EXHIBIT NO. ___(JMR-13)
DOCKET NO. UG-040640, *et al.* (consolidated)
2004 PSE GENERAL RATE CASE
WITNESS: JULIA M. RYAN

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	Docket No. UG-040640 Docket No. UE-040641 (*consolidated*)
In the Matter of the Petition of PUGET SOUND ENERGY, INC. For an Order Regarding the Accounting Treatment for Certain Costs of the Company's Power Cost Only Rate Filing.	Docket No. UE-031471 (*consolidated*)
In the Matter of the Petition of PUGET SOUND ENERGY, INC. For an Accounting Order Authorizing Deferral and Recovery of the Investment And Costs Related to the White River Hydroelectric Project.	Docket No. UE-032043 (*consolidated*)

FIRST EXHIBIT TO THE PREFILED REBUTTAL TESTIMONY OF JULIA M. RYAN (NONCONFIDENTIAL) ON BEHALF OF PUGET SOUND ENERGY, INC.

NOVEMBER 3, 2004

REDACTED
VERSION

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket Nos. UG-040640 and UE-040641
Puget Sound Energy, Inc.'s General Rate Case
for Gas and Electric Operations

WUTC STAFF DATA REQUEST NO. 173

WUTC STAFF DATA REQUEST NO. 173:

Regarding the direct testimony of Ms. Ryan at page 11, lines 18 to page 12, line 8, please explain in detail how the Company estimated the benefits of hedging to rate payers, and what criteria were used to implement hedging.

Response:

The referenced section of Ms. Ryan's testimony, Exhibit No. ___(JMR-1T), from page 11, lines 18 to page 12, line 8, describes Puget Sound Energy, Inc.'s ("PSE") general approach to hedging and risk management. PSE manages the gas and electric wholesale portfolios with the express purpose of reducing exposures in energy costs. "Hedging", as PSE uses the term, means to reduce risk inherent in a portfolio, through an offsetting transaction or set of transactions. With every hedge transaction, PSE is trying to lock in costs and reduce the risk of price aberrations that could raise power and gas costs.

The criteria PSE uses to implement hedging have been explained in several recent filings before the Washington Utilities and Transportation Commission, including WUTC Docket Nos. UE-031389 (2003 Power Cost Adjustment ("PCA") Mechanism Report), UE-031725 (Power Cost Only Rate Case ("PCORC")) and UE-030594/5 ("Least Cost Plan"). Attached as Attachment A to PSE's Response to WUTC Staff Data Request No. 173, please find PSE's Responses to WUTC Staff Data Request Nos. 33 and 34 from the PCORC proceeding in WUTC Docket No. UE-031725.

The benefits of hedging are well documented. Attached as Attachment B to PSE's Response to WUTC Staff Data Request No. 173, please find a bibliography containing source materials to supplement this response. The benefits of locking-in prices became very clear during the price spikes in 2000-2001 in the western United States as a result of the Western Energy Crisis. More recently, gas production shortfall and reduced production capacity has given rise to volatile gas markets, again proving the benefits of hedging.

Two excerpts from PSE's Energy Risk Policy (attached in its entitety as Attachment C to PSE's Response to WUTC Staff Data Request No. 173) document the risk management (hedging) objectives and illustrate PSE's focus on managing costs and portfolio risks:

> "Managing wholesale electric and gas portfolio risks is of critical importance for Puget Sound Energy ("PSE" or "the Company"). The nature of the wholesale energy markets are such that there is continuous exposure to volumetric risk, commodity risk, counterparty risk, operational risk and estimation risk." (page 1)
>
> "PSE will manage its energy supply portfolio to achieve three primary objectives:
> - Ensure physical energy supplies are available to serve retail customer requirements.
> - Manage portfolio risks to serve retail load at overall least cost and limit undesired impacts on PSE's customers and shareholders.
> - Optimize the value of PSE energy supply assets.
>
> The Company is expressly not engaged in the business of assuming risk for the sake of earning speculative trading revenues. Therefore wholesale market transactions will be focused on balancing the Company's energy portfolio, reducing costs and risks where feasible, and reducing volatility in wholesale costs and margin in the portfolio." (page 2)

With respect to the question of the benefit of hedging to rate payers, PSE's hedging in the Core Gas portfolio where PSE sources supply for gas customers is primarily for the benefit of customers (through the Purchased Gas Adjustment (PGA) mechanism). In the Core Power portfolio, PSE has the same interest with respect to cost management as a result of the PCA mechanism.

