

**EXHIBIT NO. \_\_\_(JAP-1T)**  
**DOCKET NO. UE-09\_\_\_/UG-09\_\_\_**  
**2009 PSE GENERAL RATE CASE**  
**WITNESS: JON A. PILIARIS**

**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**  
**JON A. PILIARIS**  
**ON BEHALF OF PUGET SOUND ENERGY, INC.**

**MAY 8, 2009**

**PUGET SOUND ENERGY, INC.**

**PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF  
JON A. PILIARIS**

**CONTENTS**

I. INTRODUCTION .....1

II. CLASSIFICATION OF ELECTRIC PRODUCTION AND  
TRANSMISSION COSTS.....3

    A. Background Regarding the Classification of Electric Production  
    Costs.....3

    B. Overview of the Company’s Peak Credit Calculation.....5

III. CONSERVATION PHASE-IN ADJUSTMENT .....18

IV. CONCLUSION.....25

1 **PUGET SOUND ENERGY, INC.**

2 **PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF**  
3 **JON A. PILIARIS**

4 **I. INTRODUCTION**

5 **Q. Please state your name and business address.**

6 A. My name is Jon A. Piliaris. I am employed as a Regulatory Consultant in Pricing  
7 and Cost of Service with Puget Sound Energy, Inc. ("PSE" or the "Company").  
8 My business address is 10885 NE Fourth Street, Bellevue, WA 98009-9734.

9 **Q. Have you prepared an exhibit describing your education, relevant**  
10 **employment experience and other professional qualifications?**

11 A. Yes, I have. It is Exhibit No. \_\_\_\_ (JAP-2).

12 **Q. What is the purpose of your testimony?**

13 A. My testimony presents the classification of the Company's electric production  
14 costs within its cost of service analysis. I also present the proposed  
15 implementation of a new adjustment to restate weather-normalized test year loads  
16 of retail natural gas and electric customers to reflect the phase-in of the  
17 Company's conservation programs during the test year in this proceeding  
18 (calendar year 2008). These support the proposed cost of service analysis, rate

1 spread and rate design presented in the Prefiled Direct Testimonies of David Hoff,  
2 Exhibit No. \_\_\_\_ (DWH-1T), and Janet Phelps, Exhibit No. \_\_\_\_ (JKP-1T). Please  
3 see the Prefiled Direct Testimonies of John H. Story Exhibit No. \_\_\_\_ (JHS-1T),  
4 and Janet Phelps, Exhibit No. \_\_\_\_ (JKP-1T), for the impact of these proposals on  
5 pro forma revenues.

6 **Q. Please summarize your testimony.**

7 A As detailed below, I have updated the peak credit method used by the Company in  
8 its last general rate case to reflect the implications of current planning  
9 assumptions and costs.<sup>1</sup> Based on PSE's proposed peak credit method and  
10 updated assumptions, 21 percent of electric production and transmission costs are  
11 classified as demand-related. This compares with 28 percent of electric  
12 production and transmission costs being classified as demand-related using the  
13 method applied in PSE's most recent general rate case.

14 In addition, I present PSE's proposal to restate weather-normalized test year loads  
15 of retail natural gas and electric customers to reflect the phase-in of conservation  
16 achieved by the Company during the test year. This restating adjustment reduces  
17 test year electric loads by 124 million kWh and test year natural gas loads by two  
18 million therms.

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<sup>1</sup> The peak credit method divides virtually all of the Company's electric production, transmission and high-voltage distribution costs into demand and energy components. As a result, almost 80% of the entire electric revenue requirement in this case has been classified into demand and energy using this method.

