

**EXHIBIT NO. \_\_\_(PKW-1T)**  
**DOCKET NO. UE-14\_\_\_\_\_**  
**2014 PSE PCORC**  
**WITNESS: PAUL K. WETHERBEE**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY, INC.,**

**Respondent.**

**Docket No. UE-14\_\_\_\_\_**

**PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF  
PAUL K. WETHERBEE  
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**MAY 23, 2014**

**PUGET SOUND ENERGY, INC.**  
**PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF**  
**PAUL K. WETHERBEE**

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1 **PUGET SOUND ENERGY, INC.**

2 **PREFILED DIRECT TESTIMONY (CONFIDENTIAL) OF**  
3 **PAUL K. WETHERBEE**

4 **I. INTRODUCTION**

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

6 A. My name is Paul K. Wetherbee, and my business address is 10885 N.E. Fourth  
7 Street, Bellevue, Washington 98004. I am employed by Puget Sound Energy, Inc.  
8 (“PSE”) as a Director, Hydroelectric and Wind Resources & Asset Management.

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. \_\_\_(PKW-2).

12 **Q. Please summarize your prefiled direct testimony.**

13 A. This prefiled direct testimony addresses the following issues that affect the rate  
14 year in this proceeding, December 1, 2014 through November 1, 2015 (the “rate  
15 year”):

16 (i) PSE’s rate year production operations and maintenance  
17 (“O&M”) expense adjustments and projections for the  
18 hydroelectric and wind generation facilities, including  
19 O&M expenses required to meet FERC relicensing  
20 requirements during the rate year and,

21 (ii) Status of negotiations regarding the sale of the Electron  
22 Hydroelectric Project (the “Electron Project”).

1           **II.     PRODUCTION OPERATIONS AND MAINTENANCE COSTS**

2           **Q.     How has PSE prepared its forecast of hydroelectric and wind production**  
3           **O&M expense for the rate year?**

4           A.     PSE developed the rate year production O&M expense for hydroelectric and wind  
5           projects in a manner consistent with the development of O&M expenses in  
6           Docket UE-130617 *et al.* (“2013 PCORC”). For most plants, PSE utilizes test  
7           year O&M expense and makes certain pro forma adjustments as previously  
8           allowed by the Commission.

9           **Q.     What is PSE’s forecast of hydro and wind production O&M for the rate year?**

10          A.     Rate year hydro production O&M costs are forecast to be \$15.9 million, an  
11          increase of less than \$15,000 from the 2013 PCORC hydro production O&M  
12          costs of \$15.9 million. Rate year wind production O&M costs are forecast to be  
13          \$30.2 million, a decrease of \$1.7 million from the 2013 PCORC wind production  
14          O&M costs of \$31.9 million. Please see Exhibit No. \_\_\_(RJR-3) for the rate year  
15          production O&M costs. Please see the Prefiled Direct Testimony of Mr. Ronald J.  
16          Roberts, Exhibit No. \_\_\_(RJR-1CT), for a discussion of production O&M for the  
17          gas-fired generators.

18          **A.     Hydro Production O&M Costs**

19          **Q.     Please summarize the hydro production O&M costs.**

20          A.     Please see Table 1 below for a summary of hydro production O&M costs.

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**Table 1. Hydro Production O&M Costs**

<b>Resources</b>	<b>2013 PCORC</b>	<b>Test Year 1/1/13 - 12/31/13</b>	<b>Adjustments</b>	<b>2014 PCORC 12/1/14 - 11/30/15</b>	<b>2014 PCORC vs. 2013 PCORC</b>
Lower Baker	\$5,333,295	\$4,137,204	-	\$4,137,204	\$(1,196,091)
Upper Baker	\$2,338,297	\$4,299,468	-	\$4,299,468	\$1,961,171
Baker Licensing	\$3,635,532	\$3,011,106	\$(612,431)	\$2,398,675	\$(1,236,858)
Electron Project	\$1,770,334	\$2,009,672	-	\$2,009,672	\$239,338
Snoqualmie	\$2,161,851	\$2,446,632	-	\$2,446,632	\$284,781
Snoqualmie Licensing	\$642,910	\$354,693	\$250,634	\$605,327	\$(37,583)
<b>Hydro Total O&amp;M</b>	<b>\$15,882,219</b>	<b>\$16,258,775</b>	<b>\$(361,797)</b>	<b>\$15,896,978</b>	<b>\$14,759</b>