PSE monitors the impact of rising energy costs in its relations with customers. PSE monitors price impacts in its PCA and PGA mechanisms. PSE takes pride in trying to be a low-cost provider to its customers. Low cost is defined not only by low operating costs, but also low commodity costs on customers' bills.

PSE's customers do not want to be surprised by rising energy costs. Many of PSE's commercial and industrial customers who purchase gas from PSE are trying to manage energy costs within a certain budget level. PSE's Major Accounts and Key Accounts teams work closely with these customers, and often receive inquiries such as "What will happen to our energy costs?" Additionally, many residential customers watch their energy bills, and become concerned if costs are rising.

Attached as Attachment D to PSE's Response to WUTC Staff Data Request No. 173 is a presentation dated May 13, 2004, provided in July 2004 to WUTC Staff, regarding revisions to hedge strategy for the Core Gas portfolio. This presentation outlines revisions PSE thought would improve the hedging plan currently in place for gas customers.

Attachments A, C and D to PSE's Response to WUTC Staff Data Request No. 173 are marked CONFIDENTIAL per Protective Order in WUTC Docket Nos. UG-040640, et al.

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WUTC STAFF DATA REQUEST NO. 173

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DR NO.	"CONFIDENTIAL" Material
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WUTC STAFF DATA REQUEST NO. 220

WUTC STAFF DATA REQUEST NO. 220:

Has the Company compared the cost of any volatility in day-ahead or same-day markets to the revenue requirement increase caused by the current PSE forward market policy? If so, please explain such efforts and provide any supporting studies, analyses or other documentation. If not, why not?

Response:

Having the ability to hedge in the forward market provides Puget Sound Energy, Inc. ("PSE") with the ability to protect itself from a highly volatile energy market as well as provide opportunities to lower costs to the rate payer. In essence, a company abstaining from a disciplined hedging program exposes itself to two major risks: upward energy costs and increased uncertainty related to such company's exposures related to those costs.

Hence, a hedging program that is managed in a disciplined manner can prove to be a highly effective tool in reducing price/cost volatility. Hedging a commodity risk in the forward market, prior to beginning of the delivery month (also called the spot market), provides PSE with the opportunity to reduce exposure in its wholesale gas and power portfolios. When PSE is deficit resources to serve supply ("short"), energy costs will rise in the event of upward price spikes. In the situation where PSE has surplus resources to sell ("long"), the risk exposure is to falling market prices. Having the ability to hedge in the forward market provides PSE with the opportunity to lock-in resource levels and prices and mitigate unfavorable price exposure. An overarching principle behind PSE's hedging program is finding the balance between mitigating risk and stabilizing costs for its customers.

A widely-accepted concept in risk management is that the more time passes, the wider the distribution of price outcomes. A one-month forward commodity would have a smaller band of price extremes than a twelve-month forward commodity. The forward market provides PSE with opportunities to mitigate risks associated with large price

deviations from current market expectations. As history has shown, as illustrated in Exhibit A, below, forward prices will vary from the actual spot price settlement.

Exhibit A illustrates the potential movement that a one-year series of monthly prices (sometimes called a "strip") at Sumas could experience twelve months prior to the beginning of the delivery period. In this exhibit, the 12-month strip has a starting price of $5.63/decatherm (or MMBtu). As market fundamentals change and the time remaining until the beginning of the delivery period elapses, the forward month price moves into new price bands. Exhibit A illustrates how a portfolio with different scenarios of percentages hedged and unhedged performs under different market conditions. The curve with the greatest price extremes is the unhedged portfolio; the 100 percent hedged portfolio experiences no price variability.