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**II. CLASSIFICATION OF ELECTRIC PRODUCTION AND TRANSMISSION COSTS**

**A. Background Regarding the Classification of Electric Production Costs**

**Q. Please describe the methods used by the Company in the last five years to classify electric production and transmission costs into energy and demand components in its electric cost of service studies.**

A. The method used to classify electric production and transmission<sup>2</sup> costs has roots dating back nearly thirty years.<sup>3</sup> The Washington Utilities and Transportation Commission ("Commission" or "WUTC") last performed a detailed review of the classification of the Company's production and transmission costs in 1992. In 1992, the Commission ordered the Company to continue to use the peak credit method to divide electric production and transmission costs into demand and energy components.<sup>4</sup>

The peak credit method classifies the Company's electric production costs, regardless of the type of generating resource, as well as transmission costs, as either energy-related or demand-related, based on the ratio of the cost of a proxy

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<sup>2</sup> The Company classifies virtually all transmission and high-voltage distribution using the peak credit method.  
<sup>3</sup> The Company used the "peak credit" method in Cause U-82-38. However, that method differs from the current implementation, which is substantially in the form approved in the 1992 Order.  
<sup>4</sup> See WUTC Docket Nos. UE-920433, UE-920499 and UE-921262 (consolidated), Ninth Supplemental Order on Rate Design Issues, at 7 ("1992 Order"). The Commission also reaffirmed the use of peak credit for the allocation of all transmission. *See id.* at 10.

1 peaking generating resource to the cost of a proxy baseload generating resource.  
2 The numerator and denominator of the ratio are expressed in \$/kW-year. This  
3 factor, based on an analysis of generation resources only, is also applied to  
4 transmission under the theory that transmission lines, including high-voltage  
5 distribution lines, are constructed to deliver the energy and capacity provided by  
6 generating plant, and in the same proportion as it is being provided.

7 **Q. Aside from updating for new cost and resource assumptions in its integrated**  
8 **resource plans, please describe any significant modifications of the method**  
9 **used by the Company to classify electric production and transmission costs**  
10 **in its electric cost of service studies in the last five years.**

11 A. In the last five years, the Company has filed three general electric rate cases:  
12 Docket Nos. UE-040641, UE-060266 and UE-072300. Over the course of these  
13 three rate cases, the peak credit assumptions related to the number of hours of  
14 peaking resource operation, peaking resource fuel type, peak-period fuel prices  
15 and the share of peaking resource capacity costs included in the peak credit have  
16 all been modified.

17 In the 2004 general rate case, the peak credit calculations assumed that the  
18 peaking resource operated 200 hours per year. In the 2006 and 2007 general rate  
19 cases, the calculations assumed that the peaking resource operated 75 hours per  
20 year.

1 In the 2004 general rate case, the peak credit calculations assumed that the  
2 peaking resource operated for 150 hours with natural gas and 50 hours with fuel  
3 oil. In the 2006 and 2007 general rate cases, the calculations assumed that the  
4 peaking resource operated exclusively with natural gas, at prices adjusted to  
5 reflect its higher cost during periods of cold weather.

6 Finally, in the 2004 general rate case, the peak credit calculations included 50  
7 percent of the capital and fixed operations and maintenance (“O&M”) costs of the  
8 peaking resource. In the 2006 and 2007 general rate cases, the peak credit  
9 calculations included 100 percent of these costs.

10 **B. Overview of the Company’s Peak Credit Calculation**

11 **Q. Has the Company proposed any further modifications of the peak credit**  
12 **method in this rate case?**

13 A. Yes. The Company proposes three modifications to better reflect the relative cost  
14 of capacity in its current electric resource portfolio. The most significant of these  
15 modifications is the Company's proposal to add emissions costs to the peak credit  
16 calculation for the first time. Additionally, the Company proposes to eliminate  
17 the fuel and variable O&M costs associated with the peaking resource in the peak  
18 credit calculation and apply the reserve requirement to the baseload resource.

19 **Q. What is the result of the Company's proposed peak credit calculation?**

1 A. Under PSE's proposed method, 21 percent of electric production and transmission  
2 costs are classified as demand-related. Please see pages one through three of the  
3 Second Exhibit to my Prefiled Direct Testimony, Exhibit No. \_\_\_\_ (JAP-3C), for  
4 the supporting calculations.

