EXHIBIT NO. ___(MLJ-1T)
DOCKET NO. UE-09___/UG-09___
2009 PSE GENERAL RATE CASE
WITNESS: MICHAEL L. JONES

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UE-09____** **Docket No. UG-09____**

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF MICHAEL L. JONES ON BEHALF OF PUGET SOUND ENERGY, INC.

MAY 8, 2009

PUGET SOUND ENERGY, INC.

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF MICHAEL L. JONES

I. INTRODUCTION

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

A. My name is Michael L. Jones. My business address is 10885 N.E. Fourth Street, Bellevue, WA 98004. I am Asset Manager, Thermal Joint Ownership and Power Contracts 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. ___(MLJ-2).

Q. What are your duties as Asset Manager, Thermal Joint Ownership and Power Contracts

A. I am responsible for the management of PSE's ownership and contract interests in the four-unit Colstrip Steam Electric Station in Colstrip, Montana ("Colstrip"). My responsibilities include oversight of plant operations, environmental issues, budget performance and the Colstrip fuel supply contracts. I am also responsible for managing PSE's ownership interests in the Frederickson 1 combined cycle

facility and for managing thermal power purchase agreements. Additionally, I am involved in PSE's generating resource development and acquisition efforts, focusing on solid fuel technologies.

Q. Please summarize the purpose of your prefiled direct testimony.

A. My prefiled direct testimony provides background regarding the Colstrip Steam Electric Station in Colstrip, Montana. My testimony also explains the current capacity levels of the four Colstrip units, operating levels and describes the scheduling of major plant maintenance overhauls. Further, my testimony explains the effect the Mercury Control Rule, enacted by the State of Montana in 2006, will have on Colstrip maintenance and operations. My testimony also presents a summary of a settlement resulting from a lawsuit filed by Colstrip residents and businesses and describes proposed rate treatment. Finally, my testimony summarizes and updates the status of the Coal Purchase and Sale Agreement for the continuing supply of coal for Colstrip Units 1 and 2. I introduced the features of the Agreement in my Prefiled Direct Testimony, Exhibit No. MLJ-1CT, in PSE's last general rate proceeding, Docket No. UE-072300 ("2007 GRC").

II. BACKGROUND REGARDING THE COLSTRIP STEAM ELECTRIC STATION

Q. What is the Colstrip Steam Electric Station?

A. The Colstrip Steam Electric Station is a four-unit, mine mouth, coal-fired electricity-generating facility operated by PPL Montana, LLC ("PPL") in

Colstrip, Montana, about 120 miles southeast of Billings. The Colstrip Steam Electric Station is capable of producing up to 2,094 megawatts ("MW") of electricity. Colstrip Units 1 and 2 are each rated at 307 MW of net generating capacity, and Units 3 and 4 are each currently rated at 740 MW of net generating capacity. Units 1 and 2 began commercial operation in 1975 and 1976, respectively, and Units 3 and 4 and began commercial operation in 1984 and 1986, respectively.

Q. What is PSE's interest in the Colstrip Steam Electric Station?

A. PSE owns a 50% undivided interest in Units 1 and 2 and a 25% undivided interest in Units 3 and 4. PSE receives additional energy from Unit 4 pursuant to a purchased power contract between PSE and NorthWestern Energy, which expires at the end of 2010. In total, the Colstrip Steam Electric Station provides about 20% of the Company's overall energy needs.

Q. Please explain the term "forced outage rate", as used for forecasting power costs.

A. As used in this context, the forced outage rate ("FOR") is the percentage of time that a unit is not available for power production because of maintenance, forced outages or derating. PSE uses the FOR to model the availability of the Colstrip units in estimating power costs. The FOR does not include the time that a unit is

unavailable due to the triennial planned overhaul of each unit because such planned overhauls are specific inputs used in the power cost model.

Q. What method did PSE apply to determine the FOR in this proceeding?

A. Pursuant to the Company's 2007 GRC,[1] the FOR used in this proceeding is based on the average FOR over the most recent four calendar years, 2005 through 2008. Because of the differences in design between Units 1 and 2 and Units 3 and 4, PSE applied one FOR to Units 1 and 2 and another FOR to Units 3 and 4.