In addition to the potential movement of forward prices, PSE must also manage exposures in the daily and hourly market. Therefore, PSE seeks to mitigate those risks as well. Although the first-of-the-month commodity price serves as a baseline for spot prices within that month, the potential for daily price shocks within the month remains of concern. While the majority of spot days do not experience extreme price movements, as illustrated in Exhibit B, below, it only takes a few days of extreme prices to adversely impact total energy costs for the rest of the year.

In Exhibit B, the line to the left of the dashed vertical line represents the historical *Gas Daily* Sumas Price. This posted market price reflects the daily market price (also called the "spot" price) for physical gas purchased and sold in the physical markets at Sumas. The line to the right of the dashed vertical line represents current forward market prices of future delivery months. The top line to the right of the dashed vertical line represents the potential movement of spot prices incorporating the potential migration of prices from both the forward and spot market. The bottom line to the right of the dashed vertical line represents the potential benefit that PSE could experience should it choose to remain completely unhedged. The risk of PSE experiencing unfavorable Sumas spot prices (top line) far outweighs the potential benefit of staying completely unhedged (bottom line). The second to the top line illustrates how hedging 50 percent of volumetric exposures dampens the impact of adverse price movements.

In a very simple example, for the rate year in this proceeding using updated power costs provided in PSE's Response to WUTC Staff Data Request No. 169, if wholesale energy prices were to double and the price relationship between power and gas were maintained, the projected costs could increase by roughly $348 million (secondary costs could increase by $130 million, secondary sales could increase by $28 million and fuel/gas costs could increase by $246 million). Looking back, as shown in Exhibit B for Sumas gas prices, it is possible for prices to double in a very short period of time. During the Western Energy Crisis in 2000-2001, prices were much more volatile.

Hedging activity is intended to protect against negative price exposure such as occurs in extreme market events.

Exhibit A:

