

EXHIBIT NO. ___(JAP-1T)
DOCKET NO. UE-13___
2013 PSE PCORC
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-13___

**PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF
JON A. PILIARIS
ON BEHALF OF PUGET SOUND ENERGY, INC.**

APRIL 25, 2013

PUGET SOUND ENERGY, INC.

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

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1 **PUGET SOUND ENERGY, INC.**

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

4 **I. INTRODUCTION**

5 **Q. Please state your name, business address, and present position with Puget**
6 **Sound Energy.**

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

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

12 A. Yes, I have. It is Exhibit No. ____ (JAP-2).

13 **Q. What topics are you covering in your testimony?**

14 A. My testimony describes how changes to PSE's Power Cost Rate¹ are allocated to
15 rate classes, the resulting impacts to customers and the derivation of the
16 temperature adjustments to energy sales used in this filing.

¹ PSE's Power Cost Rate is discussed in the Prefiled Direct Testimony of Katherine J. Barnard, Exhibit No. ____ (KJB-1T).

1 **Q. Please summarize the revenue impacts associated with this filing.**

2 A. The total revenue decrease resulting from this rate proposal is \$616,833,² an
3 average 0.03 percent decrease relative to the rates set in May 2012.

4 **II. RATE SPREAD AND DESIGN**

5 **Q. Please summarize how the proposed change to the Power Cost Rate will be**
6 **spread to customers.**

7 A. The Power Cost Adjustment Mechanism (“PCA”) requires that changes in rates
8 attributable to adjustments to the Power Cost Rate as a result of a power cost only
9 review be spread to customers based upon the peak credit methodology used in
10 computing the rate spread methodology in PSE’s most recent general rate case.
11 PSE's most recent general rate case was in 2011, Docket Nos. UE-111048 and
12 UG-111049 ("2011 GRC"). PSE applied the peak credit methodology used in its
13 2011 GRC to the change in total power costs shown on Exhibit No. ___(KJB-6) at
14 line 20 to determine the amount to be allocated to each rate class. This allocation
15 to rate class is shown on page one of the second exhibit to my prefiled direct
16 testimony, Exhibit No. ___(JAP-3). The allocated change in power cost is then
17 divided by test year pro forma kWh for each rate class to calculate the amount to
18 be charged to customers receiving service under each class on a cents/kWh basis.

² The slight difference between this amount and the change in total power costs shown in Exhibit No. ___(KJB-1T) is due to the rounding required in developing rates.

1 This rate calculation is shown on pages two through five of Exhibit No. ___(JAP-
2 3).

3 **Q. Please describe the peak credit methodology used to calculate the rate spread**
4 **methodology in the 2011 GRC.**

5 A. The peak credit methodology used in calculating the rate spread methodology in
6 PSE's 2011 GRC:

- 7 (i) classified 19 percent of generation and transmission costs on demand,
- 8 (ii) classified 81 percent of generation and transmission costs on energy,
- 9 (iii) allocated all demand costs (19 percent of generation and transmission
10 costs) to rate classes based on the contribution of the rate class to the
11 top 75 hours of system peak, and
- 12 (iv) allocated all energy costs (81 percent of generation and transmission
13 costs) to rate classes based on the contribution of the rate class to total
14 annual kWh sales.

15 This resulted in peak credit weighted allocation factors for each rate class, which
16 are shown in column (e) on page one of Exhibit No. ___(JAP-3). An example of
17 the calculation of such a factor follows: if the residential class represents 60
18 percent of the top 75 hours of system peak and 50 percent of the annual kWh
19 load, its peak credit weighted allocation factor would be $(19\% \times 60\% + 81\% \times$
20 $50\%)$, or 52 percent. As such, this class would be allocated 52 percent of PCA
21 costs.

1 **Q. Please describe page one of Exhibit No. ____ (JAP- 3), entitled “Calculation of**
2 **Schedule 95 Rate.”**

3 A. Page one of Exhibit No. ____ (JAP-3) presents the calculation of the Power Cost
4 Adjustment rate, Schedule 95, for each rate class.³ It describes and uses the
5 calculation of the weighted allocation factors used in the rate spread methodology
6 in the 2011 GRC. Exhibit No. ____ (JAP-3) then shows how those allocation
7 factors are used to allocate the change in power costs to each rate class. Finally, it
8 calculates the Schedule 95 rates for each class by dividing the allocated costs by
9 the weather adjusted kWh for each class for the test year.

10 **Q. Please describe page 2 of Exhibit No. ____ (JAP-3), entitled “Statement of**
11 **Pro forma and Proposed Revenues for Schedule 95.”**

12 A. Page two of Exhibit No. ____ (JAP-3) shows the pro forma and proposed revenue
13 under current and proposed rates based on test period billing determinants.
14 Column (a) shows the test year pro forma sales volumes for each rate class;
15 Column (b) shows total test year pro forma revenue produced at current rates
16 (effective May 14, 2012); and Column (c) shows the cents/kWh attributable to
17 adjustments to the Power Cost Rate to be allocated to each class. Total revenue
18 under the proposed rates is shown in Column (d), and the total change in revenue
19 due to the proposed change in the Power Cost Rate is shown in Column (e). The

³ The \$/kWh rate on this page for the lighting class is converted to a monthly \$/lamp charge on pages three through five of Exhibit No. ____ (JAP-3).

1 percentage impact of the proposed change on each class is shown in Column (f).

2 **Q. Please summarize the impacts of the proposed Schedule 95 rates.**

3 A. The impacts are summarized in the table below. The results show that the
4 percentage impacts are generally in the range of a 0.3 percent to 0.4 percent
5 decrease. Residential customers receive about half of the overall revenue
6 reduction. As shown on page six of Exhibit No.____(JAP-3), this translates into a
7 three cent per month reduction in residential customer bills.