5 **Q. You say the peak credit calculation incorporates emission costs for the first**  
6 **time. Why did PSE decide to add these costs at this time?**

7 A. The peak credit method relies on forward-looking assumptions used by the  
8 Company in planning its power supply portfolio. Further, emissions costs have  
9 become a more significant factor in the cost of these portfolios since the last rate  
10 case. While there continues to be uncertainty surrounding the ultimate way in  
11 which greenhouse gases will be regulated, since the Company's last general rate  
12 case, there has been a greater recognition that some form of regulation will apply  
13 in the future. Washington State, as well as many others, currently has laws in  
14 place that set goals for limiting greenhouse gas emissions.<sup>5</sup> In fact, according to  
15 the Center for Climate Strategies, 26 states currently have climate plans  
16 completed, and five more states have plans underway.<sup>6</sup>

17 Moreover, the passage of federal climate change legislation appears more likely

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<sup>5</sup> See RCW 70.235.020 for Washington State's emissions goals. A survey of other states' goals can be found on the website of the Pew Center on Global Climate Change ([http://www.pewclimate.org/what\\_s\\_being\\_done/in\\_the\\_states/emissionstargets\\_map.cfm](http://www.pewclimate.org/what_s_being_done/in_the_states/emissionstargets_map.cfm)).

<sup>6</sup> See <http://www.climatestrategies.us/>.



1 than it has been in recent years. The urgency of this federal legislation has  
2 heightened with a recent proposed ruling of the Environmental Protection Agency  
3 ("EPA"),<sup>7</sup> which concludes "greenhouse gases contribute to air pollution that may  
4 endanger public health or welfare."<sup>8</sup> If this rule is finalized in its current form, it  
5 will likely lead to some form of regulation of greenhouse gases. However, the  
6 EPA is on record as noting that "both President Obama and Administrator  
7 Jackson have repeatedly indicated their preference for comprehensive legislation  
8 to address this issue...."<sup>9</sup>

9 With the heightened state of interest in controlling greenhouse gas emissions at  
10 the state and federal levels, and consistent with the recognition of future  
11 emissions costs in its resource planning, the Company believes the time is right to  
12 introduce these costs into the peak credit methodology.

13 **Q. What is the source of the emission cost forecasts used in the peak credit**  
14 **calculations?**

15 A. The source of the emission cost forecasts used in the peak credit calculations is  
16 the Company's forthcoming Integrated Resource Plan ("IRP"). These costs were  
17 presented to the 2009 IRP Advisory Group, which includes Commission staff and  
18 Public Counsel Section of the Washington State Office of the Attorney General

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<sup>7</sup> Docket No. EPA-HQ-OAR-2009-0171, " *Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act*".

<sup>8</sup> Press release issued by the EPA on April 17, 2009.

<sup>9</sup> *Id.*

1 ("Public Counsel"). The Company made this presentation on October 2, 2008.  
2 Specifically, the peak credit calculations in the Company's proposal use the  
3 "reference case" from this presentation.

4 **Q. How would removing emissions costs change the Company's proposed peak**  
5 **credit result?**

6 A. Emissions costs have a significant effect on the peak credit results in this case.  
7 Removing emissions costs from the Company's proposed peak credit method  
8 would increase the percentage of demand-related electric production and  
9 transmission costs from 21 percent<sup>10</sup> to 27 percent. Pages four through six of the  
10 Second Exhibit to my Prefiled Direct Testimony, Exhibit No. \_\_\_(JAP-3C),  
11 provide calculations that remove emissions costs from the Company's proposed  
12 peak credit method.

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<sup>10</sup> See pages one through three of the Second Exhibit to my Prefiled Direct Testimony, Exhibit No. \_\_\_(JAP-3).

1 **Q. What is the rationale for eliminating the fuel and variable O&M costs**  
2 **associated with the peaking resource in the peak credit calculation?**

3 A. PSE has modified the calculation to be more consistent with a strict interpretation  
4 of the costs associated with meeting peak demands. As with other methods for  
5 classifying electric production costs, the purpose of the peak credit method is to  
6 determine how much of a utility's electric production costs are associated with  
7 meeting the peak demand of customers versus meeting their energy requirements.  
8 The peak credit method models this relationship by dividing the cost of a proxy  
9 peaking resource by the cost of a proxy baseload resource. The result is the  
10 proportion of electric production costs estimated to be demand-related. In the  
11 past, the cost of the proxy peaking resource included the cost of operating the  
12 resource to meet system demands over an assumed number of hours during the  
13 year. PSE believes these operating costs are not, strictly speaking, costs  
14 associated with meeting peak demand, and thus should be removed.