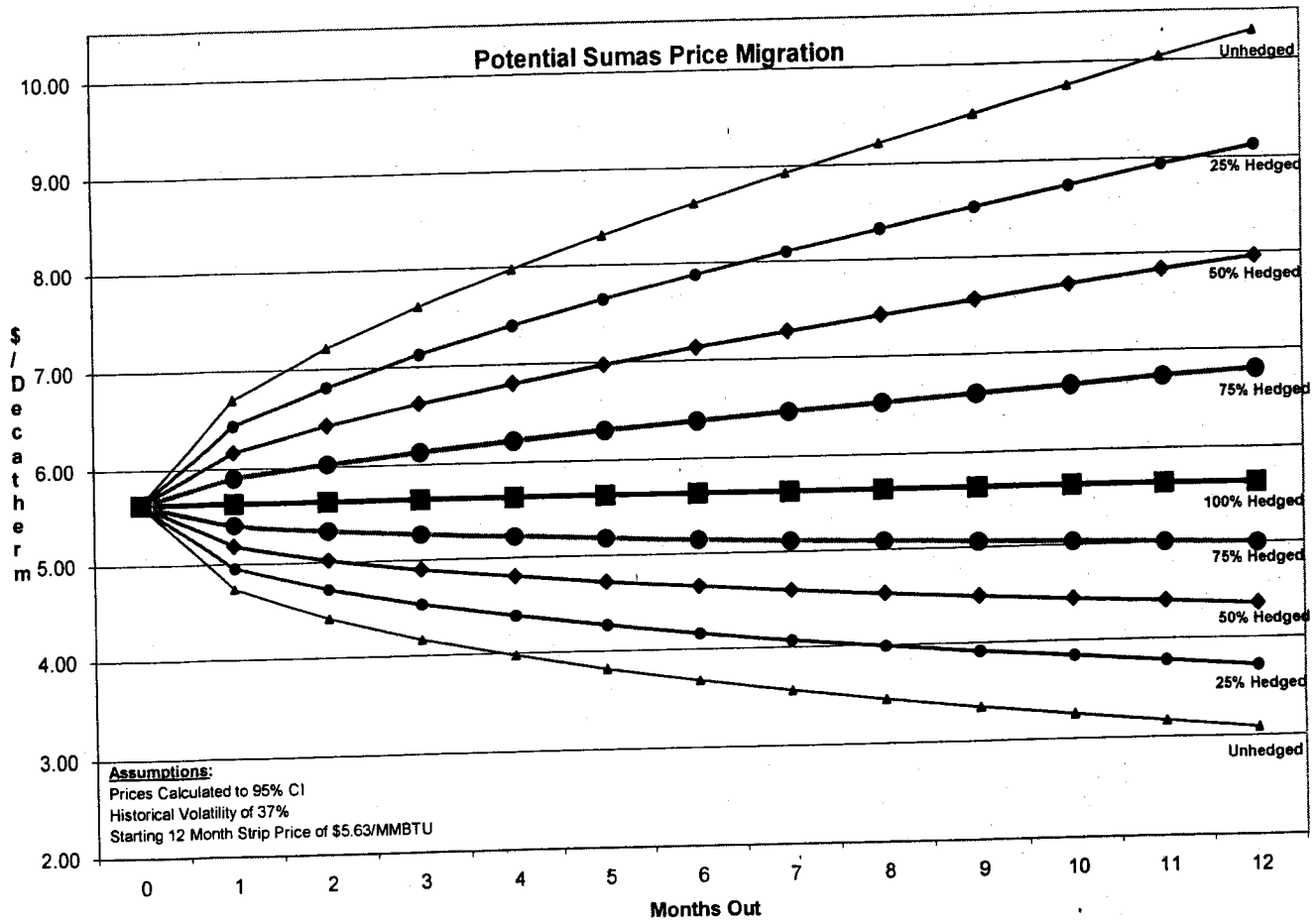

Exhibit A Assumptions:
Bands around the current forward curve were used assuming a constant 37% historical volatility for the twelve-month strip calculated to the 95.0% confidence interval. The starting 12-month strip price, the average of the Sep04-Aug05 prices, was $5.63.

WUTC Staff Data Request No. 220
Date of Response: September 1, 2004
Person who Prepared the Response: S. Aladin; A. Saati
Witness Knowledgeable About the Response: Julia M. Ryan

Exhibit B:

