EXHIBIT NO. ___(DEM-3C)
DOCKET NOS. UE-07___/UG-07___
2007 PSE GENERAL RATE CASE
WITNESS: DAVID E. MILLS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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

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

REDACTED VERSION

DECEMBER 3, 2007

PUGET SOUND ENERGY, INC.

SECOND EXHIBIT (CONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF DAVID E. MILLS

PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF DAVID E. MILLS

I. PSE'S ORGANIZATIONAL STRUCTURES, POLICIES & STRATEGIES USED TO MANAGE PORTFOLIO RISKS

A. Organizational Structures

Q. What organizational structures does the Company have to manage electric and natural gas portfolio risks?

A. PSE's Energy Portfolio Management ("EPM") functional area – composed of energy market analysts, quantitative analysts, seasoned energy traders and other professionals – is responsible for identifying, quantifying, monitoring and reporting on risk factors. This functional area also develops and recommends risk management strategies for the Company. The EPM function includes the Energy Supply and Planning department, which implements the Company's short- and medium-term risk management strategies and manages PSE's medium-term portfolios. This department is led by the Chief Resource Officer.

The EPM function also includes the Structuring and Asset Optimization, Energy Risk Control and Credit Risk Management groups who provide risk control oversight. Since April 2007, these areas have been led by the Chief Financial

Officer / Sr. Vice President of Finance.

PSE's Energy Management Committee ("EMC") – composed of five senior PSE officers – oversees the activities performed by the EPM and the Energy Resources groups. 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 Energy Management Committee also 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 PSE staff.

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

Q. Does the Company have the same policies and overarching strategies with respect to its Power and Gas portfolios?

A. No, PSE's management of its Power Portfolio for electric customers (including the natural gas PSE acquires to generate electricity) is not the same as its management of its natural gas portfolio for gas customers (often referred to as the "Core Gas" portfolio). PSE actively manages and hedges both portfolios, but does not always employ the same strategies. This is because management of the Power Portfolio involves complexities not present in the Core Gas portfolio such as the relationship between wholesale market power prices and the wholesale market price of natural gas needed to generate power; the extent of water available to generate hydroelectric power; and alternatives available to the Company to generate, purchase or sell power result in additional risks and opportunities in the electric portfolio.

B. PSE's Core Gas Portfolio Hedging Strategy

Q. Please describe the Company's policies and overarching risk management strategies with respect to its Core Gas portfolio.

A. The structure of the Core Gas portfolio hedging strategy can best be described as programmatic, with some discretion. It is a two-dimensional matrix, where both the time until delivery and required hedged volumes establish thresholds for executing wholesale gas market transactions. However, there is an additional price component to this matrix that accelerates hedging if prices fall to a certain level, referred to as the Threshold Price Level. The Threshold Price Level is derived by examining fundamental industry factors and modeling. Essentially, this price represents a "floor" where PSE feels comfortable accelerating its hedging because the price is approaching the marginal price of the highest cost resource, such as the cost of landed [redacted], and the cost of [redacted].

Q. Please describe the programmatic and discretionary aspects of the Core Gas hedging matrix.

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A. The hedging timeframe, or horizon, for the Core Gas portfolio is [redacted], which encompasses [redacted]: November through March (winter) and April through October (summer). The strategy mandates that a certain percentage of the portfolio be hedged [redacted]. These volumetric hedge targets are spaced [redacted] apart, which allows PSE staff some flexibility as to when to execute the hedges. Execution timing is based on both fundamental and technical analysis performed by experienced traders. Hedge levels [redacted] and the strategy mandates that [redacted] percent of the [redacted] period. Specifically, the Core Gas Portfolio should have at least [redacted] MMBtu/day hedged going into the [redacted], and at least [redacted] MMBtu/day hedged going into the [redacted], both subject to credit availability.

Q. When did the Company develop its Core Gas hedging matrix?

A. The Company developed this approach to hedging the Core Gas portfolio in the summer of 2004. Prior to August 2004, when the current matrix was approved by the Risk Management Committee, Core Gas was hedged using a dollar cost averaging strategy that had fundamental price levels built into it. As prices increased, less volume would be hedged; as prices decreased, more volume would be hedged. The reason for this approach was that, historically, natural gas prices had remained very stable (excluding the anomaly of the "Western Energy Crisis"). If prices rose sharply, it was assumed that this was a short lived event and that

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prices would revert to the mean and fall back to historic levels. However, as gas prices and volatility continued to increase, staff realized that the growing price uncertainty required a change in the hedging methodology.