15 Implicit in the peak credit calculation is the assumption that the peaking resource  
16 costs should be a function of demand only and the baseload resource costs are a  
17 function of both demand and energy. Multiplying the ratio of the costs of these  
18 two resources by the Company's electric production costs, which are also a  
19 function of demand and energy, produces the amount of the Company's electric  
20 production costs that is considered to be demand-related. This can be put into a  
21 simple formula, as follows:

1 
$$\left( \frac{PeakingCosts(kW)}{BaseloadCosts(kW, kWh)} \right) \times EmbeddedPowerCosts(kW, kWh) = DemandCosts(kW)$$

2 In the 1992 Order, the Commission noted "[d]emand-related costs vary with  
3 kilowatt (kW) demand imposed by the customer" and "[e]nergy-related costs vary  
4 with the energy or kilowatt-hours (kWh) that the utility provides."<sup>11</sup> Note that the  
5 only difference between the measurement of demand (kW) and energy (kWh) is  
6 the element of time (in this case, hours). Therefore, to be strictly consistent with  
7 these definitions, costs that vary with the hours of operation must be removed  
8 from the estimation of the cost of the peaking resource to properly carry out the  
9 purpose of the peak credit method (*i.e.*, to identify demand-related costs).

10 In peak credit calculations made in past rate cases, the hours of operation  
11 influenced the level of variable O&M and fuel costs incurred by the peaking  
12 resource. Since these costs vary with the hours of operation and the peaking  
13 resource should only reflect demand-related costs, PSE proposes to remove these  
14 costs from the peak credit calculation.

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<sup>11</sup> See the 1992 Order at 7.

1 **Q. Is the removal of the peaking resource's variable O&M and fuel costs**  
2 **consistent with the Company's most recent Integrated Resource Plan**  
3 **("IRP")?**

4 A. Yes, it is. The IRP separately identifies the Company's capacity and energy  
5 requirements. To the extent that the IRP forecasts the acquisition of a peaking  
6 resource, that acquisition addresses a capacity need. To the extent that the IRP  
7 forecasts the operation of a peaking resource, the operation of that resource  
8 addresses an energy need.

9 **Q. Should the treatment of the peaking resource in the peak credit calculation**  
10 **reflect the actual (or planned) operation of the Company's peaking**  
11 **resources?**

12 A. No. How much or how often the peaking resource operates is irrelevant for the  
13 determination of demand-related costs in the peak credit calculation.  
14 Appropriately constricted, the peak credit method isolates costs associated with  
15 meeting the peak demand, and does not include any energy associated with  
16 meeting that peak. Electric production costs that vary with hours of operation are  
17 appropriately classified as energy-related, rather than demand-related.

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1 **Q. How would the Company's proposed peak credit change if the peaking**  
2 **resource's fuel and variable O&M costs were included, as they were in PSE's**  
3 **most recent general rate case?**

4 A. Including these fuel and variable O&M costs would increase the Company's  
5 proposed peak credit result by one percentage point, with 22 percent of the  
6 Company's electric production and transmission costs calculated to be demand-  
7 related. Please see pages seven through nine of the Second Exhibit to my Prefiled  
8 Direct Testimony, Exhibit No. \_\_\_\_ (JAP-3C), for the supporting calculations.

9 **Q. Why propose to change the methodology in this case?**

10 A. As will be shown later in my testimony, the parity percentages<sup>12</sup> of half of the  
11 customer classes in the Company's cost of service model are unaffected by this  
12 one percentage point change in the peak credit result. For the remaining classes,  
13 their parity percentages change by only one percentage point. Because removing  
14 peaking resource operating costs from the peak credit calculation has little  
15 practical ratemaking implications, PSE has decided to be faithful to the strict  
16 theory of peak credit. PSE is also proposing this change to reduce the amount of  
17 time spent addressing matters that have little ratemaking effect.

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<sup>12</sup> For an explanation of parity percentages, please see the Prefiled Direct Testimony of David Hoff, Exhibit No. \_\_ (DWH-1T).

