

**EXHIBIT NO. \_\_\_(JAP-3)**  
**DOCKET NO. UE-14\_\_\_**  
**2014 PSE COST OF SERVICE AND RATE**  
**DESIGN FILING**  
**WITNESS: JON A. PILIARIS**

**BEFORE THE**  
**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of  
PUGET SOUND ENERGY, INC.  
To Update Methodologies Used To  
Allocate Electric Cost of Service and For  
Electric Rate Design Purposes

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

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

**JULY 1, 2014**

**EXHIBIT NO. \_\_\_(JAP-1T)  
DOCKET NO. UE-11\_\_\_/UG-11\_\_\_  
2011 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-11\_\_\_  
Docket No. UG-11\_\_\_**

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

**JUNE 13, 2011**

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

**CONTENTS**

|      |   |    |
|------|---|----|
| I.   | INTRODUCTION .....  | 1  |
| II.  | ELECTRIC COST OF SERVICE .....  | 3  |
|      | A. Background Regarding Electric Cost of Service Studies .....                | 3  |
|      | B. Overview of PSE’s Electric Cost of Service Study .....                     | 9  |
|      | C. Classification of Production Costs.....                                    | 10 |
|      | D. Classification of Transmission Costs.....                                  | 11 |
|      | E. Classification of Distribution Costs .....                                 | 12 |
|      | F. Allocation of Production and Transmission Demand Costs .....               | 12 |
|      | G. Allocation of Distribution Costs .....                                     | 13 |
|      | 1. Distribution Substations and Feeder Costs .....                            | 13 |
|      | 2. Distribution Line Transformer Costs .....                                  | 14 |
|      | 3. Service Line and Meter Costs.....  | 15 |
|      | H. Administrative and General Costs and Other Cost Allocation<br>Factors..... | 16 |
| III. | ELECTRIC RATE SPREAD PROPOSAL .....   | 17 |
| IV.  | ELECTRIC RATE DESIGN .....  | 20 |
|      | A. Summary of Residential Electric Rate Design.....                           | 21 |
|      | B. Summary of General Service Rate Design .....                               | 22 |
|      | C. Campus Rates: Schedule 40.....   | 23 |
|      | D. Summary of High Voltage Rate Design .....                                  | 25 |

V. EFFECT OF COMPANY-SPONSORED ENERGY EFFICIENCY ON  
PSE’S ABILITY TO RECOVER COSTS.....26

VI. PSE CONSERVATION SAVINGS ADJUSTMENT RATE PROPOSALS .....32

    A. Overview.....32

    B. Proposal Details .....35

VII. CONCLUSION.....43

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
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**PUGET SOUND ENERGY, INC.**

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

**I. INTRODUCTION**

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

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

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

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

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

A. My testimony presents PSE's electric cost of service study and PSE's proposed rate spread and rate design for electric service. My testimony also presents estimates of the effects of Company-sponsored energy efficiency on PSE's ability to recover costs, as well as its proposed Conservation Savings Adjustment ("CSA") Rates for its natural gas and electric customers.

**Q. Please summarize your testimony.**

A. As with past cases, PSE continues to advocate for a rate spread proposal that aligns cost causation with cost recovery. The theoretical point where costs

1 assigned to a customer class equal the revenues collected from that customer class  
2 (once all classes are adjusted for system over or under recovery) is called "parity,"  
3 and the parity percentage at this point is 100 percent. The electric cost of service  
4 results in this case indicate that there are two major customer classes significantly  
5 (more than 5 percent) below parity and one major classes significantly (greater  
6 than 5 percent) above parity. PSE acknowledges that the determination of parity  
7 is not absolute and that parity is dependent on the methodology used to allocate  
8 joint costs. As a result, PSE's proposal in this case, while changing rates for some  
9 classes more than others, does not rigidly move each class to parity.

10 Regarding electric rate design, PSE does not propose any significant change in  
11 this filing. In general, all rates within a customer class have been increased by the  
12 class percentage, with the exception of the Choice/Retail Wheeling and Campus  
13 rate classes. As a result, the proposed rates will increase the monthly bill of  
14 virtually every customer within a retail class by the same percentage, regardless  
15 of season or usage. Rates for the Choice/Retail Wheeling class were set in  
16 accordance with the Multiparty Settlement Agreement approved by the  
17 Commission in Docket No. U-072375.

18 For the rate year in this case, absent the CSA Rates proposed in this case, PSE  
19 estimates that Company-sponsored energy efficiency will limit its ability to  
20 recover \$15.5 million and \$2.8 million of its electric and natural gas system costs,  
21 respectively. To ameliorate this impact, PSE is proposing CSA Rates in this case  
22 for its electric and natural gas customers. The CSA Rates are intended to recover

1 PSE's costs unrelated to energy supply that would otherwise go unrecovered due  
2 to the load-reducing impacts of Company-sponsored conservation savings. The  
3 Company proposes that a third party verify the conservation savings. The  
4 Company further proposes to protect customers by providing a cap on CSA  
5 revenues so that they do not contribute to PSE's actual earnings exceeding its  
6 allowed rate of return.

7 **II. ELECTRIC COST OF SERVICE**

8 **A. Background Regarding Electric Cost of Service Studies**

9 **Q. Please summarize the purpose of a cost of service study.**

10 A. A cost of service study identifies the costs that are incurred to serve a particular  
11 customer class. Identifying the cost responsibility of each class requires an  
12 analysis of PSE's costs and then an allocation of those costs to each customer  
13 class. This allocation is done by first directly assigning to a customer class any  
14 costs determined to be caused by that class alone. Joint costs that are shared by  
15 multiple customer classes are then allocated to various classes on a pro rata basis,  
16 based on factors appropriate to the costs being allocated.

17 The ultimate objective of the cost allocation process is to create a just, fair,  
18 reasonable and sufficient allocation of costs to different customer classes. This  
19 cost of service information is then used to allocate the revenue requirement  
20 determined in a rate case to the different customer classes. Historically, the  
21 Commission has treated the cost of service study as a guidepost for the allocation  
22 of the revenue requirement and has eschewed a mechanical application of the cost

1 of service study.

2 In order to provide the benefits of cost analysis to individual customers in  
3 addition to customer classes, the cost of service study also serves as a guide for  
4 the rate design process. For example, the basic charge has historically been  
5 based, in part, upon customer-related costs determined in the cost study.

6 Similarly, demand charges have historically been guided by demand-related costs  
7 determined in the cost study.

8 **Q. Please summarize the process for preparing the electric cost of service study.**

9 A. The electric cost of service study starts with the electric revenue requirement that  
10 is set forth in the Prefiled Direct Testimony of John H. Story, Exhibit  
11 No. \_\_\_(JHS-1T) and associated exhibits, which represents PSE's costs to provide  
12 service to its electric customers.

13 The first step of this study is to separate these costs into the major electric utility  
14 functions: generation, transmission, and distribution. This process is referred to  
15 as the functionalization of costs.

16 The second step is to further divide the costs associated with each of the major  
17 functions into customer, demand and energy components (which are explained  
18 below). This process is referred to as the classification of costs.

19 The third step is to allocate each of the cost components to the individual  
20 customer classes.

21 **Q. What are customer, demand, and energy costs?**



1 A. Customer-related electric utility costs are incurred to connect a customer to the  
2 electric distribution system and include costs for meters and meter reading,  
3 billing, and customer service. Customer costs are primarily a function of the  
4 number of customers served and are incurred whether or not the customer uses  
5 any electricity.

6 Demand-related electric utility costs are those costs associated with electric utility  
7 plant that is designed, installed and operated to meet maximum hourly or daily  
8 electric capacity requirements, such as transmission and distribution conductors  
9 and related structures or portions of generation units that are needed to meet peak  
10 demands. While these structures or units may not be fully utilized at all times,  
11 they must be designed and installed to meet the maximum firm load that the  
12 utility plans to serve.

