if the prices are less than the cost of generating or if additional supplies are needed to supplement PSE's resources. Historically, there has been inadequate transmission capacity from the Mid-C to PSE's system (Cross Cascades transmission path) to move all of PSE's resources and market purchases during an extreme cold event, resulting in risk that short-term firm capacity would not be available. Additionally, curtailments of non-firm hourly transmission were likely to occur. PSE's strategies to deliver additional winter supply to its system to ensure it had adequate transmission capacity to deliver additional winter supply to its system to meet peak demand have historically been to [redacted] Given the long-term firm BPA Cross Cascades transmission PSE has acquired over the last couple of years (650 MW in 2006, 115 MW in 2008 and 35 MW in 2009) and the location of newly acquired resources, PSE is less constrained by Cross Cascades transmission to meet winter peaking needs.

REDACTED

Q. How did PSE approach the decisions whether and how to enter into winter peaking contracts and exchanges for the winter months of calendar 2008?

A. PSE approached these decisions within the context of its portfolio and risk

management systems and procedures.

PSE specifically considered how it should plan for and execute contracts to provide peaking capacity or related hedges. As part of that assessment, PSE considered the effectiveness of entering into various call options that were available in the market versus "self-insuring" against extreme winter peak events. PSE ultimately decided that it would purchase several winter on-peak power index power transactions to ensure physical power supply during the winter peaking hours.

C. PSE's PCA Period 7 Power Costs

Q. How did PSE's actual power costs during PCA Period 7 compare to the power costs recovered in rates?

A. PSE's actual PCA Period 7 power costs were approximately $1.2 million above the amounts recovered through the Power Cost Baseline Rate during PCA Period 7.

The primary drivers of this under-recovery were higher power costs caused by a combination of (1) lower hydro generation due to 97% of normal runoff for the water period ended July 2008; (2) a very late start to the spring run-off which drove up Mid-C prices, thus forcing PSE to purchase power in the market when the Mid-C prices were high; and (3) higher power costs to serve incremental load due to colder than normal weather. Lower power costs due to higher low-cost Colstrip generation and lower Mid-C contract costs resulting from Chelan County PUD transitioning to a new billing process mitigated the higher power costs noted above.

IV. CONCLUSION

Q. Do you believe that PSE has met the Commission's prudence standard with respect to its power costs during PCA Period 7?

A. Yes; PSE met the Commission's prudence standard for the PCA Period 7 power costs because PSE's management of its power costs during PCA Period 7 was reasonable. The Company has structures and processes in place to formulate strategies for controlling power costs and executed those strategies, taking into account information and variables associated with managing a complex resource portfolio within a dynamic market environment.

Q. Does that conclude your testimony?

A. Yes, it does.