Q. Isn't it true that the forced outage rate reported to the North American Electric Reliability Corporation ("NERC") Generator Availability Data System is lower than the forced outage rate PSE used in PSE's AURORA model?

A. Yes. The FOR used for Colstrip in PSE's AURORA model is not the same as the forced outage rate reported to the NERC Generator Availability Data System ("GADS") database. The GADS forced outage rate is lower than the FOR PSE uses in AURORA because the GADS forced outage rate includes only the time that a unit is *forced* offline or suffers a *forced* derating. PSE's FOR includes both forced *and planned* outages and deratings, except the planned triennial overhaul on each unit, which is scheduled specifically in the AURORA modeling. For this

[1] *See* 2007 GRC, Prefiled Rebuttal Testimony of Michael L. Jones, Exhibit No. MLJ-15T, at 2.

reason, PSE's FOR for Colstrip will always be higher than the NERC GADS forced outage rate.

Q. Why doesn't PSE use the GADS forced outage rate for power cost modeling?

A. Colstrip is a low cost, base load unit operating at full power during most of the year. When a Colstrip unit is not available, that unit's power production must be replaced by a higher cost unit. If planned outages were not included in the power cost modeling, the effect would be to overestimate the availability of the unit and understate forecasted power costs.

Q. How do the Colstrip units compare to the average power production of similar-sized coal-fired plants?

A. The Colstrip units compare favorably to other coal-fired plants of similar size. The Net Capacity Factor ("NCF") is the standardized GADS measure of the actual generation a unit supplied during the calendar year compared to the theoretical maximum if it had operated at full rated capacity for the entire year. The higher the NCF, the more energy that plant produced during the year. The average NCF for the five-year period from 2003-2007 for Colstrip Units 1 and 2 is 85.33%, while the NERC GADS 2003-2007 average NCF for coal-fired units of 300-399 MW is 72.78%. Similarly, the average NCF for the five-year period from 2003-2007 for Colstrip Units 3 and 4 is 84.28%, while the NERC GADS 2003-2007 average NCF for coal-fired units of 600-799 MW is 76.41%.

Q. Are there other assumptions PSE applies to the AURORA modeling?

Yes, the AURORA model uses three Colstrip data inputs. In addition to FOR, PSE's AURORA model also uses (1) the four-year average heat rate and (2) an annual variable cost ($/MMBtu). The annual variable cost is determined from estimates of coal costs and other fuel-related costs, transmission losses and the four-year average heat rate.

PSE's AURORA model uses these same assumptions for both PSE's ownership interest in Colstrip and the Colstrip interest purchased under contract from NorthWestern Energy.

Q. How are the transmission losses determined?

A. Using data from PSE's energy management system, the Company compared the amount of energy received by PSE at the junction between the Colstrip Transmission System and the Bonneville Power Administration system with PSE's share of net generation at the power plant. The result showed that over the 24-month period of January 2007 through December 2008, the losses averaged 2.99%. See the Second Exhibit to my Prefiled Direct Testimony, Exhibit No. ___(MLJ-3), for results of PSE's analysis.

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III. COLSTRIP UNITS 1 AND 2 COAL PURCHASE AND SALE AGREEMENT

Q. What is the current coal supply arrangement for Units 1 and 2?

A. PSE and the Montana Power Company ("Montana Power") built Colstrip Units 1 and 2 in the 1970s to burn coal from the nearby Rosebud Mine, which is owned and operated by Western Energy Company ("Western Energy").[2] Western Energy delivers coal from the Rosebud Mine to Units 1 and 2 by off-road truck. The Rosebud Mine has been supplying the full coal requirements of Units 1 and 2 since the units started operation in 1975 and 1976 under a contract that terminates on December 31, 2009.

Q. What is the supply arrangement for the coal for Colstrip Units 1 and 2 after 2009?

A. A new contract, the Coal Purchase and Sale Agreement ("Agreement") between PSE and Western Energy, commences January 1, 2010. This Agreement secures the coal requirements for Units 1 and 2 for a minimum of ten years. A description of the Agreement and the steps the Company took to analyze and negotiate a new coal supply arrangement was discussed in my Prefiled Direct Testimony, Exhibit No. MLJ-1CT, in the Company's 2007 GRC. The Agreement was provided in

[2] Montana Power sold its interests in Units 1 and 2 to PPL-Montana ("PPL") in 1999, and Western Energy was sold to Westmoreland Coal Company ("Westmoreland Coal") in 2001.

that proceeding as the Twelfth Exhibit to my Prefiled Direct Testimony, Exhibit No. (MLJ-13C).