13 Energy-related electric utility costs are those costs that vary with the amount of  
14 electricity sold to, or transmitted for, customers. Costs related to electric supply  
15 are classified as energy related to the extent they vary with the amount of  
16 electricity purchased or generated by the utility for its electric sales customers.

17 One of the challenges of classifying costs into demand, energy, and customer  
18 components is that some utility equipment is commonly considered to serve  
19 multiple functions. For example, generation equipment is widely recognized as  
20 having both demand and energy components.

21 **Q. Please identify all electric cost of service studies conducted by PSE in the last**  
22 **five years.**

1 A. In addition to the electric cost of service study conducted in this case, PSE  
2 conducted fully allocated embedded cost of service studies to support general rate  
3 case filings in 2006, 2007 and 2009 (Docket Numbers UE-060266, UE-072300  
4 and UE-090704).<sup>1</sup> In the 2006 general rate case ("GRC"), two separate studies  
5 were filed.

6 **Q. Please describe the methodology used in those studies.**

7 A. Each of the cost of service studies referenced above used the same basic  
8 methodology for functionalization of costs. However, there are some differences  
9 in how the studies classified and allocated costs. For instance, one version of the  
10 cost of service study prepared for PSE's 2006 GRC relied on cost classification  
11 and allocation factors used in the prior litigated electric cost of service study in  
12 Docket Nos. UE-920433, UE-920499 and UE-921262 without any significant  
13 modification to how the calculation was performed. A second version of the cost  
14 of service study prepared for PSE's 2006 GRC used the same approach but  
15 modified the calculation of the cost classification and allocation factors in order to  
16 reflect (1) changes in PSE's generation and delivery system since 1992, and (2)  
17 access to more detailed data to provide a more accurate allocation of costs. The  
18 latter version was used in PSE's 2007 and 2009 GRCs, with a few further  
19 modifications that are explained more fully below.

---

<sup>1</sup>Also, PSE used a cost allocation study to set rates in power cost only rate case ("PCORC") in Docket No. UE-070565. However, in PCORC proceedings PSE relies on the power cost allocation factors from the cost of service study conducted in the rate case that immediately precedes the PCORC proceeding.

1 **Q. What changes or modifications adopted in PSE's 2006 GRC were used in**  
2 **PSE's 2007?**

3 A. The 2006 GRC implemented the following updates and modifications to PSE's  
4 methodology:

- 5 • modifications of the approach used to classify generation costs into  
6 demand and energy components,
- 7 • modification of the approach used to classify transmission costs into  
8 demand and energy components,
- 9 • allocation of distribution substation and line costs relative to each class's  
10 share of the load on these specific facilities,
- 11 • direct allocation of line transformer costs to each of the customer rate  
12 classes, and
- 13 • classification of the transformer cost as customer-related rather than  
14 demand-related.

15 All issues regarding cost of service, rate spread and rate design were settled in  
16 that case, and all parties agreed to allocate any rate increase that PSE had in  
17 proportion to PSE's proposed rate spread, which was based on PSE's cost of  
18 service analysis. These modifications were then adopted by PSE for the 2007  
19 general rate case, which was also settled.

20 **Q. Were any further modifications made to the cost of service study in PSE's**  
21 **2009 GRC?**

22 A. Yes. The 2009 GRC implemented further modifications to PSE's methodology  
23 adopted in PSE's 2006 and 2007 GRCs. The most significant of these  
24 modifications was the addition of emissions costs to the peak credit calculation.  
25 Additionally, PSE eliminated the fuel and variable O&M costs associated with the

1 peaking resource in the peak credit calculation and applied the reserve  
2 requirement to the baseload resource.

3 All issues regarding cost of service, rate spread and rate design were settled in  
4 PSE's 2009 GRC, and all parties agreed to allocate any rate increase that PSE had  
5 in proportion to the rate spread agreed to in the Multiparty Settlement Agreement  
6 in that case, which was based on PSE's cost of service analysis.

7 **Q. Has PSE made any changes as to how it allocates generation and**  
8 **transmission costs among rate classes in the last five years?**

9 A. Beginning with PSE's 2006 GRC, the demand component of generation and  
10 transmission costs has been allocated to each rate class based upon each class's  
11 contribution to the highest 75 hourly system loads, rather than the highest 200  
12 hourly loads.

13 **Q. Please explain how PSE allocates distribution costs amongst the rate classes.**

14 A. As I describe later in my testimony, PSE has allocated distribution costs based  
15 upon each class's contribution to the non-coincident peak ("NCP") of each  
16 distribution feeder and distribution substation. More specifically, the distribution  
17 circuit cost allocations at the feeder level are weighted to a total system allocation  
18 based upon distribution circuit miles. This alternative is used in place of the  
19 distribution allocation factors used previously in which the cost allocation was  
20 based upon an estimate of each class's system aggregate NCP. Another  
21 difference, also used in the past several proceedings and also described in more

1 detail in Section G(2), is that the allocation of the cost of line transformers relies  
2 on a method that is more targeted than an aggregate class level contribution to the  
3 NCP. Customers on the Campus Rate are directly assigned all of their  
4 distribution plant costs.

5 **B. Overview of PSE's Electric Cost of Service Study**

6 **Q. Please explain the methodology for classification and allocation of electric**  
7 **costs that PSE used in this proceeding?**

8 A. The electric cost of service study in this case utilizes the same methodology as  
9 PSE used in its last GRC. This methodology is discussed in more detail in  
10 Sections C through H, below.

11 **Q. What are the results of PSE's electric cost of service study?**

12 A. The parity percentages by customer class that result from the electric cost of  
13 service study are shown in Table 1, below. Parity reflects the relative relationship  
14 between normalized revenue currently recovered in rates to the revenue required  
15 based upon the cost of service analysis. A parity percentage over 100 percent  
16 indicates that the customer class is currently paying more than its allocated costs  
17 (once all classes are adjusted for system over or under recovery).

1

**Table 1 - Results of Company's Electric Cost of Service Study**

| <b>Customer Class</b>         | <b>Rate Schedule</b> | <b>Parity Percentage</b> |
|-------------------------------|----------------------|--------------------------|
| Residential                   | 7                    | 98 %                     |
| General Service, < 51 kW      | 24                   | 103 %                    |
| General Service, 51 – 350 kW  | 25                   | 106 %                    |
| General Service, >350 kW      | 26                   | 104 %                    |
| Primary Service               | 31/35/43             | 103 %                    |
| Campus Rate                   | 40                   | 94 %                     |
| High Voltage                  | 46/49                | 99 %                     |
| Lighting Service              | 51 - 59              | 95 %                     |
| Choice/Retail Wheeling        | 448/449              | 88 %                     |
| Firm Resale/Special Contract  | 5                    | 73 %                     |
| <b>System Total / Average</b> |                      | 100 %                    |

2

**Q. Was the model used to develop the cost of service study the same model used**

3

**in PSE's most recent general rate case?**

4

A. Yes. The model used for this study is the same model used in the last general rate case.

5

6

**C. Classification of Production Costs**

7

**Q. Please describe how production costs were classified into energy and demand components in PSE's electric cost of service study.**

8

9

A. The Company utilized the "peak credit" methodology to divide production costs into demand and energy components. The peak credit method classifies PSE's electric production costs, regardless of the type of generating resource, as either energy-related or demand-related, based on the ratio of the cost of a proxy peaking generating resource to the cost of a proxy baseload generating resource.

