Exhibit No. ___T (JRS-1T)
Docket UE-060266 and UG-060267
Witness: Joelle Steward

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	DOCKET NO. UE-060266 DOCKET NO. UG-060267

TESTIMONY OF

JOELLE R. STEWARD

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Natural Gas Decoupling, Electric Conservation Incentives and Electric Demand Response Pilots

July 25, 2006

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Joelle Steward. My business address is 1300 S. Evergreen Park Drive S.W., P.O. Box 47250, Olympia, WA 98504. My email address is jsteward@wutc.wa.gov.

Q. By whom are you employed and in what capacity?

A. I am employed by the Washington Utilities and Transportation Commission as a Regulatory Analyst.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since October 1999.

Q. Have you prepared an exhibit that states your educational and professional background?

A. Yes, it is Exhibit No. __ (JRS-2).

II. SCOPE OF TESTIMONY

Q. What is the scope of your testimony?

A. I present Staff's recommendation on Puget Sound Energy, Inc.'s (PSE or the Company) proposed: 1) decoupling mechanism, the Gas Revenue Normalization Adjustment; 2) electric energy efficiency incentive mechanism; and 3) demand response pilot programs. I also recommend a future gas rate study.

In separate joint testimony with Public Counsel and the Northwest Industrial Gas Users, I testify in support of a joint proposal regarding natural gas rate spread, rate design and low-income energy assistance. On August 23, 2006, I will also file joint testimony with the Company, Public Counsel and several intervenors in support of a Partial Settlement Agreement on electric rate spread, rate design and low income energy assistance.

III. SUMMARY OF TESTIMONY

Q. Please summarize your recommendation on PSE's proposed gas decoupling mechanism, the Gas Revenue Normalization Adjustment.

A. I recommend that the Commission reject the gas decoupling mechanism proposed by PSE and adopt a partial decoupling mechanism that will recover variations in sales that are non-weather related. The partial decoupling mechanism that I propose takes into account that new customers have lower than average usage, is limited to three years, and has a cap on the level of surcharge that could be imposed each year.

Q. Please summarize your recommendation on PSE's proposed electric energy efficiency incentive mechanism.

A. I recommend that the Commission reject the electric incentive mechanism as proposed by PSE. I propose a modified mechanism that will reward PSE for aggressively pursuing electric energy efficiency and is well balanced between the interests of the Company and ratepayers.

Q. Please summarize your recommendation on PSE's proposed demand response pilot programs.

A. I recommend that the Commission reject the demand response pilot programs in this general rate case. The Company should make a separate tariff filing for the programs after they are fully developed, and seek recovery of the costs through the electric tariff rider, Schedule 120.

Q. Have you prepared any exhibits in support of you recommendations?

A. Yes. They are:

Exhibit No. ___ (JRS-3): Summary of GRNA Simulation With and Without Weather Effects.

Exhibit No. ___ (JRS-4): 2005 Residential Use Per Customer for New Customers added in 2003 and 2004.

Exhibit No. ___ (JRS-5): Partial Decoupling With Modified New Customer Adjustment

Exhibit No. ___ (JRS-6): Use Per Customer, 1995 – 2005

Exhibit No. ___ (JRS-7): Proposed Electric Energy Efficiency Incentive Mechanism

Exhibit No. ___ (JRS-8): Requirements for Electric Incentive Mechanism

IV. NATURAL GAS RATES

Q. What are the natural gas rate decisions the Commission faces in this case?

A. The Commission has to resolve the usual questions of: 1) how to allocate any increase in revenue requirement between customer classes (rate spread); and 2) how to allocate that increase across the rate components in each schedule (rate design). Staff is a party to the joint proposal on gas rates with Public Counsel and the

Northwest Industrial Gas Users. Together we recommend a rate spread and rate design for any increase authorized by the Commission in this case, as well as an increase in funding for low-income bill assistance.

An additional issue relating to gas rates is the Company's proposal for a decoupling mechanism, called the Gas Revenue Normalization Adjustment (GNRA). The Company proposes this mechanism to correct what it calls a fundamental problem in ratemaking, which is the inability to accurately forecast gas volumes to set rates, resulting in the Company having to financially "live or die" by the sales level based on rates set in a prior period.[1] The mechanism is also designed to minimize the impact of weather on PSE's financial condition, as well as to remove a disincentive for it to promote energy efficiency.