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**Q. What is the nature of the adjustments PSE has made to test year hydro production O&M expense?**

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A. PSE has adjusted test year hydro production O&M to reflect a reduction in test year O&M of \$361,797 due to lower rate year FERC relicensing costs associated with the Baker Project and the Snoqualmie Falls Project.

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**Q. Please describe the adjustment to reflect rate year FERC relicensing costs associated with the Baker Project and the Snoqualmie Falls Project.**

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A. The decrease in test year O&M licensing costs are a result of pro-formed costs to reflect the budgeted licensing O&M costs during the rate year. This is consistent with the treatment in the 2013 PCORC.

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**Q. Is there anything else regarding hydro operations that will impact the rate year?**

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A. Yes. Outages are scheduled to occur during the rate year at three of the four Baker Project units for replacement of certain components as described below:

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- (i) Upper Baker Unit 1 will be out of service for 55 days for governor replacement and annual maintenance;
- (ii) Upper Baker Unit 2 will be out of service for 69 days for governor replacement and annual maintenance; and
- (iii) Lower Baker Unit 4 will be out of service for 114 days to resolve vibrational issues as discussed in the prefiled direct testimony of Mr. Douglas S. Loreen, Exhibit No. \_\_\_(DSL-1T).

In addition, Lower Baker Unit 3 will be out of service for 14 days for routine annual maintenance. These outages impact rate year hydroelectric generation as reflected in the prefiled direct testimony of Mr. David E. Mills, Exhibit No. \_\_\_(DEM-1CT).

**B. Wind Production O&M Costs**

**Q. Please summarize the wind production O&M costs.**

A. Please see Table 2 below for a summary of wind production O&M costs.

**Table 2. Wind O&M Costs**

Resources	2013 PCORC	Test Year 1/1/13 - 12/31/13	Adjustments	2014 PCORC 12/1/14 - 11/31/15	2014 PCORC vs. 2013 PCORC
Hopkins Ridge + Expansion	\$7,378,425	\$4,844,081	\$283,562	\$5,127,642	\$(2,250,783)
Wild Horse	\$11,918,504	\$10,510,036	\$448,238	\$10,958,274	\$(960,230)
Wild Horse Expansion	\$1,591,996	\$1,586,244	\$68,200	\$1,654,444	\$62,448
Lower Snake River	\$10,964,812	\$12,645,372	\$(203,951)	\$12,441,421	\$1,476,608
<b>Wind Total O&amp;M</b>	<b>\$31,853,738</b>	<b>\$29,585,733</b>	<b>\$596,048</b>	<b>\$30,181,781</b>	<b>\$(1,671,956)</b>

1 **Q. What is the nature of the adjustments PSE has made to test year wind**  
2 **production O&M expense?**

3 A. PSE has made adjustments to test year wind production O&M that total \$596,048  
4 as described below:

5 (i) added \$518,099 to test year wind production O&M expense  
6 to reflect projected rate year royalty costs under the royalty  
7 contracts for the Hopkins Ridge, Wild Horse/Wild Horse  
8 Expansion, and Lower Snake River Phase I wind projects  
9 based upon projected rate year wind generation;

10 (ii) added \$626,128 to test year wind production O&M to  
11 reflect projected rate year contract maintenance costs under  
12 the Vestas maintenance contracts for the Hopkins Ridge  
13 and Wild Horse/Wild Horse Expansion wind projects; and

14 (iii) reduced test year wind production O&M \$548,179 to  
15 reflect projected rate year contract maintenance costs under  
16 the Siemens maintenance contract for the Lower Snake  
17 River wind project.