10

11

12

13

1 The numerator and denominator of the ratio are expressed in \$/kW-year.

2 **Q. What is the result of the PSE's peak credit calculation?**

3 A. Applying assumptions consistent with PSE's most recently completed integrated  
4 resource plan ("IRP") to the methodology that was used in PSE's 2009 GRC, the  
5 percent of production cost classified as demand is 19 percent, with 81 percent  
6 classified as energy. The derivation of these percentages is provided in Exhibit  
7 No. \_\_\_(JAP-3C).

8 **D. Classification of Transmission Costs**

9 **Q. How are transmission costs classified in PSE's electric cost of service study?**

10 A. PSE uses the peak credit method, described above, to classify transmission costs.  
11 The peak credit percentages are applied to transmission costs under the theory that  
12 transmission lines are constructed to deliver the energy and capacity provided by  
13 generating plant, and in the same proportion as it is being provided.  
14 Using the peak credit method, 19 percent of transmission costs are classified as  
15 demand and 81 percent are classified as energy. These factors are also applied to  
16 high voltage distribution, which is the sub-230 kV plant that was classified as  
17 transmission prior to reclassification in Docket No. UE-010010. PSE also  
18 separately identifies transmission related to generation-integration and other  
19 transmission before allocating costs to customer classes.

20 **Q. Why does PSE distinguish between generation-integration transmission and**  
21 **other transmission?**

1 A. Generation-integration transmission brings PSE's remote generation to PSE's  
2 integrated transmission system. One must segregate the costs of generation-  
3 integration transmission from other transmission because customers in the  
4 Choice/Retail Wheeling class, as well as certain customers in the Firm  
5 Resale/Special Contract class, do not use PSE's remote generation resources.  
6 Thus, it is appropriate to exclude these customers from the allocation of costs for  
7 transmission lines used for integration of remote resources. However, these  
8 classes continue to receive an allocation of PSE's other transmission costs.

9 **E. Classification of Distribution Costs**

10 **Q. How are distribution costs classified in PSE's electric cost of service study?**

11 A. With three exceptions, all electric distribution costs are classified as demand-  
12 related. The three exceptions are the costs of meters, service lines and distribution  
13 line transformers. These are classified as customer-related, as discussed in  
14 Sections G(2) and G(3).

15 **F. Allocation of Production and Transmission Demand Costs**

16 **Q. How are production and transmission demand costs allocated in PSE's**  
17 **electric cost of service study?**

18 A. PSE uses estimated peak demands at 23°F to determine peak generation  
19 requirements for a temperature normal year in its Integrated Resource Plan. The  
20 Company reviewed hourly temperature data over the last 15 years and determined  
21 that the largest number of hours in any one year that the hourly temperature was  
22 23°F or colder was 75 hours. Therefore, as in the past three GRCs, PSE is



1 allocating generation and transmission demand costs in this case based on an  
2 average of hourly class loads that occurred coincident with the top 75 system  
3 hourly loads during the test year.

4 **G. Allocation of Distribution Costs**

5 **1. Distribution Substations and Feeder Costs**

6 **Q. How does PSE allocate distribution substations and feeder costs in its cost of**  
7 **service study?**

8 A. Consistent with PSE's past three general rate cases, PSE assigns the cost of  
9 distribution underground circuits, overhead circuits, and substations based upon  
10 allocation factors constructed from each class's contribution to feeder and  
11 substation peak loads and the length of the distribution circuit. These allocation  
12 factors are constructed from monthly energy and load factors for the twelve-  
13 month period ending December 2010.

14 **Q. Would you please describe specifically how substation costs are allocated?**

15 A. For each month, each customer class's contribution to the peaks of individual  
16 distribution substations, as a percent of those peaks, is calculated using the  
17 average hourly consumption of each class's load on the substation, divided by the  
18 non-coincident peak ("NCP") load factor of that class in that month. Each class's  
19 contribution to the peak load on each individual substation is then averaged across  
20 the months of the year. This average monthly contribution to each substation's  
21 peak load is then multiplied by the booked cost of the individual substation in

1 2010 dollars to derive the allocated cost of each substation. These allocated  
2 substation costs are then summed by customer class and compared with PSE's  
3 total substation investment in 2010 dollars to develop the substation cost  
4 allocations for FERC Accounts 360-362.

5 **Q. How does PSE allocate distribution line costs?**

6 A. PSE uses its customer and distribution feeder databases to associate each  
7 customer with a feeder. Monthly NCP load factors are then used for each  
8 customer class to determine each class's contribution to each feeder's monthly  
9 NCP as a percent of each month's peak on the feeder. Each class's contribution  
10 to monthly peak load on the feeder is multiplied by the number of overhead and  
11 underground miles on the feeder. These load-weighted line miles are then added  
12 across all the feeders to develop the total load-weighted overhead and  
13 underground distribution line miles allocated to each class. Allocation factors for  
14 overhead and underground lines are then developed by dividing the total load-  
15 weighted line miles attributable to each class by the total load-weighted line miles  
16 for all classes. The overhead allocators are applied to FERC Accounts 364 and  
17 365, and the underground allocators are applied to FERC Accounts 366 and 367.

18 **2. Distribution Line Transformer Costs**

19 **Q. How does PSE classify line transformer costs in its cost of service analysis in**  
20 **this case?**

21 A. As in PSE's previous three general rate cases, line transformer costs are classified  
22 as being customer-related.

1 **Q. Why does PSE classify line transformer costs as a customer-related cost?**

2 A. PSE classifies line transformer costs as a customer-related cost because (1)  
3 transformer sizes are standardized, (2) line transformers are installed and sized  
4 specifically to serve a particular customer or group of customers, and (3)  
5 transformers are rarely re-sized for a particular customer or a group of customers.  
6 Therefore, transformer costs are appropriately characterized as customer-related  
7 costs.

8 **Q. Please describe how the line transformer cost allocation factor is developed.**

9 A. The Company uses its customer database to associate each line transformer with  
10 the customers using the transformer. This results in allocating approximately  
11 252,000 transformers to PSE's different customer classes by type and size. The  
12 vast majority of line transformers are used by a single class and thus are directly  
13 assigned. The remaining transformers are allocated to each class based upon the  
14 class's relative contribution to the transformer's load. The transformers are priced  
15 at current costs, including installation, to determine each class's contribution to  
16 embedded line transformer costs (FERC Account 368). The embedded line  
17 transformer costs in the FERC account reflect PSE's line extension policy and are  
18 reduced for customer contributions.

19 **3. Service Line and Meter Costs**

20 **Q. How are service line and meter costs allocated in PSE's cost study?**

1 A. Service line costs are allocated based on the number of customers taking service  
2 at secondary voltage. Costs of all underground service lines are assigned to the  
3 residential class because non-residential secondary voltage customers own their  
4 underground services. Costs of overhead service lines are allocated based on the  
5 number of secondary voltage overhead service customers in each class. Meters  
6 are allocated based on the current cost of electric meters assigned to customers in  
7 each class relative to the current cost of all electric meters.

8 **H. Administrative and General Costs and Other Cost Allocation Factors**

9 **Q. How does PSE allocate administrative and general costs in its electric cost of**  
10 **service study?**

11 A. The majority of administrative and general costs are assigned based upon  
12 production, transmission, distribution, and customer costs. Property insurance  
13 allocations are based upon allocated plant, and pensions and employee insurance  
14 follow the allocation of salary and wages.

15 **Q. What other cost allocations does PSE use in its electric cost of service study?**

16 A. PSE reviews historical experience with late payments and assigns the costs to  
17 each class. Other miscellaneous revenues associated with non-sufficient fund  
18 checks and reconnects are allocated to each class based upon a historical analysis  
19 of revenues received from these sources.