Q. What general principles should be considered in deciding these issues?

A. The general principles to be applied in rate determination are fairness, revenue stability for the company, rate stability for customers, understandability, and sending proper price signals.

Of course, there is no perfect solution that will satisfy all these criteria equitably for all parties. Staff, like all parties, uses judgment based on the current industry and regulatory environment and past Commission policy in crafting our recommendations.

[1] Exhibit No. __ (RJA-1T) at 26:22 – 27:15 (Amen).

Q. In addition to your joint proposal on gas rate spread and rate design in this case, do you have any other recommendations related to gas rates?

A. Yes. I recommend that before the Company files its next rate case, it be ordered by the Commission to undertake a review of its current rate schedules and consider how these could be combined or separated to better reflect similar types of usage and cost causation. Currently, PSE has 16 rate schedules, many of which are combined for cost of service purposes. This implies that the load characteristics are similar for these classes. The Company's review should verify where this is reasonable and/or where new classes may be appropriate.

V. DECOUPLING

Q. The Company proposes a decoupling mechanism, which it calls the Gas Revenue Normalization Adjustment (GRNA). Before describing PSE's proposal, first explain decoupling in general?

A. Decoupling is a regulatory mechanism that separates, or "decouples," a utility's revenues from its sales of energy, in this case natural gas, and "recouples" revenues to something else, such as the number of customers. The mechanism gives a utility recovery of deviations in actual revenue from an authorized level of revenue through an annual adjustment.[2]

One of the primary goals for a decoupling mechanism is to remove a utility's disincentive to promote energy efficiency. Under current rate structures, revenues are

[2] PSE, like other gas utilities in Washington, has a Purchased Gas Adjustment in which it passes through all gas commodity costs to customers. So, when we refer to a decoupling mechanism for a gas utility, we are talking about only the revenues and costs associated with delivering the gas, which is also referred to as "margin". Also, it is important to note that the delivery-related costs are generally fixed costs, meaning they do not vary with usage or commodity throughput of the system.

largely generated through volumetric charges; therefore, reducing energy use may result in lower profits for the utility, and may compromise the ability of the utility to recover its fixed costs. A decoupling mechanism, which restores to the utility the margins "lost" due to customer efficiency, would then allow the utility to pursue energy efficiency without losing profits and make it more likely that it would recover its fixed costs.

Interest by utilities and environmental advocates in decoupling has re-emerged in recent years as gas prices have risen and customer usage has declined.

Q. Please describe the Company's decoupling proposal?

A. The Company's proposed decoupling mechanism, the GNRA, is designed to annually restore the margin revenue authorized by the Commission in this case, on a per customer basis, for variations of sales volumes. Under the mechanism, the Company will defer the difference between the actual margin revenues and the target margin revenues, on a monthly basis, and once a year compute a surcharge or a credit to recover the deferral balance.

The target margin revenues are the authorized margin revenue levels from this case (baseline margin revenue) plus an adjustment for the change in the number of customers (new customer adjustment). To calculate the new customer adjustment, PSE:

1. Multiplies the number of new customers by the customer charge.

2. Multiplies the number of new customers by the average use per customer. This estimates the sales volumes for new customers. The average use per customer is taken from the corresponding month in the test year in this case.

3. Multiplies the estimated new customer sales volumes (step 2) by the delivery charge in the rate schedule.

4. Adds steps 1 and 3.

Q. To which customer classes does PSE's GRNA apply?

A. PSE proposes that the GRNA apply to Residential General Service Schedule 23, Commercial and Industrial General Service Schedule 31, Special Commercial Heating Service Schedule 36, Special Multiple Unit Housing Service Schedule 51, and Propane Service Schedule 53. The margin deferral is calculated separately for each schedule and each schedule would see a separate surcharge or credit.

Company witness Mr. Amen states that these customer classes were chosen for the mechanism because they exhibit "weather sensitivity and trends in declining use per customer,"[3] which he presents in Exhibit No. __ (RJA-4).