18 **Q. Please explain PSE's proposed adjustment to wind royalty expense.**

19 A. Wind turbine production royalties represent variable dollar per MWh fees paid  
20 under contract to project stakeholders. These fees are based on the actual  
21 generation of PSE's wind turbines. Consistent with the treatment in the  
22 2013 PCORC, PSE has pro formed the royalty costs based upon the wind  
23 generation included in the rate year projected power costs. The rate year royalty  
24 expenses for PSE's wind facilities have increased to \$6.8 million for the 2014  
25 PCORC rate year as compared to \$6.7 million for the 2013 PCORC rate year for a  
26 rate year-to-rate year increase of \$0.1 million.

1 **Q. Do the wind turbine production royalty payments reflect contract increases?**

2 A. Yes. In accordance with the terms of PSE's development and land lease  
3 agreements with project stakeholders, the annual royalty rate paid per MWh of  
4 energy production is subject to an annual adjustment for inflation.

5 **Q. How is routine and corrective maintenance provided for the wind turbines?**

6 A. PSE's wind turbines at Hopkins Ridge, Wild Horse, and the Wild Horse  
7 Expansion are maintained by the manufacturer, Vestas, in accordance with the  
8 terms of five-year service agreements. Siemens has been contracted to provide all  
9 maintenance services at the Lower Snake River Phase I facility. The term of the  
10 initial contract with Siemens terminates after five years following turbine  
11 commissioning on February 29, 2012.

12 **III. STATUS OF THE ELECTRON HYDROELECTRIC PROJECT**

13 **Q. Please provide an update on the status of the pending sale of PSE's Electron**  
14 **Project to Electron Hydro.**

15 A. In May 2013 PSE and Electron Hydro entered into the Asset Purchase Agreement  
16 ("APA"), which included a \$13.7 million purchase price and formalized  
17 agreement on other commercial terms for Electron Hydro's acquisition of the  
18 Electron Project. Closing of the sale of the Electron Project is subject to the  
19 fulfillment of several conditions that are specified in the APA. One of the  
20 conditions to closing has not been fulfilled. This condition is defined in the APA  
21 as follows:

1 (i) Buyer has executed a Renewable Resource  
2 Agreement (“RRA”) with the Puyallup Tribe (the “Tribe”), in  
3 form and substance satisfactory to Buyer in its sole discretion;  
4 and (ii) Seller has received the consent of the Tribe to the  
5 termination of the current Resource Enhancement Agreement  
6 between Seller and the Tribe.

7 There have been three amendments to the APA, each extending the dates after  
8 which either party may terminate the agreement due to a failure to close.

9 Amendment No. 1 extended the termination date from December 31, 2013 to  
10 January 31, 2014. Amendment No. 2 further extended this date to April 30, 2014.  
11 Amendment No. 3 then extended the termination date to June 30, 2014.

12 **Q. Has PSE’s decision to sell the Electron Project and the resulting APA with**  
13 **Electron Hydro previously been reviewed by the Commission?**

14 A. Yes. On June 6, 2013 PSE filed its application “[f]or an Order Authorizing the  
15 Sale of the Water Rights and Associated Assets of the Electron Hydroelectric  
16 Project” (Docket UE-131099). This docket was later consolidated with PSE’s  
17 2013 PCORC.

18 **Q. Did the Commission make any determination in that case regarding the**  
19 **proposed sale of the Electron Project?**

20 A. Yes. In Order 08 in the 2013 PCORC, the Commission determined that the sale  
21 of PSE’s Electron Project to Electron Hydro is in the public interest and  
22 conditionally approved the sale so long as there are no material changes to the  
23 APA originally filed with PSE’s June 6, 2013 application.

1 **Q. Are there any further amendments anticipated?**

2 A. PSE and Electron Hydro have recently been engaged in negotiations regarding an  
3 additional amendment to the APA, which could facilitate the closing of the sale.  
4 If PSE and Electron Hydro execute this amendment, PSE will supplement its  
5 testimony during the course of this proceeding.

6 **IV. CONCLUSION**

7 **Q. Does this conclude your prefiled direct testimony?**

8 A. Yes, it does.