20 **Q. Has PSE provided a summary of its electric cost of service study in this**  
21 **proceeding?**

1 A. Yes. PSE's proposed electric cost of service study is summarized in Exhibit  
2 No. \_\_\_(JAP-4).

3 **III. ELECTRIC RATE SPREAD PROPOSAL**

4 **Q. Would you briefly describe rate spread and its relationship to cost of service?**

5 A. Rate spread is the process of determining what portion of the total revenue  
6 requirement should be allocated to each customer class for recovery in that class's  
7 rates. Rate spread is guided by the results of the cost of service study.

8 **Q. What rate spread policy factors does PSE consider in developing its electric  
9 rate spread recommendation?**

10 A. The Company's proposal emphasizes two factors: the customer class relationship  
11 to parity and customer impacts. The Company's proposal is guided by the results  
12 of the cost of service study and continues movement towards parity. PSE also  
13 considers the relative impact on different classes of customers.

14 **Q. Would you please summarize PSE's proposed electric rate spread?**

15 A. Based upon the parity percentages shown in PSE's electric cost of service study  
16 and the desire to move towards full parity (a parity percentage of 100 percent) in a  
17 gradual manner, PSE proposes to 1) apply, with two exceptions, an adjusted  
18 average rate increase to retail classes within 5 percent of full parity; 2) apply a  
19 rate increase that is 75 percent of the adjusted average to the class that is more  
20 than 5 percent above full parity (Small General Service greater than 50 kW but  
21 less than 351 kW); and 3) apply an increase that is 125 percent of the average to

1 the one retail class that is 5 percent or more below full parity (Choice/Retail  
2 Wheeling).

3 As in PSE's last rate case, rates in Schedule 40 (Large Demand General Service  
4 Greater than 3 aMW) are tied to rates in the High Voltage Schedules, such that the  
5 rate increase for that schedule is not independently determined. The Schedule 40  
6 production and transmission charges are linked to those found in the High Voltage  
7 Schedules and distribution charges are based on customer-specific information.  
8 This results in a calculated rate spread amount for this class, rather than a rate  
9 spread based on a class-specific cost of service and rate spread analysis.

10 The Firm Resale/Special Contract class is allocated an amount that would move it  
11 to full parity so that there is not a cross-jurisdictional subsidy.

12 The adjusted average electric rate increase is the average electric rate increase  
13 after accounting for the effect of above-average or below-average increases to  
14 certain classes. Since the customer class receiving a below-average increase  
15 generates greater revenue for PSE than the retail class receiving the above-  
16 average increase, the adjusted average retail electric increase of 8.42 percent is  
17 greater than PSE average retail electric increase of 8.13 percent.

18 A summary of PSE's proposed electric rate spread is provided in Table 2. Please  
19 also see the Exhibit No. \_\_\_(JAP-5) for a detailed worksheet of PSE's rate spread  
20 proposal.

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**Table 2 - Proposed Electric Rate Spread**

| <b>Customer Class</b>                    | <b>Rate Schedule</b> | <b>Parity Percentage</b> | <b>Proposed Rate Increase</b> |
|--|----------------------|--------------------------|-------------------------------|
| Residential                              | 7                    | 98 %                     | 8.42 %                        |
| General Service, < 51 kW                 | 24                   | 103 %                    | 8.42 %                        |
| General Service, 51 - 350 kW             | 25                   | 106 %                    | 6.31 %                        |
| General Service, >350 kW                 | 26                   | 104 %                    | 8.42 %                        |
| Primary Service                          | 31/35/43             | 103 %                    | 8.42 %                        |
| Campus Rate*                             | 40                   | 94 %                     | 7.52 %                        |
| High Voltage                             | 46/49                | 99 %                     | 8.42 %                        |
| Lighting Service                         | 51 - 59              | 95 %                     | 8.41 %                        |
| Choice/Retail Wheeling                   | 448/449              | 88 %                     | 10.52 %                       |
| <b>Total Jurisdictional Retail Sales</b> | <b>n/a</b>           | <b>n/a</b>               | <b>8.13 %</b>                 |
| Firm Resale/Special Contract             | 5                    | 73 %                     | 48.81 %**                     |
| <b>System Total/Average</b>              |                      | <b>100%</b>              | <b>8.15 %</b>                 |

\*Campus Rate increase proposal reflects customer-specific distribution rates according to agreement.

\*\*Reflects the rate increase to necessary to move non-jurisdictional rates to parity.

1 **IV. ELECTRIC RATE DESIGN**

2 **Q. What are the guidelines used by PSE in designing customer rate**  
3 **development?**

4 A. Rates should: (1) provide for recovery of the total revenue requirement; (2)  
5 provide revenue stability and predictability to the utility; (3) provide rate stability  
6 and predictability to the customer; (4) reflect the cost of providing service; (5) be  
7 fair; (6) send proper price signals; and (7) be simple and understandable. These  
8 principles are consistent with those presented in "Principles of Public Utility  
9 Rates," by James C. Bonbright, Albert L. Danielsen and David R. Kamerschen,  
10 2<sup>nd</sup> Edition, 1988.

11 **Q. Please summarize the changes PSE proposes to make to electric rate design.**

12 A. The Company is not proposing any changes in this case to the design of existing  
13 rates. With only minor exceptions, all rates in a customer class will be increased  
14 by the class average percentage increase. The exceptions are Schedule 26, where  
15 the demand and energy rates are tied to Schedule 31; Schedule 40, where  
16 customer specific distribution rates are charged and the loss-adjusted energy and  
17 demand charges are set equal Schedule 49; and Schedules 448/449, where,  
18 according to agreement, the methodology proposed in PSE's 2007 GRC for these  
19 customers was used and the rate increase was applied on an equal dollar per kVA  
20 basis rather than equal percentage.

21 **Q. Has PSE prepared new electric tariff schedules based upon the cost of service**



1           **study results and consistent with its rate design proposals in this case?**

2           A.     Yes, the proposed tariff schedules are presented in Exhibit No. \_\_\_(JAP-6).

3           **A.     Summary of Residential Electric Rate Design**

4           **Q.     Please summarize PSE's proposed residential electric rate design.**

5           A.     The current rate is a two-block energy rate with a monthly basic charge (single-  
6           phase) of \$7.25, a first-block energy rate of 8.4991 ¢/kWh, and a second-block  
7           energy rate of 10.2974 ¢/kWh. The Company proposes to increase all three  
8           charges by the class average increase of 8.42 percent, adjusted for rounding. This  
9           results in a proposed basic charge (single-phase) of \$7.86 per month, a first-block  
10          energy rate of 9.2144 ¢/kWh and a second-block energy rate of 11.1641 ¢/kWh.

11          **Q.     How does PSE's proposed residential basic charge compare with basic**  
12          **charges of other utilities?**

13          A.     I reviewed the basic charges of national and local investor-owned electric utilities  
14          and government and customer-owned utilities in Washington state that are close  
15          to PSE's service territory. The 217 basic charges of the national electric utilities  
16          surveyed average \$9.17 per month. Of the 24 other Washington state electric  
17          utilities surveyed, 16 have residential basic charges that are greater than or equal  
18          to \$11.00 per month, or over \$3.00 per month more than the amount proposed in  
19          this filing. The average basic charge for all 25 of the utilities surveyed in  
20          Washington State (including PSE) is \$12.92. These basic charge surveys are  
21          provided in Exhibit No. \_\_\_(JAP-7).

1 **B. Summary of General Service Rate Design**

2 **Q. Please summarize the proposed rate design for the General Service rate class.**

3 A. The General Service (Rate Schedule 24) class has a monthly basic charge and a  
4 single-block energy rate that varies by season. This rate schedule does not have a  
5 demand charge. The Company's proposal is to increase all rate components,  
6 including the basic charge, by the class average increase.