C. Electric Risk Management Policies

Q. Please describe the Company's former hedging strategies for its power portfolio.

A. The prior programmatic hedging plan (called the "Rolling [redacted] Month Hedging Plan"), approved July 22, 2004 by the EMC, was utilized through September, 2007, when it was extended through [redacted] months. EPM staff now follows this updated plan 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 was needed to serve PSE's load. Generally, this prior plan required EPM staff to reduce PSE's net electric portfolio exposure each month such that the net exposure by the end of each month fell within the range of exposure – stated in dollars – that was permitted in the plan. On or before [redacted] months ahead of delivery, the bulk of the hedging strategies and transactions are made per this programmatic plan. This is why the plan was called the "Rolling [redacted] Hedging Plan" even though it began [redacted] ahead of the time of delivery – it was implemented over the time period from [redacted] ahead of delivery.

This hedging plan is not entirely programmatic and incorporates elements of

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discretion. EPM staff has, and continues to have, discretion as to how to accomplish the required reduction in exposure during the course of each month. For example, EPM staff determine how much to purchase or sell and the timing during the month to complete such transactions. Margin at Risk analysis was also used, and continues to be used in order to determine which commodity was most advantageous to hedge, be it on- or off-peak power or natural gas. In addition, staff decided whether to push toward the maximum or minimum monthly dollar limits each month, or to hedge somewhere in between. EPM staff also could recommend departures from this plan, pursuant to market fundamentals, but execution of any such departures from previously approved strategies was subject to EMC approval.

Q. How did the Company develop the existing electric hedging strategy referenced above?

A. PSE initially wished to develop more programmatic hedging strategies because, while one can make projections regarding future market movements, one can never know at the time of a hedging transaction how the future will actually unfold. Thus, the Company saw a benefit in avoiding hedging strategies that are overly reliant on discretionary market timing.

Toward this end, PSE implemented a "dollar cost averaging" strategy for its electric portfolio in 2002. The volumetric dollar-cost averaging strategy required EPM staff to purchase or sell a specific volume of gas or power each month, in order to progressively reduce the Company's projected short or long position during future months.

Q. When did the Company change this initial dollar-cost averaging strategy?

A. By spring 2003, the Risk Management Committee (currently the Energy Management Committee) 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 each month to a dollar amount of risk reduction to be accomplished every month. Under this approach, the Risk Management Committee would approve a dollar amount of risk to be reduced, and PSE staff would determine the appropriate commodity to hedge. As markets moved up or down, the approved dollar amount would allow for less or more volumetric purchases.

In May 2004, the Company began to employ a metric called Margin at Risk, to measure risk reduction as a result of incremental hedging. PSE has incorporated the Margin at Risk concept into the evaluation process for hedge strategies to measure risk reduction for various commodity alternatives. A series of hedge strategies, or transaction types, are run through the portfolio risk system, providing a table of how much risk reduction is gained, by month and by strategy. The Margin at Risk concept provides an additional tool in deciding how to allocate dollars across commodities in a credit-constrained environment.

Q. Why did the Company extend its hedging strategies?

A. Prior to extending the term of hedging strategies, the Company engaged in a very detailed best-practices benchmarking and market research initiative. These initiatives indicated customers prefer a longer term 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 our hedging horizons. The line of credit requested and approved in the 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.

II. PSE'S MODELING TOOLS & INFORMATION USED TO MANAGE ITS PORTFOLIO AND IMPLEMENT RISK MANAGEMENT STRATEGIES

Q. How does PSE integrate hedging activities into its Core Gas strategies?

A. PSE's Core Gas risk system models the estimated potential variability of future prices using one hundred price scenarios. This risk system permits PSE to model scenarios of prices and storage activity versus load requirements to represent future projected Core Gas portfolio needs. For example, the hundred price scenarios the risk system models help determine the Threshold Price Level described above, where PSE feels comfortable accelerating its hedging under the matrix.

Specifically, PSE uses the lowest quartile (25 lowest priced natural gas scenarios) in the risk system to develop the Threshold Price Level.

Q. Are there other examples of how the Company's risk system modeling informs its discretionary actions under the Core Gas hedging matrix?

A. Yes. The Company's storage capacity at Jackson Prairie and Clay Basin, nearly [redacted] Bcf ([redacted] Dth), can have a large influence on the portfolio's position. The Company's model adjusts storage injections and withdrawals based upon the shape of forward price curves. The risk system also values these storage transactions. Based on this information, PSE staff may decide to release storage capacity to a third party, if that party is willing to pay more for the storage than what PSE staff thinks the Company can make by managing it internally.

Q. Please describe what PSE's electric portfolio risk system does.

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

To model a variety of scenarios regarding PSE's gas-fired generation, the risk system takes into account each plant's individual operating characteristics,

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including: unit efficiency, start-up costs, variable operating costs, minimum run times, planned and unplanned outages, and unit availability. The risk system performs simulations of different market conditions and various outages in order to develop an estimate of how much gas is required and how much power will 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. In modeling whether the portfolio is surplus or deficit, the risk system incorporates information about hedges that PSE staff has already executed.