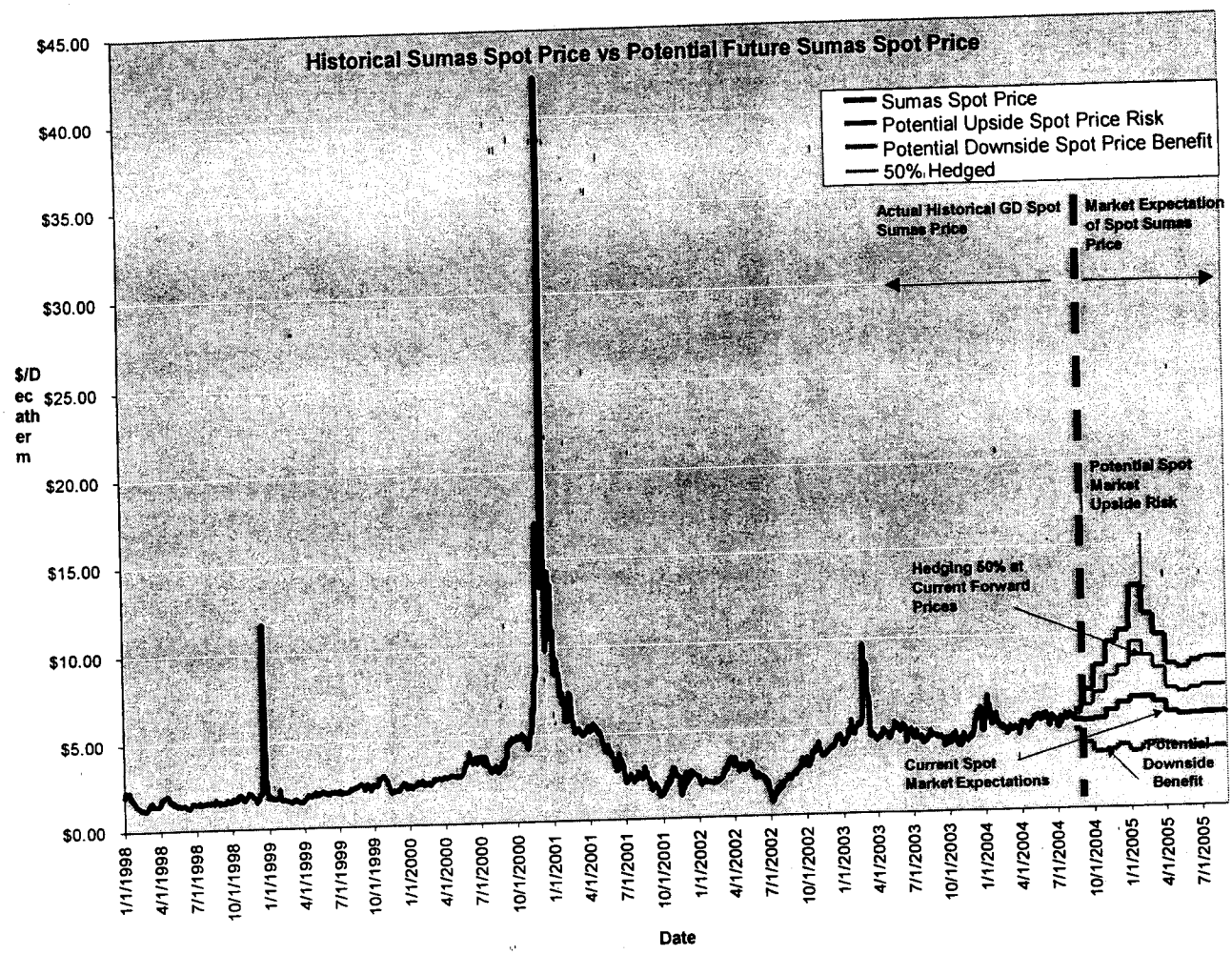

Exhibit B Assumptions:

A combination of forward market volatility and spot market volatility were used to forecast potential spot price scenarios to the 95.0% confidence interval.

WUTC Staff Data Request No. 220
Date of Response: September 1, 2004
Person who Prepared the Response: S. Aladin; A. Saati
Witness Knowledgeable About the Response: Julia M. Ryan

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WUTC STAFF DATA REQUEST NO. 230

WUTC STAFF DATA REQUEST NO. 230:

With respect to Ms. Ryan's direct testimony at page 22, lines 5 - 12:

A. Please explain how much benefit there is in the ability to retain or increase the amount of "hedging" whether in forward contracts or through other techniques.

B. Is this benefit mostly a matter of smaller standard deviation of the probable future costs? If there is another benefit, please describe and quantify it.

C. What are the costs to PSE (and possibly its ratepayers) of achieving the position which produces these benefits?

Please include in your response any supporting studies, analyses or other documentation.

Response:

A. Please see Puget Sound Energy, Inc.'s ("PSE") Response to WUTC Staff Data Request No. 220, in which PSE describes the exposure associated with not hedging, but remaining open to spot market price volatility. Please also see Risk Management Committee materials in connection with Attachment A to ICNU Data Request No. 03.01.

B. The primary benefit of PSE's hedging is to try to stabilize energy costs (protect against price volatility) and to protect against rising energy costs. Please see PSE's Response to WUTC Staff Data Request No. 173, which addresses this issue in greater detail. PSE's Response to WUTC Staff Data Request No. 220 also addresses the question of deviation in future costs.

C. When PSE pays a premium to have an option, such as a winter peaking capacity option, there is a known "cost". The general rate case filing contains cost estimates for peaking capacity costs, transmission costs, and other related costs. With respect to gas and power costs, to the degree that hedging transactions are fixed price transactions, the main "cost" is opportunity cost. In a situation where an entity locks a price, and then the market moves to a more advantageous price level, then the entity lost the opportunity to obtain the product at the more advantageous price.