1 **Q. You mentioned earlier that PSE is proposing to apply the reserve**  
2 **requirement to the baseload resource. Why is the Company making this**  
3 **proposal?**

4 A. In recent rate cases, the Company adjusted the cost of the peaking resource in the  
5 peak credit calculation to reflect a reserve requirement. This reserve requirement  
6 reflects the fact that a portion of the region's generating resource base must be  
7 available for outage contingencies. In the area served by PSE, the Western  
8 Electricity Coordinating Council ("WECC") sets the reserve requirement.<sup>13</sup> For  
9 thermal generation in the WECC region, this reserve requirement is currently  
10 seven percent.

11 Since the baseload resource in the peak credit calculation would be subject to the  
12 same reserve requirement as the peaking resource, it is appropriate to apply the  
13 reserve requirement to both resources. Accordingly, PSE proposes to reflect this  
14 reserve requirement in the cost of the baseload resource in the peak credit  
15 calculation as well as in the cost of the peaking resource.

16 **Q. How much does this change in assumptions affect the Company's proposed**  
17 **peak credit?**

18 A. Changing the reserve requirement for the baseload resources has little effect on

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<sup>13</sup> The WECC is one of eight regional councils of the North American Electric Reliability Corporation ("NERC"). NERC is largely responsible for ensuring the reliability of the bulk power system in North America.

1 the percentage of demand-related electric production and transmission costs  
2 calculated for this case. As with the previously discussed change, the peak credit  
3 increases to 22 percent. Even though this change has little effect on the peak  
4 credit result in this case, PSE believes that applying the reserve requirement to the  
5 baseload resource appropriately reflects the effect of the reserve requirement on  
6 the cost of the baseload resource, and therefore should be included in the peak  
7 credit calculation. Pages 10 through 12 of the Second Exhibit to my Prefiled  
8 Direct Testimony, Exhibit No. \_\_\_\_ (JAP-3C), provide calculations that  
9 demonstrate the effect of removing the reserve requirement from the cost of the  
10 baseload resource in the Company's proposed peak credit method.

11 **Q. What would be the effect on the Company's peak credit results if the**  
12 **Company had used the same method of calculation as in PSE's 2007 general**  
13 **rate case ("2007 GRC")?**

14 A. Under the method of calculation used in PSE's 2007 GRC, updated for new costs  
15 and resource assumptions, 28 percent of electric production and transmission  
16 costs would be classified as demand-related. Please see pages 13 through 15 of  
17 the Second Exhibit to my Prefiled Direct Testimony, Exhibit No. \_\_\_\_ (JAP-3C),  
18 for the supporting calculations.

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1 **Q. Please explain the difference between these results and those experienced in**  
2 **PSE's 2007 GRC?**

3 A. In the 2007 GRC, the peak credit method resulted in 26 percent of electric  
4 production and transmission costs being demand-related. The increase in the  
5 percentage of demand-related electric production and transmission costs to 28  
6 percent, using the method from the 2007 GRC, is solely a function of the revised  
7 input assumptions. The revised assumptions in this case for variable operations  
8 and maintenance, reserve requirement, fixed charge rates and baseload capacity  
9 factor put downward pressure on the peak credit results. However, they do not  
10 exert enough downward pressure to compensate for the effects of the new  
11 assumptions for natural gas prices, capital costs and fixed O&M costs, which  
12 increase the percentage of demand-related power production costs in this case.  
13 The new assumptions for the generating resource heat rates and the peak gas price  
14 adjustment have virtually no impact on the peak credit results.

15 **Q. What effect do the various peak credit results discussed in your testimony**  
16 **have on the parity percentages of the Company's customers?**

17 A. Table 1, below, compares the parity percentages associated with the Company's  
18 proposal with the methodology from its 2007 GRC (updated for current  
19 assumptions), with the Company's proposal without emission costs, and with the  
20 Company's proposal with the peaker operating for 75 hours or with the reserve  
21 requirement removed from the baseload resource. The range of parity

1 percentages between customer classes is smallest under the Company's proposal.  
 2 Across these alternatives, the greatest range in parity percentages for any  
 3 individual customer class does not exceed 6 percentage points. The ratemaking  
 4 implications of these parity percentages are discussed more fully in the Prefiled  
 5 Direct Testimony of David Hoff, Exhibit No. \_\_\_(DWH-1T).