8 **Table 1 – Summary of Impacts of Proposed Schedule 95 Rates by Class**

Rate Schedule	Revenue Impact	% Impact
Schedule 7	\$(328,020)	(0.030)%
Schedule 24	(74,935)	(0.030)%
Schedule 25/29	(82,194)	(0.031)%
Schedule 26	(55,779)	(0.035)%
Schedule 31/35/43	(38,205)	(0.032)%
Schedule 40	(20,371)	(0.040)%
Schedule 46/49	(14,998)	(0.035)%
Schedules 51-59	(2,119)	(0.012)%
Firm Resale	(211)	(0.061)%
Total	\$(616,833)	(0.030)%

1 **Q. Were PSE customers served in Jefferson County included in the calculation**
2 **of proposed Schedule 95 rates?**

3 A. No. PSE completed the sale of its distribution assets to the Jefferson County
4 Public Utility District No. 1 (“JPUD”) on March 31, 2013. As of April 1, 2013,
5 approximately 18,000 customers formerly served by PSE in Jefferson County are
6 now served by JPUD. As a result, the calculation of proposed Schedule 95 rates
7 in this filing excludes energy sales from these customers.

8 **Q. Has the Company prepared revised Schedule 95 (Power Cost Adjustment**
9 **Clause) tariff sheets to reflect the proposed adjustments to the Power Cost**
10 **Rate?**

11 A. Yes, revised tariff sheets for Schedule 95 are presented in Exhibit No. ___(JAP-
12 4). The revised Schedule 95 tariff sheets reflect the amounts calculated for each
13 rate class in Exhibit No. ___(JAP-3).

14 **III. TEMPERATURE ADJUSTMENT CALCULATIONS**

15 **Q. Has the test year pro forma energy sales in Exhibit No. ___(JAP-3) and the**
16 **system level load in Exhibit No. ___(KJB-6) been adjusted for temperature?**

17 A. Yes, the test year pro forma energy sales by rate class shown on each of Exhibit
18 No. ___(JAP-3) and at the system level in Exhibit No. ___(KJB-6) have been
19 adjusted for, and thus include, 121,982 MWh of temperature adjustment. This
20 amount is reduced to 113,565 MWh, to account for system line losses, before

1 being allocating to each of the applicable rate class.

2 **Q. How did the Company normalize the test year system-level delivered load for**
3 **temperature in this case?**

4 A. The temperature adjustment to test year system load was estimated by following
5 the same methodology and procedures performed for 2011 GRC. The
6 temperature adjustment of system load was estimated using model coefficients of
7 temperature-sensitivity. The model coefficients measure the relationship between
8 PSE's actual daily loads and temperatures recorded at Seattle-Tacoma
9 International Airport to adjust system-level delivered load (Generated Purchased
10 and Interchange, or GPI) for temperature. The key variables in the model are
11 heating degree days ("HDD") and cooling degree days ("CDD"), as well as daily
12 system loads. The model relies on data from the four-year period ending
13 September 30, 2012.

14 The temperature adjustment was calculated by multiplying the weather sensitivity
15 coefficients by the difference between the actual and normal HDDs and CDDs.
16 This process was repeated for each month of the test year for all of the HDD and
17 CDD variables included in the model. The monthly temperature adjustments
18 were added to actual system load to calculate the normalized system load in each
19 month. These loads were then added across the months to calculate the test year
20 temperature-normalized load.

1 **Q. What period was used to calculate “normal” temperature in this analysis?**

2 A. “Normal” temperature was calculated using temperature data compiled over the
3 30-year period from January 1982 through December 2011.

4 **Q. Were PSE customers served in Jefferson County included in this analysis?**

5 A. No. As noted earlier, these customers are now being served by JPUD. As a
6 result, the historical data used for modeling the temperature adjustment exclude
7 the energy sales and number of customers served by PSE in Jefferson County.

8 **Q. How did the Company calculate the class-specific temperature adjustments**
9 **to load?**

10 A. PSE used a three-step process to adjust rate class sales for the effects of
11 temperature. The first step was to develop a weather-sensitivity model to
12 characterize the relationship between daily temperature and load for each rate
13 class. The data period selected for modeling was the same four-year period used
14 for the system weather-sensitivity modeling. The second step was to use the class
15 model’s temperature variable coefficients to estimate each rate class’s relative
16 contribution to the temperature adjustment to system load, adjusted for losses.
17 The third step was to allocate the system temperature adjustment based on each
18 class’s relative contribution, as calculated in the previous step.

1 **Q. How did PSE derive class-specific revenue adjustments from the class-**
2 **specific temperature adjustments to energy sales?**

3 A. The class-specific revenue adjustments were calculated by multiplying the class-
4 specific temperature adjustments to energy sales by the tail-block energy rate
5 applicable for each rate class.

6 **Q. What are the results of this class-specific analysis?**

7 A. The results of this analysis are summarized by rate class in the table below.

8 **Table 2 - Temperature Adjustment to kWh and Revenue by Schedule**

Rate Schedule	kWh Adjustment	Revenue Adjustment
Schedule 7	(94,124,712)	\$ (10,014,399)
Schedule 24	(7,743,603)	(711,631)
Schedule 25	(6,078,880)	(399,466)
Schedule 26	(1,341,351)	(85,366)
Schedule 29	11,107	612
Schedule 31	(1,535,181)	(94,449)
Schedule 40	(2,185,745)	(126,525)
Schedule 43	(525,275)	(30,096)
Firm Resale	(41,522)	(1,459)
Total	(113,565,191)	\$ (11,462,779)

9 **IV. CONCLUSION**

10 **Q. Does that conclude your testimony?**

11 A. Yes, it does.