7 **Q. Please summarize the proposed rate design for Small Demand General  
8 Service.**

9 A. The Small Demand General Service (Rate Schedule 25) class has a basic charge  
10 rate, two-block seasonal energy rates and a two-block seasonal demand rate. The  
11 first 50 kW block of billing demand has no demand charge and the demand-  
12 related costs are recovered in the first block of the energy rate. Under PSE's  
13 proposal, all Schedule 25 rates are increased by roughly the same percentage, the  
14 class average increase.

15 **Q. Please summarize the proposed rate design for large general service  
16 customers.**

17 A. These customers are served under two principle schedules: Large Demand  
18 General Service (Rate Schedule 26) and Primary General Service (Rate Schedule  
19 31). Both schedules have basic charges and a single-block energy charge. The  
20 demand rates of the two schedules are seasonally-differentiated and linked such  
21 that the lower rate for Schedule 31 reflects both the cost savings to PSE of not

1 providing primary voltage transformation service and a discount for Schedule 31  
2 energy and demand based on lower transformer losses (since Schedule 31 meters  
3 are located on the high side of the line transformer).

4 **Q. Why does PSE link the demand rates of the two schedules?**

5 A. For a number of years PSE has been moving these two rate schedules towards  
6 comparable rates because the loads and load factors are comparable. The drive  
7 towards a cost-based differential between the two rates schedules is to create an  
8 end-point where customer motivation to take primary service will be based upon  
9 customer needs rather than a desire to qualify for the schedule with the lower rate.

10 **Q. Please describe the proposed Schedule 26 and Schedule 31 rate designs.**

11 A. PSE increased all Schedule 31 rate components by the class average increase.  
12 PSE increased the Schedule 26 basic charge by the class average, which is 100  
13 percent of the adjusted average for all classes. The reactive power charge for  
14 each schedule was increased by the applicable class average increase. The  
15 Schedule 26 demand charges were then set equal to the Schedule 31 demand  
16 charges on a loss-adjusted basis. PSE then increased the Schedule 26 energy rate  
17 by an amount that will recover the remainder of the rate responsibility of the  
18 Schedule 26 rate class.

19 **C. Campus Rates: Schedule 40**

20 **Q. Please describe the purpose of Schedule 40.**

21 A. Large Demand General Service Greater than 3 aMW (Rate Schedule 40) was

1 developed in PSE's 2004 GRC in response to customers with large loads that are  
2 either typically in a campus configuration or share a distribution feeder with other  
3 customers. The rate first became effective on March 17, 2005 and was voluntary  
4 until the GRC following the third anniversary of that date. This rate is not  
5 mandatory for those customers that qualify. The rate requires a cost study to be  
6 performed by PSE to establish a customer-specific distribution charge, and  
7 customers can only be added or removed in a GRC.

8 **Q. Has PSE identified any customers that should be added to Schedule 40 in this**  
9 **case?**

10 A. Yes. As noted above, Schedule 40 is now mandatory once a qualifying customer  
11 has been identified and approved for Schedule 40 service in a general rate case.  
12 There are two additional customers who now qualify for this rate. These  
13 customers have been included in Schedule 40.

14 **Q. Has PSE identified any customers that should be removed from Schedule 40**  
15 **in this case?**

16 A. Yes. There is one customer who no longer qualifies for this rate. This customer  
17 has been proformed out of the calculation of Schedule 40 rates in this case and  
18 proformed into the appropriate alternative rate schedules.

19 **Q. Please summarize the rate design for Schedule 40.**

20 A. Rates for Schedule 40 are calculated using the same calculated rate methodology  
21 used in PSE's 2009 GRC. Schedule 40 has customer-specific distribution rates

1 and a bundled energy and transmission rate that is based upon Schedule 49 after  
2 an adjustment for losses. The distribution rate is designed to recover customer-  
3 specific distribution costs on a levelized basis. The bundled production and  
4 transmission energy and demand rates are linked to the parity-adjusted high  
5 voltage rates because the aggregated load of each of these customers is  
6 comparable to the load of high voltage customers.

7 The Company reviewed the distribution rates of the customers and adjusted their  
8 distribution costs, transformer costs, and substation costs based on plant additions  
9 and retirements that have occurred since PSE's 2009 GRC.

10 **D. Summary of High Voltage Rate Design**

11 **Q. Please summarize the high voltage rate design.**

12 A. All rates for High Voltage General Service (Schedule 49) and the High Voltage  
13 Interruptible Service (Schedule 46) were increased by the class average increase.  
14 All rates for the Power Supplier Choice and Retail Wheeling Service (Schedules  
15 448 and 449) were increased using the same methodology used in PSE's 2007  
16 GRC, pursuant to Paragraph 60 of Appendix A of the Multiparty Settlement  
17 Agreement, approved by the Commission in PSE's merger case, Docket No. U-  
18 072375. Under such methodology, the basic charge is set at its cost of service,  
19 and the allocated amount remaining is recovered on an equal dollars per kVA  
20 basis.

1                   **V.       EFFECT OF COMPANY-SPONSORED ENERGY**  
2                   **EFFICIENCY ON PSE'S ABILITY TO RECOVER COSTS**

3       **Q.       PSE is proposing a Conservation Savings Adjustment Rate in this case.**

4                   **What is prompting this proposal?**

5       A.       PSE is proposing this new rate to mitigate the effect that energy efficiency has on  
6                   the Company's ability to recover its fixed costs. Mr. DeBoer describes the  
7                   Company's rationale for this proposal in Exhibit No. \_\_ (TAD-1T).

8       **Q.       Is this effect generally understood within the industry?**

9       A.       While characterizations of the effect energy efficiency has on a utility's ability to  
10                  recover costs vary, one offered in "Aligning Utility Incentives with Investment in  
11                  Energy Efficiency," by the National Action Plan for Energy Efficiency,<sup>2</sup> is  
12                  consistent with PSE's understanding of this effect. Appendix B to this report  
13                  describes it in the following way:

14                               [t]he reduction in revenue to cover fixed costs, including earnings  
15                               or profits in the case of investor-owned utilities. Similar to lost  
16                               revenue, but concerned only with fixed cost recovery, or with the  
17                               opportunity costs of lost margins that would have been added to  
18                               net income or created a cash buffer in excess of that reflected in  
19                               the last rate case.

20       **Q.       Do you find anything particularly compelling about this explanation of the**  
21                   **effect energy efficiency has on a utility's ability to recover costs?**

---

<sup>2</sup> The National Action Plan for Energy Efficiency was developed in 2006 by a leadership group of more than 50 organizations and was co-chaired by the presidents of the Edison Electric Institute and the National Association of Regulatory Commissioners. The National Action Plan was developed with the assistance of the U.S. Department of Energy and the Environmental Protection Agency. A link to this report can be found at <http://www.epa.gov/cleanenergy/documents/suca/incentives.pdf>.

1 A. Yes. This explanation is not predicated on the present financial condition of the  
2 utility. It suggests that, even if utility were earning what was authorized by its  
3 regulator, it would have "added to net income or created a cash buffer" in the  
4 absence of conservation.

5 **Q. Can you describe in more detail how energy efficiency impacts a utility's**  
6 **ability to recover its costs?**

7 A. Yes. To facilitate this explanation, please refer to Exhibit No. \_\_\_(JAP-8). This  
8 exhibit presents a series of slides that illustrate how energy efficiency affects the  
9 utility's ability to recover cost between a historic test year and a future rate year.

10 Slide 1: This is a title page.

11 Slide 2: This slide illustrates the timeline between the beginning of a historic test  
12 year and the end of a rate year. Assuming an 11-month rate case period and a 3-  
13 month period between the end of the test year and the start of the rate case, this  
14 period spans 38 months. The diagonal line on Slide 2 shows the conceptual  
15 upward trajectory of conservation savings.