6 **Table 1 – Electric Parity Percentages Under Alternative Peak Credit Methods and**  
 7 **Assumptions**

Parity Percentages in Cost of Service Analysis					
Customer Class	Rate Schedule	Company Proposal	Company Proposal w/Peaker Operation <sup>1</sup>	Company Proposal Without Emissions	2007 General Rate Case Method
Residential	7	95%	95%	93%	93%
General Service, < 51 kW	24	107%	107%	108%	108%
General Service, 51 - 350 kW	25	112%	113%	114%	115%
General Service, >350 kW	26	105%	105%	108%	108%
Primary Service	31/35/43	109%	110%	114%	114%
Campus Rate	40	89%	89%	92%	93%
High Voltage	46 / 49	98%	99%	103%	104%
Lighting Service	51 - 59	109%	109%	110%	111%
Choice/Retail Wheeling	448 / 449	94%	95%	98%	99%
Firm Resale/Special Contract	5	88%	88%	89%	89%
System Total / Average		100%	100%	100%	100%

<sup>1</sup> The results are the same for the case where the baseload resource has no reserve requirement.

8 **Q. Earlier in your testimony, you highlighted the impact of emissions costs on**  
 9 **the peak credit results in the Company's proposal. Are there are any other**  
 10 **inputs to the peak credit calculation that have a significant impact on the**  
 11 **results?**

1 A. One input with significant impact on the peak credit results is the natural gas price  
2 forecast. Over the past year, spot prices for natural gas have ranged from almost  
3 \$12 per MMBtu to about \$3 per MMBtu at the Sumas trading hub. Mirroring the  
4 recent volatility in natural gas prices, the Company's forthcoming IRP includes a  
5 wide range of natural gas price projections. Using the highest and lowest natural  
6 gas price forecasts in the Company's forthcoming IRP, all other things being  
7 equal, produces peak credit results that range from 15 percent to 24 percent. Peak  
8 credit calculations that reflect these high and low natural gas price forecasts are  
9 provided in pages 16 through 21 of the Second Exhibit to my Prefiled Direct  
10 Testimony, Exhibit No. \_\_\_\_ (JAP-3C).

11 **Q. Are there are any other factors related to the peak credit calculation that**  
12 **have a significant impact on the results?**

13 A. Yes, there are. Although this has not been as much of an issue in recent cases, the  
14 assumed capacity factor of the baseload resource has been a contested input to the  
15 peak credit calculation. While the Commission has accepted the use of a baseload  
16 capacity factor consistent with assumptions in the Company's IRP, various parties  
17 in past rate cases have proposed that the capacity factor for the baseload resource  
18 should be consistent with the Company's system load factor. Replacing the  
19 current peak credit assumption for the baseload capacity factor with the  
20 Company's current system load factor of roughly 55 percent, all other things  
21 being equal, would produce a peak credit result of 31 percent in this case. Peak

1 credit calculations that reflect this capacity factor assumption are provided in  
2 pages 22 through 24 of the Second Exhibit to my Prefiled Direct Testimony,  
3 Exhibit No. \_\_\_\_ (JAP-3C).

4 **III. CONSERVATION PHASE-IN ADJUSTMENT**

5 **Q. Would you briefly describe the Company's proposed conservation phase-in**  
6 **adjustment?**

7 A. PSE's proposed conservation phase-in adjustment restates the weather-  
8 normalized test year loads of the Company's retail natural gas and electric  
9 customers. This adjustment mitigates certain ratemaking consequences of the  
10 phase-in of Company-sponsored conservation that occurred during the test year.  
11 This adjustment is calculated individually for each month and each customer  
12 class. It is based on the difference between the total test year Company-  
13 sponsored conservation achieved by the end of the year and the year-to-date  
14 conservation achievement in each month of the test year. This adjustment is then  
15 applied to the weather-normalized retail natural gas and electric loads for each  
16 class and in each month of the test year to reflect the impact of conservation  
17 achieved in the test year on rate year loads.