IV. ENVIRONMENTAL REGULATIONS

Q. Please explain how recently adopted environmental regulations have affected PSE's management of Colstrip.

A. The operation and management of Colstrip has been influenced by the Montana Mercury Rule, which was adopted in October 2006 and promulgated as Administrative Rule of Montana 17.8.771. Beginning January 2010, the Montana Mercury Rule requires a significant reduction in the levels of mercury emitted from power plant flue gases. For Colstrip, the Montana Mercury Rule limits annual mercury emissions to no more than 0.9 pounds of mercury per trillion Btu of heat input, requiring the capture of up to 90% of the mercury in the coal.

Q. What steps have been taken to comply with the Montana Mercury Rule?

A. An application has been submitted to the Montana Department of Environmental Quality to modify Colstrip's Montana air quality permit to reflect proposed new mercury control measures and strategies and add the maximum permitted mercury emission rate. A continuous emission monitor ("CEM") has been installed on each unit to measure mercury emissions. The mercury control equipment to be installed has been designed, specified and purchased, based on emissions

performance analyses performed during 2006-2008. This equipment will be installed in Fall 2009, and it must be operating no later than January 1, 2010.

Q. Please explain how the mercury emissions control equipment operates.

A. The mercury emissions control technology consists of equipment that will spray an oxidizing agent, calcium bromide, on the coal as it enters the boiler. Activated carbon sorbent is then injected into the flue gas between the air pre-heater and the scrubbers. The activated carbon absorbs the mercury, and the carbon-mercury mix is then removed in the scrubbers, along with other particulates and sulfur dioxide gases. The CEMs provide a continuous record of actual stack emissions. Colstrip will begin using the calcium-bromide injection and activated carbon sorbent for system demonstration and tuning in late 2009. The units must operate in compliance with the Montana Mercury Rule beginning January 1, 2010.

Q. How much does PSE estimate the emissions control equipment will cost?

A. The initial estimate of PSE's share of costs for calcium bromide and activated carbon in 2010 is $4.53 million for Units 1 and 2 and $4.84 million for Units 3 and 4. PSE has included these costs in its power cost projections in this proceeding.

Q. Have costs related to Colstrip been affected by any other legislative or court proceedings?

A. Yes, in 2008 PSE and other Colstrip owners resolved a claim for additional royalties and taxes related to the transport of coal to Units 3 and 4. PSE and other Colstrip owners also settled a civil claim regarding water leakage from plant ponds.

Q. Please describe the royalty and tax settlements.

A. After exhausting the administrative appeals process, settlement agreements were reached with the Minerals Management Service of the U. S. Department of the Interior and the Montana Department of Revenue by agreeing to pay portions of past and future royalties and taxes on the revenue associated with coal transportation. A portion of the increased taxes and royalties will be paid by the coal supplier and the balance by PSE and the other coal purchasers. Future royalties and taxes are included in my estimates of annual variable costs.

Q. Please describe the resolution of claims relating to the civil proceeding that occurred in 2008.

A. In May 2003, approximately 50 plaintiffs brought a consolidated action against PSE and other owners of the Colstrip plant. The action became known as the Ankney litigation. The complaint alleged that (1) seepage from wastewater ponds caused ground water contamination and threatened to contaminate domestic water wells and (2) seepage from the raw water supply pond caused differential settlement and structural damage to buildings and toxic mold. The Third Exhibit

to my Prefiled Direct Testimony, Exhibit No.___(MLJ-4), is a memorandum that provides additional background with respect to the nature of the lawsuit and the settlement that was reached.

Q. How much of the settlement amount stated above is PSE requesting to recover in rates in this proceeding?

A. PSE requests authority to defer the Colstrip settlement payment in Account 182.3 – Other Regulatory Assets. Interest would accrue on the deferred balance net of deferred federal income tax associated with the payment at the Company's authorized net of tax rate of return. The Company requests that the Commission authorize amortization of the deferred balance over a five-year period, commencing when the Colstrip owners have determined that insurance recoveries have been exhausted.

Q. Does that conclude your testimony?

A. Yes, it does.