16 Slide 3: This slide provides a screenshot from Exhibit No. \_\_\_(JAP-9) that shows  
17 how PSE derives the amount of Company-sponsored energy efficiency used for  
18 the rate calculation. Specifically, lines 19 through 21 on this slide represent the  
19 cumulative Company-sponsored electric conservation savings, by rate group

1 affected by PSE's Conservation Savings Adjustment ("CSA") Rate.<sup>3</sup> Exhibit  
2 No. \_\_\_(JAP-10) provides similar figures for PSE's gas system.

3 Slide 4: This slide illustrates the conceptual amount of conservation achieved in a  
4 historic test year that is reflected in the rate year. Assuming a relatively even  
5 growth in conservation achievement over the course of the test year, roughly half  
6 of this conservation will be reflected in the rate year.

7 Slide 5: This slide provides a screenshot showing the rows in Exhibit  
8 No. \_\_\_(JAP-9) where the amount of Company-sponsored electric conservation  
9 savings achieved since January 2010 and reflected in the portion of volumetric  
10 rates that are unrelated to the recovery of power costs can be found. Specifically,  
11 this amount can be found in rows 35 through 37. Exhibit No. \_\_\_(JAP-10)  
12 provides similar figures for PSE's gas system.

13 Slide 6: This slide illustrates the conceptual amount of conservation achieved in a  
14 historic test year that is not reflected in the rate year. This is represented by the  
15 areas shaded in with diagonal cross-hatching that runs downward from left to  
16 right.

17 Slide 7: This slide illustrates the conceptual amount of conservation achieved  
18 between the beginning of the test year and the end of the rate year that  
19 undermines a utility's ability to recover its costs. This is represented by the two  
20 upper shaded areas within the rate year. Assuming a relatively consistent growth

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<sup>3</sup> The CSA Rate is discussed at length later in this testimony.



1 in conservation achievement, this suggests that the sum of the following will not  
2 be reflected in the development of rates during the rate year:

- 3 • Roughly half of the conservation achieved in the test year, plus
- 4 • All of the conservation achieved between the end of the test year and the  
5 beginning of the rate year, plus
- 6 • Half of the conservation achieved in the rate year.

7  
8 Based on the rate case timing illustrated on this slide, approximately 26 months of  
9 conservation achievement will not be reflected in the development of rates that  
10 are unrelated to the recovery of energy supply costs in effect during the rate year.

11 Slide 8: This slide provides a screenshot showing the rows in Exhibit  
12 No. \_\_\_(JAP-9) where Company-sponsored electric conservation savings not  
13 reflected in rates can be found. Specifically, this is in rows 42 through 44. The  
14 final step in estimating the impact Company-sponsored energy efficiency has on  
15 PSE's ability to recover its costs is to multiply the conservation savings  
16 referenced in rows 42 through 44 by the portion of the volumetric retail rates  
17 unrelated to power or gas supply and not otherwise recovered through fixed  
18 charges. Rows 55 through 57 shows this calculation for PSE's electric system.  
19 Exhibit No. \_\_\_(JAP-10) provides similar figures for PSE's gas system.

20 **Q. Do PSE's energy efficiency programs affect its ability to recover costs**  
21 **associated with providing power or gas supply service?**

22 A. For the most part – no. Energy efficiency's impact on a utility's ability to recover  
23 its costs is broadly a function of three primary factors: the amount of conservation  
24 achieved; the lag between the test year and rate year; and the design and

1 magnitude of utility rates. Since PSE’s power supply costs are based on forward-  
2 looking projections into the rate year, which include a projection of the load-  
3 reducing effects of energy efficiency, the limited regulatory lag associated with  
4 these costs result in more limited impact on the Company’s ability to recover  
5 these costs during the rate year.

6 Regarding its gas commodity costs, since these costs are largely a pass-through  
7 with its Purchase Gas Adjustment, PSE similarly assumes energy efficiency’s  
8 effect on the Company’s ability to recover these costs to be minimal.

9 Given the above, I will limit my discussion of these issues in this case to the  
10 impact energy efficiency has on PSE’s ability to recover costs unrelated to power  
11 or natural gas supply.

12 **Q. What impact does Company-sponsored energy efficiency have on PSE’s**  
13 **ability to recover costs unrelated to power or natural gas supply during the**  
14 **rate year in this case?**

15 A. Based upon the methodology described above, Table 3 shows that PSE estimates  
16 that Company-sponsored energy efficiency will reduce its ability to recover \$18  
17 million in costs unrelated to power and natural gas supply during the rate year in  
18 this case.

19 **Table 3 – Impact of Company-Sponsored Energy Efficiency on PSE’s**  
20 **Ability to Recover Costs Unrelated to Energy Supply (\$ millions)**

| <b>System</b> | <b>Rate Year<br/>(May 12 – Apr 13)</b> |
|---------------|--|
| Electric      | <b>\$ 15.5</b>                         |

|       |         |
|-------|---------|
| Gas   | \$ 2.5  |
| Total | \$ 18.0 |

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These figures are conservative in that they do not reflect the rate increases proposed in this case, nor do they reflect impacts related to the recovery of power supply costs. Exhibit Nos. \_\_\_(JAP-9) and \_\_\_(JAP-10) provide a derivation of these results.

**Q. Do these estimates reflect conservation savings associated with PSE’s fuel-switching program?**

A. No. This analysis excludes the conservation savings associated with PSE’s fuel-switching program.

**Q. Do these estimates reflect the revisions to gas and electric conservation savings filed with the Commission on April 25, 2011 in Docket Nos. UE-970686 and UE-100177?**

A. Yes. The estimated impacts of Company-sponsored energy efficiency shown above reflect these revisions.

**Q. Do PSE’s calculations include the effects of any offsetting factors?**

A. As noted earlier, PSE has assumed that Company-sponsored energy efficiency will have no effect on the recovery of its power supply and natural gas supply (commodity) costs. As such, these costs fully offset the associated impact on Company revenues.

1 PSE has not, however, reflected any other offsetting factors in its projection of the  
2 effects of Company-sponsored energy efficiency on its ability to recover costs.  
3 PSE does not believe that Company-sponsored energy efficiency gives rise to any  
4 other meaningful cost offsets during the relatively short amount of time between  
5 any given test year and the associated rate year. Rather, the majority of cost  
6 savings associated with Company-sponsored energy efficiency will be reflected in  
7 the long term, as reduced load decreases or delays the need for future capital  
8 investment.

9 **VI. PSE CONSERVATION SAVINGS ADJUSTMENT RATE**  
10 **PROPOSALS**

11 **A. Overview**

12 **Q. What is the purpose of PSE's Conservation Savings Adjustment ("CSA")**  
13 **Rate proposals?**

14 A. The CSA Rate proposals are intended to recover costs that would otherwise go  
15 unrecovered by PSE as a result of the load-reducing impacts of Company-  
16 sponsored energy efficiency that have occurred since the beginning of the test  
17 year used to derive its retail rates.<sup>4</sup>

18 **Q. Please describe the general methodology used to recover costs through the**  
19 **CSA Rates.**

---

<sup>4</sup> The Company is proposing CSA Rates for its electric customers and, separately, for its natural gas customers. The methodology used to construct the electric rate and gas rates are nearly identical.

1 A. As discussed in more detail later in my testimony, the CSA Rate methodology is  
2 implemented in the following steps. First, for a given calendar year, PSE  
3 calculates the amount of applicable Company-sponsored conservation savings<sup>5</sup>  
4 that is not reflected in base rates in each month and for each affected rate group.  
5 Next, PSE calculates the per-unit impact of these conservation savings on the  
6 utility's ability to recover costs for each rate group to which the CSA rates apply.  
7 PSE then multiplies the applicable conservation savings for each group by its  
8 corresponding per-unit cost impact in each month. PSE then sums these amounts  
9 across the months within the year to calculate the amount to be recovered through  
10 the CSA Rates. PSE proposes to recover seventy-five percent (75 percent) of this  
11 amount in the following CSA rate year. PSE proposes to recover the remaining  
12 twenty-five percent (25 percent) in a subsequent CSA rate filing, subject to a true-  
13 up and other conditions.