18 **Q. Why is this adjustment necessary?**

19 A. The Company's rates in this case are developed using data from, or adjusted to,  
20 the 12-month period ending December 31, 2008. Implicit in the use of historical

1 data as the basis for setting future rates is the assumption that the relationship  
2 between the Company's costs and revenues in the test year reasonably represents  
3 the relationship between costs and revenues expected in the rate year. If this were  
4 not the case, then the historical year data would not provide a suitable basis upon  
5 which to set the Company's rates.

6 To the extent that differences in the relationship between costs and revenues arise  
7 between the test year and the rate year, adjustments to the historical test year data  
8 are necessary so that this relationship is more representative of the conditions  
9 under which the proposed rates will be in effect.

10 Along these lines, Company-sponsored conservation measures are not all  
11 implemented at the beginning of the test year. Instead, the Company phases in  
12 conservation measures over the course of the test year, and these measures only  
13 reduce loads for a portion of the test year. However, measures implemented in  
14 the test year will be in place and reducing loads throughout the rate year.

15 Therefore, at a minimum, test year loads must reflect conservation achieved  
16 through the end of the test year to improve the Company's revenue-to-cost  
17 relationship between the test year and the rate year.

18 **Q. Is there precedent for this type of adjustment?**

19 A. Yes, the proposed conservation phase-in adjustment falls within a category of pro  
20 forma adjustments commonly referred to as "annualizing adjustments."

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According to Accounting for Public Utilities:

[a]nnualizing adjustments recognize that some conditions existing during segments of the period are ongoing and must be spread over the entire period....The key ingredient in the annualizing adjustment considerations is the changing level of costs (or revenues) for the same level of operations.<sup>14</sup>

Because the conservation phased in over the test year will be ongoing throughout the rate year and, for the same level of operations, the Company will experience changes to its revenues (and costs), the conservation phase-in adjustment falls within this category of generally-accepted ratemaking adjustments.

In fact, Accounting for Public Utilities specifically calls out the impact of conservation on loads as an instance where such an adjustment may be appropriate. It states, in part:

When using historic test year data, the sales volumes must be examined for conditions that are not representative of the period [over which rates are to be in effect]. The conditions that may produce recorded sales that are not representative include...significant changes in usage patterns of existing customers (e.g., *effective conservation efforts*).<sup>15</sup> (emphasis added)

**Q. Can you provide an example where PSE currently uses another annualizing adjustment?**

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<sup>14</sup> Robert L. Hahne and Gregory E. Aliff, Matthew Bender & Company, Inc., Accounting for Public Utilities § 7.05 (2006).  
<sup>15</sup> *Id.* at § 7.07.

1 A. A simple example is the way the Company restates test year revenues by  
2 adjusting for the difference between rates in effect at the end of the test year and  
3 rates in effect each month during the test year. Adjusting test year revenues for  
4 rate changes over the course of the test year helps to maintain the Company's  
5 revenue-to-cost relationship between the test year and rate year.

6 **Q. Is there other support for this adjustment?**

7 A. Yes. In the American Recovery and Reinvestment Act of 2009 ("the Act"),  
8 Congress directed state governors to provide the Secretary of the U.S. Department  
9 of Energy with assurances that a number of conditions have occurred in order for  
10 their states to secure additional energy efficiency block grant funding. One such  
11 assurance is described as follows:

12 The applicable State regulatory authority will seek to implement...  
13 a general policy that ensures that *utility financial incentives are*  
14 *aligned with helping their customers use energy more efficiently*  
15 ....<sup>16</sup> (emphasis added)

16 As highlighted above, one of Congress' objectives in the Act is to better align  
17 utility and consumer incentives for implementing conservation. Acknowledging  
18 the fact that Company-sponsored conservation does not all happen at the  
19 beginning of the test year, but is phased in over the course of the year, helps  
20 improve this alignment and achieves an outcome more in the public interest.

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<sup>16</sup> American Recovery and Reinvestment Act of 2009, Section 410, Additional State Energy Grants.