The risk system incorporates the inter-relationship between gas and power prices in developing its probabilistic gas and power positions. In different market scenarios, PSE's gas or power requirements will change. The reason is twofold. First, the plants have different operating efficiencies (known as "heat rates") and become economic to dispatch at different price differentials between power and gas. Second, the forward market prices for power and gas change frequently and the price relationship between power and gas, known as the "implied market heat rates," change as well. At certain implied market heat rates, PSE will expect to run each plant at an expected rate, and the expected plant gas requirements can be calculated. But if market conditions change, PSE will expect to adjust its gas and power purchases or sales in order to serve load with the most economic resource.

Q. Please describe the output that the electric portfolio risk system produces.

A. The risk system generates a probabilistic volumetric position, comprised of 100 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 ("CTs") grouped by heat rate efficiency of the facilities, NUGs/QFs, Coal Plants, Wind and Hydro (both PSE owned and Mid-Columbia ("Mid-C") contracts).

Based on this probabilistic volumetric position for each month, the risk system also generates a report showing the potential net cost exposure associated with the "open" positions (defined as any net surplus or deficit amount).

Q. How does PSE use the electric portfolio risk system to help make hedging decisions?

A. Once PSE's aggregated energy position and net exposure are defined for a particular period, the EPM staff evaluate and develop risk management strategy proposals and/or execute transactions around the purchase or sale of gas or power, as appropriate, to move toward a balanced position and reduced exposure. Execution entails entering into specific transactions with approved counterparties, approved instruments, executed master agreements and available credit.

Q. How is the risk system used to implement the Hedging Plan described above?

A. As described above, the Plan is set up to systematically reduce the total net exposure, for each month of the [redacted] months beyond the next [redacted] month 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 each month will fall within the limits of the plan. The total net exposure for each month is generated out of the risk system.

Q. Does Energy Portfolio Management staff implement the Hedging Plan relying only on the net exposure?

A. No. The net exposure drives transactions only to the point of showing whether PSE's exposure is within the maximum and minimum monthly limits of the plan. EPM staff must then make use of market fundamentals, water supply and weather forecasts that impact the wholesale electric and gas markets to decide whether to press toward the maximum or minimum monthly limits, or somewhere in between. EPM staff also determines when and how to execute such transactions to maintain each months net exposure within the maximum and minimum limits.

Q. How does the Energy Portfolio Management staff develop a view regarding how to exercise such discretion?

A. The EPM function utilizes a wide set of tools and sources of information to help them make informed decisions about dispatching plants, purchasing fuel, and executing hedges approved by the EMC. They also hold several meetings each

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month so that the team can review operational events, discuss market trends, and review new supply/demand information. Within this context, they work together to understand the exposures in the portfolio and discuss where hedging priorities occur. Underlying all this teamwork is an EPM staff with years of experience in energy trading, optimization and risk management.

Q. What types of information does the Energy Portfolio Management staff consider?

A. 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 markets, gas storage inventories across the United States, Canada and in the western United States; hydro run-off forecasts, reservoir storage, precipitation and snowpack; and more. Additionally, PSE staff reviews forecasted wholesale market prices and supply/demand fundamentals, such as trading firm publications and consulting service forecasts.

EPM staff also receives real-time information from a variety of sources such as: McGraw Hill (Gas Daily, Megawatt Daily), Future Source, Genscape, Intercontinental Exchange (live price data), live broker lines where current transactions are communicated though a speaker system, and other tools. The EPM group also has instantaneous data coming from the Company's systems operations staff so they can view load and generation dispatch data on a real-time basis.

In addition to using such information and processes to implement the current Hedging Plan, the EPM group also uses such information to develop recommendations to the EMC regarding potential changes to the Company's overarching hedging strategies or to recommend transactions that do not fall within those strategies.

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

A. Yes. The Company also uses a counterparty credit risk management system to assist the Credit Risk Management group and EPM staff in evaluating potential transactions with respect to credit issues. With this tool, staff can review data including: Moody's and S&P rating of the entity; applicable information about the parent of the entity; amount of parent 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 limit assigned to the entity; the existence of netting terms; and FAS 149 designation for accounting purposes. This information is gathered and calculated daily.

Furthermore, PSE traders can model what impact an incremental trade could have with 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. If a significant market movement would cause the credit exposure to exceed the amount allowed with that counterparty, the system would indicate that the trade should not be performed with that counterparty. In that case, the trader would find a different counterparty to complete the transaction.