14 **Q. What are the proposed conditions for recovering the final twenty-five**  
15 **percent of unrecovered costs?**

16 A. First, PSE proposes that the recovery of these costs be conditioned upon third-  
17 party verification of the savings used to derive the CSA rates. Second, PSE  
18 proposes that the recovery of these amounts be subject to an earnings test. I  
19 discuss these elements of the proposal in more detail, later in my testimony.

20 **Q. To which electric customers will the CSA Rate apply?**

---

<sup>5</sup> PSE's conservation savings estimates assume normal weather. Therefore, no further adjustments to these savings figures are necessary for the effects of weather.

1 A. PSE proposes to implement separate electric CSA rates for its residential  
2 customers and two groups of non-residential customers. One group of non-  
3 residential customers is composed of those that are currently eligible for  
4 conservation programs under PSE's electric rate Schedule 258 (Large Power User  
5 Self-Directed Program).<sup>6</sup> The other group of non-residential customers is  
6 composed of those customers served under electric rate Schedules 24, 25, 26, 29,  
7 31, 35 43 and 57, including their equivalent schedules (e.g., Residential and Farm  
8 Schedules).

9 **Q. To which gas customers will the CSA Rate apply?**

10 A. PSE proposes to implement separate gas CSA rates for its residential customers  
11 (Schedules 23 and 53) and two groups of non-residential customers. Separate  
12 rates are proposed for PSE's firm non-residential gas sales and interruptible gas  
13 sales customers. The firm non-residential gas sales group is composed of  
14 Schedules 31 and 41. The interruptible gas sales group is composed of Schedules  
15 85, 86 and 87. Since PSE's gas transportation customers do not participate in  
16 PSE's energy efficiency programs, the CSA Rates will not apply to them.

17 **Q. Why were these specific rate groups chosen?**

18 A. PSE believes these groupings strike a reasonable balance between a desire to  
19 minimize cross-subsidization between customer groups and the administrative

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<sup>6</sup> This includes customers served under electric rate schedules 40, 46, 49, 448, 449, 458 and 459.

1 complexity that will inevitably be inherent in tracking and verifying conservation  
2 savings used to determine CSA Rates.

3 **B. Proposal Details**

4 **Q. Earlier, you described the steps in implementing the CSA Rate methodology.**  
5 **Can you please elaborate on how the conservation savings used in the CSA**  
6 **Rate methodology are determined for each rate group?**

7 A. Yes. Exhibit Nos. \_\_\_(JAP-11) and \_\_\_(JAP-12) show these calculations for the  
8 Electric and Gas CSA Rates, respectively.

9 To begin the analysis, PSE determines the first-year energy savings from  
10 Company-sponsored energy efficiency programs for each rate group and in each  
11 month of a "Recovery Year."<sup>7</sup> This is shown in columns (b), (g) and (l) of the  
12 exhibits.

13 PSE then divides these first-year energy savings by 12 to derive an incremental  
14 monthly amount of conservation savings. This is shown in columns (c), (h) and  
15 (m) of the exhibits.

16 PSE then accumulates those incremental monthly energy savings each month,  
17 beginning from the first month of the test year used to determine rates in effect  
18 during the Recovery Year. This is shown in columns (d), (h) and (n) of the  
19 exhibits.

---

<sup>7</sup> Recovery Years are coterminous with calendar years and represent the years for which the costs recovered through the CSA Rate are calculated.

1 In Recovery Years where more than one set of rates was in effect, conservation  
2 savings that were not reflected in the rates in effect early in the Recovery Year,  
3 but that are reflected in rates later in the Recovery Year, would be subtracted from  
4 the accumulated conservation savings in each month the new rates were in effect  
5 (i.e., when the billing determinants were updated). This is the situation for the  
6 development of Gas CSA Rates in this case, as reflected in columns (e), (j) and  
7 (o) of Exhibit No. \_\_\_(JAP-12).

8 In Recovery Years where only one set of rates are in effect, the CSA Rate  
9 methodology simply uses the accumulated conservation savings since the  
10 beginning of the test year for rates in effect during the year. This is the situation  
11 for the development of Electric CSA Rates in this case.

12 The accumulated amounts of conservation savings that are not reflected in rates in  
13 each month of the Recovery Year are referred to as the "Savings Adjustment."  
14 The Savings Adjustments are shown in columns (f), (k) and (p) of these exhibits.

15 **Q. Why do Exhibit Nos. \_\_\_(JAP-11) and \_\_\_(JAP-12) only go back to January**  
16 **2010 when the rates in the 2011 Recovery Year rely, in whole or in part, on a**  
17 **2008 test year?**

18 A. As mentioned earlier and discussed in more detail below, PSE proposes that the  
19 conservation savings used to calculate CSA rates go through a verification  
20 process. Given the complexities and added cost of performing additional analyses  
21 going back another two years (i.e., to the beginning of 2008), PSE chose not to



1 include conservation savings that occurred prior to 2010 in the CSA Rate  
2 calculation for the 2011 Recovery Year.

3 **Q. Does the electric Savings Adjustment include electric conservation savings**  
4 **associated with PSE's fuel conversion program?**

5 A. No. Consistent with the calculations in the previous section of this testimony,  
6 PSE has subtracted electric conservation savings associated with this program  
7 from its electric Savings Adjustment calculation.

8 **Q. Does the Savings Adjustment include the gas and electric conservation**  
9 **savings revisions filed with the Commission on April 25, 2011 in Docket Nos.**  
10 **UE-970686 and UE-100177?**

11 A. Yes. PSE calculated its gas and electric Savings Adjustments with conservation  
12 savings that tie to the amounts reported in this filing.

13 **Q. You noted earlier that PSE then multiplies the Savings Adjustment by a per-**  
14 **unit cost to calculate the amount recovered through the CSA Rates. How is**  
15 **this per-unit cost determined?**

16 A. For the Electric CSA Rate, PSE calculates the per-unit cost separately for each  
17 rate group by dividing the group's pro forma test year revenue for rates in effect  
18 during each month of the Recovery Year, less the sum of any associated basic  
19 charge revenue and allocated power-related costs, by the group's corresponding  
20 pro forma test year sales. The net result is referred to as the Fixed Cost Rate, or  
21 "FCR." This calculation is shown in Exhibit No. \_\_\_(JAP-13) for each rate group

1 subject to PSE's proposed Electric CSA Rates.

2 A similar approach is taken for the Gas CSA Rate, where PSE calculates the gas  
3 FCR separately for each rate group by dividing the group's pro forma test year  
4 margin revenue for rates in effect during each month of the Recovery Year, less  
5 the sum of any associated basic charge and minimum charge revenue, by the  
6 group's corresponding pro forma test year sales. This calculation is shown in  
7 Exhibit No. \_\_\_\_ (JAP-14) for each rate group subject to PSE's proposed Gas CSA  
8 Rates.

9 **Q. What is the resulting amount to be recovered from each rate group through**  
10 **Electric CSA Rates for the 2011 Recovery Year?**

11 A. The resulting amount to be recovered from each electric rate group is shown  
12 below. This amount is referred to as the Unrecovered Fixed Cost Amount, or  
13 "UFCA." Exhibit No. \_\_\_\_ (JAP-15) presents a derivation of these amounts.

14 **Table 4 – UFCA by Electric Rate Group (\$ millions)**

| <b>Electric Rate Group</b>                   | <b>CSA Rate Year<br/>(May 12 – Apr 13)</b> |
|--|--|
| Schedule 7 (Residential)                     | \$ 4.5                                     |
| Schedules 24, 25, 26, 29, 31, 35, 43 and 57* | \$ 5.3                                     |
| Schedules 40, 46, 49, 448, 449, 458 and 459  | \$ 0.1                                     |
| Total**                                      | \$ 9.8                                     |

15 \* As well as equivalent schedules, such as Residential and Farm Schedules.