Opportunity cost is hard to measure on a prospective basis. Historical markets can provide a context of where market prices have moved in the past. But it is also important to note that markets could behave differently in the future, because market conditions are not stagnant, but change.

WUTC Staff Data Request No. 230
Date of Response: September 1, 2004
Person who Prepared the Response: Julia M. Ryan
Witness Knowledgeable About the Response: Julia M. Ryan

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket Nos. UG-040640 and UE-040641
Puget Sound Energy, Inc.'s General Rate Case
for Gas and Electric Operations

WUTC STAFF DATA REQUEST NO. 233

WUTC STAFF DATA REQUEST NO. 233:

On page 10, line 16 of Exhibit (DEG -1CT), Mr. Gaines states that from his perspective a "BBB+" credit rating is important because (among other reasons) it facilitates expanded risk management activities. Please explain why risk management is not now adequate, why it should be expanded, and to what level it should be expanded. Please include all supporting documentation.

Response:

The issue is not that risk management is inadequate but rather that Puget Sound Energy, Inc. ("PSE") is limited in its ability to hedge beyond short-term hedging because of its current credit rating. The limitation results from the amount of credit available to PSE for entering into wholesale physical and financial natural gas and power transactions.

A number of issues in the last few years have created this situation. To start, a large number of wholesale energy companies, including PSE and other utilities, were downgraded during 2001 and 2002. Such downgrades, however, did not uniformly affect the energy market and those market participants that retained their high investment grade rating have become more disciplined in their credit risk management. To the best of PSE's knowledge, all major wholesale energy companies in the markets today (both regulated and unregulated) closely monitor their credit exposure with their counterparties. Such parties seek contractual language that mitigates the risk of non-performance by counterparties.

Second, fewer counterparties exist today than did just three years ago. Please see Exhibit No. ___(JMR-4C), which provides information about the reduction in PSE's counterparties from 2001 to present.

Third, energy prices have risen, so the same amount of open credit does not go as far in terms of volume.

WUTC Staff Data Request No. 233
Date of Response: September 1, 2004
Person who Prepared the Response: Donald E. Gaines
Witness Knowledgeable About the Response: Donald E. Gaines; Bertrand A. Valdman; Julia M. Ryan

Finally, beginning in September of 2002, PSE began hedging for its gas customers. Such activity added to the degree PSE was hedging in wholesale markets.

PSE's risk management activities are limited by the amount of open or trade credit its counterparties are willing to make available. As a general rule, the higher the credit rating, the greater level of credit counterparties are willing to make available. Some of PSE's counterparties will provide no credit if PSE's credit rating were to drop to non-investment grade. With PSE's credit rating at just one notch above non-investment grade status, PSE limits its activities with these counterparties to avoid the risk of collateral calls if PSE's credit ratings were to fall.

At this time, if PSE were to seek to enter into hedging for a longer time period, it would be quite constrained. The majority of PSE's hedging activity today is in the short-term periods of 6-18 months, leaving little room for credit to be use for purposes of long-term hedging. At such time that PSE thought it beneficial to lock-in long-term gas or power prices, it would not be able to do so easily. Therefore, PSE is seeking to expand its capacity to enter into additional hedging activity, so that it is in a position to do so.

PSE is targeting a credit rating of BBB+ because it believes such rating to be a better balance of cost and benefit than its current credit rating of BBB-. The testimonies of Mr. Gaines and Mr. Valdman, Exhibit No. ___(DEG-1CT) and Exhibit No. ___(BAV-1T), respectively, each refer to the numerous benefits of a BBB+ rating. Such benefits include but are not limited to greater willingness of counterparties to extend PSE credit, greater access to capital markets during times of market or economic distress, and lower financing costs for resource acquisitions.

WUTC Staff Data Request No. 233
Date of Response: September 1, 2004
Person who Prepared the Response: Donald E. Gaines
Witness Knowledgeable About the Response: Donald E. Gaines; Bertrand A. Valdman; Julia M. Ryan