1 Section 80.28.260 of the Revised Code of Washington provides additional  
2 support. It states, in part:

3 The commission shall consider and may adopt other policies to  
4 protect a company from a reduction of short-term earnings that  
5 may be a direct result of utility programs to increase the efficiency  
6 of energy use.

7 As in the Act, Washington State law provides policy guidance for removing  
8 financial disincentives for companies under the Commission's jurisdiction to  
9 implement programs that increase energy efficiency. Again, the Conservation  
10 Phase-In Adjustment would be consistent with this legislative priority and  
11 therefore be in the public interest.

12 **Q. How have you calculated the proposed Conservation Phase-In Adjustment?**

13 A. This adjustment is calculated separately for the Company's electric and natural  
14 gas loads. It was also calculated separately for each class of customer in each  
15 month of the test year. This is particularly important when estimating the impact  
16 of changes in load on the Company's revenues, since different classes of  
17 customers contribute differently to the Company's revenues and the timing of the  
18 load could have consequences on test year revenues.

19 The calculation of this adjustment relies upon data provided by the Company's  
20 Energy Efficiency Services Department ("EES"). The adjustment was calculated  
21 by taking the difference between the Company-sponsored test year conservation  
22 and the year-to-date conservation achieved in each month of the test year for each



1 customer class.<sup>17</sup>

2 For example, the Company-sponsored conservation achieved by its residential  
3 electric customers during the test year was reported to have reached a little over  
4 12 million kWh per month by the end of the year.<sup>18</sup> However, these programs  
5 were phased in during the year. At the end of January 2008, this figure was  
6 slightly less than one million kWh per month. Thus, test year loads in January  
7 must be adjusted downward by the difference between test year conservation that  
8 would have been achieved had measures been in place all year and actual  
9 conservation levels achieved at the end of the month. Therefore, for January, the  
10 adjustment for residential electric customers is approximately 11 million kWh.  
11 By the end of February 2008, the year-to-date conservation savings for residential  
12 electric customers grew to a little under 2 million kWh per month,<sup>19</sup> resulting in a  
13 10 million kWh adjustment in February. Similar calculations were performed for  
14 each of the subsequent months. Summing across all months of the test year, the  
15 resulting annual adjustment for residential electric customers is approximately 63  
16 million kWh. Similar calculations were performed for the Company's other  
17 natural gas and electric customers. The Third Exhibit to my Prefiled Direct

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<sup>17</sup> Using this methodology, the adjustment would be zero if all of the Company-sponsored test year conservation were achieved at the beginning of the test year.

<sup>18</sup> EES routinely reports conservation savings in annual amounts. It does not provide a profile of these savings across the year. So, for lack of better information, monthly savings were assumed to be one-twelfth of the annual savings.

<sup>19</sup> This includes the conservation achieved in January and February.

1 Testimony, Exhibit No. \_\_\_\_ (JAP-4), provides a summary of these calculations.

2 **Q. Is the data used to calculate the proposed adjustments known and**  
3 **measurable?**

4 A. Yes. The Conservation Resources Advisory Group ("CRAG") carefully vets the  
5 conservation savings. The Company records when the savings are implemented.  
6 The actual calculation of the adjustment is simple math.

7 **Q. Are all of the Company's reported test year conservation savings included in**  
8 **the calculation of this adjustment?**

9 A. No, they are not. This adjustment excludes over 24 million kWh of annual  
10 aggregate conservation savings associated with the Company's participation in the  
11 Northwest Energy Efficiency Alliance in 2008. Due to the nature of the  
12 Alliance's programs, an attribution of these savings to customer classes is not  
13 available. Since customer class attribution is necessary for a pro-forma revenue  
14 adjustment, the Conservation Phase-In Adjustment excludes these savings.

15 **Q. What is the result of the Conservation Phase-In Adjustment on test year**  
16 **loads?**

17 A. This adjustment results in a reduction of two million therms in weather-  
18 normalized retail natural gas sales and 124 million kWh in weather-normalized  
19 retail electric sales over the test year.

1 **IV. CONCLUSION**

2 **Q. Does this conclude your testimony?**

3 **A. Yes.**