16 \*\* Differences due to rounding.

17 **Q. How much is proposed to be recovered from each rate group through Gas**  
18 **CSA Rates for the 2011 Recovery Year?**

1 A. The amount proposed to be recovered from each rate group is shown below.  
2 Exhibit No. \_\_\_\_ (JAP-16) presents a derivation of these amounts.

3 **Table 5 – UFCA by Gas Rate Group (\$ millions)**

| <b>Gas Rate Group</b>            | <b>CSA Rate Year<br/>(May 12 – Apr 13)</b> |
|----------------------------------|--|
| Schedule 23 and 53 (Residential) | \$ 1.2                                     |
| Schedules 31 and 41              | \$ 0.7                                     |
| Schedules 85, 86 and 87          | \$ 0.1                                     |
| Total*                           | \$ 2.0                                     |

4 \* Differences due to rounding.

5 **Q. How are the Electric CSA rates calculated for each rate group?**

6 A. The Company calculates each rate group’s Electric CSA Rate by dividing the total  
7 UFCA to be recovered in the CSA rate year by their forecasted electric sales over  
8 the CSA rate year. For the Electric CSA Rates proposed in this case, PSE used its  
9 F2011 forecast to determine each group’s forecasted electric sales. The proposed  
10 Electric CSA Rates for the 2012-2013 CSA rate year are shown below. Exhibit  
11 No. \_\_\_\_ (JAP-17) summarizes the derivation of these rates, while Exhibit  
12 No. \_\_\_\_ (JAP-18) provides the proposed tariff.

13 **Table 6 – Proposed Electric CSA Rates for 2012-13**

| <b>Rate Group</b>                            | <b>2012-2013<br/>Electric CSA Rates</b> |
|--|---|
| Schedule 7 (Residential)                     | 0.0311 ¢/kWh                            |
| Schedules 24, 25, 26, 29, 31, 35, 43 and 57* | 0.0415 ¢/kWh                            |
| Schedules 40, 46, 49, 448, 449, 458 and 459  | 0.0018 ¢/kWh                            |

1 **Q. What is the bill impact of these rates on PSE’s electric customers?**

2 A. As shown in Exhibit No. \_\_\_(JAP-5), for a PSE customer that consumes roughly  
3 1,000 kWh per month, their average monthly bill is currently \$97. At the rates  
4 shown above, the average monthly bill for this residential electric customer will  
5 increase by 31 cents, or by 0.3 percent. Similarly, the projected rate year impact  
6 on PSE’s non-residential electric customer revenue is well below 1 percent.

7 **Q. How are the Gas CSA rates calculated for each rate group?**

8 A. As with the Electric CSA Rates, PSE calculates each rate group’s Gas CSA Rate  
9 by dividing the total UFCA to be recovered in the CSA rate year by their  
10 forecasted gas sales over the CSA rate year. The Company used its F2010  
11 forecast to determine each groups’ forecasted gas sales.<sup>8</sup> The proposed Gas CSA  
12 rates for the 2012-2013 CSA rate year are shown below. Exhibit No. \_\_\_(JAP-  
13 19) summarizes the derivation of these rates, while Exhibit No. \_\_\_(JAP-20)  
14 provides the proposed tariff.

15 **Table 7 – Proposed Gas CSA Rates for 2012-13**

| <b>Gas Rate Group</b>             | <b>2012-2013<br/>Gas CSA Rates</b> |
|-----------------------------------|------------------------------------|
| Schedules 23 and 53 (Residential) | 0.161 ¢/therm                      |
| Schedules 31 and 41               | 0.182 ¢/therm                      |
| Schedules 85, 86 and 87           | 0.120 ¢/therm                      |

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<sup>8</sup> This is the most current Company load forecast for gas sales.

1 **Q. What is the bill impact of these rates on PSE's gas customers?**

2 A. Page 2 of Exhibit No. \_\_\_(JKP-12) suggests that the average PSE residential gas  
3 customer consumed roughly 66 weather-normalized therms of natural gas per  
4 month in the test year, which translates into an average monthly bill of  
5 approximately \$82. At the rates shown above, the average monthly bill for this  
6 residential customer will increase by 11 cents, or by approximately 0.1 percent.  
7 Similarly, the projected rate year impact on PSE's non-residential gas customer  
8 revenue is well below 1 percent.

9 **Q. In the final steps of the CSA rate methodology, you mentioned that seventy-**  
10 **five percent of the initial UFCA would be recovered in the following CSA**  
11 **rate year and the remainder would be recovered later. Can you provide an**  
12 **illustration of how this methodology would work over time?**

13 A. Yes. Exhibit No. \_\_\_(JAP-21) provides a hypothetical example of how a rate  
14 group's UFCA in each Recovery Year would be recovered over time, as well as  
15 how the true-up would also be factored into subsequent CSA Rate filings. The  
16 figures are loosely based on figures provided for residential electric customers in  
17 Exhibit Nos. \_\_\_(JAP-9 and JAP-15). Column (b) of this exhibit shows the  
18 Recovery Year and column (c) illustrates a hypothetical UFCA for each Recovery  
19 Year. Column (d) shows the CSA rate years. Column (e) shows how seventy-  
20 five percent (75 percent) of each Recovery Year's UFCA is recovered in the  
21 following CSA rate year, while column (f) shows how the remaining twenty-five  
22 percent (25 percent) could be recovered the following CSA rate year. Column (j)

1 shows a true-up between the expected CSA revenue (column (h)) and actual CSA  
2 revenue (column (i)) for each Recovery Year. Column (g) shows how this true-up  
3 amount is then recovered in the following CSA rate year.

4 **Q. Does the true-up amount in column (j) of Exhibit No. \_\_\_(JAP-21) only**  
5 **reflect the difference between expected and actual CSA revenue in each**  
6 **Recovery Year?**

7 A. That is all that is included in this simple, hypothetical example. However, PSE  
8 contemplates that any changes to the Recovery Year Savings Adjustment  
9 resulting from the third-party verification of conservation savings would flow  
10 through these calculations in a similar manner.

11 **Q. What is PSE's proposal regarding third-party verification of conservation**  
12 **savings?**

13 A. PSE proposes to rely on the verification standards used for confirming  
14 conservation savings to comply with the RPS. These verification standards were  
15 just recently updated on October 13, 2010 by the Commission as part of its  
16 approving and adopting the settlement agreement in Docket No. UE-100177.  
17 That said, PSE is open to the possibility of using a different standard more  
18 acceptable to the Commission.

19 **Q. You mentioned earlier that PSE also proposes to apply an earnings test to the**  
20 **recovery of costs through CSA Rates. Can you elaborate?**

21 A. Yes. PSE proposes that the recovery of costs through CSA Rates be limited so

1 that costs recovered through these rates for a given Recovery Year do not result in  
2 PSE's actual rate of return, as derived from PSE's audited year-end financial  
3 statements, exceeding its authorized rate of return in the Recovery Year. To the  
4 extent that the earnings test resulted in a need to reduce Recovery Year CSA  
5 revenue, such revenue would be reduced in proportion to the expected gas and  
6 electric CSA revenue in the Recovery Year for which the earnings test applied.  
7 While PSE is opposed to the notion that its authorized rate of return represents a  
8 hard cap on earnings, PSE wishes to address any concerns that the proposed CSA  
9 Rates would contribute to its ability to exceed the expected level of earnings  
10 approved by the Commission in PSE's general rate proceedings.

11 **VII. CONCLUSION**

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

13 A. Yes.