Q. Is the mechanism designed to restore the margin for these customer classes due to any variation in sales?

A. Yes. The mechanism does not distinguish between any causes of sales variation. All weather-related effects as well as customer conservation or efficiency improvements are captured in the mechanism.

[3] Exhibit No. __ (RJA-1T) at 47:12 – 14 (Amen).

Q. What is your recommendation for this mechanism?

A. I recommend that the mechanism be rejected as proposed by PSE. Further, I recommend that the Commission adopt, as a pilot, a partial decoupling mechanism that will remove PSE's disincentive to promote energy conservation by restoring lost margin due to customers' non-weather related changes in usage.

Q. Please explain how the partial decoupling mechanism that you recommend is different from PSE's proposed GRNA.

A. First, my partial decoupling mechanism defers margin variances based on weather-normalized volumes so it would include only the non-weather related effects that cause changes in usage, such as customer conservation and efficiency improvements.

Second, PSE's new customer adjustment is modified to take into account that new customers have lower than average usage.

Third, the partial decoupling mechanism would be a three-year pilot program with a cap on the annual rate change.

Fourth, for the pilot, the mechanism would apply to only Residential General Service Schedule 23, Commercial and Industrial General Service Schedule 31 and Special Commercial Heating Service Schedule 36. It would not apply to Multiple Unit Housing Service Schedule 51 and Propane Service Schedule 53, as proposed by the Company.

Q. First, why should sales variations due to weather not be included in the decoupling mechanism?

A. Including weather effects in the mechanism, as proposed by PSE, results in more bill volatility for customers. Customers should not absorb yet another shift in risk through reduced bill stability in order to increase revenue stability for the Company. Staff witness Mr. Russell explains in his testimony that 69 percent of the Company's revenues are already protected from variations in weather, notwithstanding revenue from customer charges and demand charges that are not affected by weather.

Exhibit No. __ (JRS-3) shows the difference in projected increases for the decoupling mechanism with and without weather, based on Mr. Amen's GRNA simulation in Exhibit No. __ (RJA-10), updated to reflect PSE's proposed rates.[4] As you can see from my exhibit, including weather effects in the mechanism nearly doubles the estimated revenue adjustment to be collected in a surcharge. Including weather also creates larger swings in the year-to-year adjustments.

Q. If there is a concern about increased bill volatility for customers, why do you recommend even a partial decoupling mechanism that may also result in bill volatility, albeit at a significantly lower level?

A. The social and customer value of removing the disincentive for the utility to promote energy efficiency warrants a pilot for a partial decoupling mechanism. Cost-effective energy efficiency may benefit customers and society through lower customer bills, reduced pollution, and lower rates. Additionally, a recent study by the American

[4] PSE's GRNA simulation for 2007-2009 in Exhibit No. __ (RJA-10) is based on the weather experienced in the last 3 years, which was warmer than normal in each year.

Council for an Energy Efficient Economy suggests that accelerated energy efficiency and renewable energy investment in the Pacific Northwest may help bring down natural gas prices by up to 38 percent.[5]

A partial decoupling mechanism will allow PSE to recover the fixed costs that are lost between general rate cases as a result of the utility-funded efficiency programs or other customer conservation efforts. It may also allow PSE to look for new ways to encourage or educate customers on ways to reduce use.

Q. Doesn't PSE already promote energy efficiency for its customers?

A. Yes. PSE has already made a significant commitment to pursue cost-effective energy efficiency opportunities with its customers. It assesses the potential efficiency opportunities in its service area in its integrated resource planning process. As an outcome of that process and its consultations with its Conservation Resource Advisory Group,[6] PSE has set reasonably aggressive targets for energy efficiency programs, which it has met or exceeded for the last several years. PSE's current gas target for 2006-2007 is 4.2 million therms.[7] This is equivalent to serving over five thousand residential customers for a year. At current rates, PSE would incur approximately $1 million in lost margin at the end of 2007 if it achieves this target.

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[5] William Prindle, R. Neal Elliott, Anna Shipley, *Impacts of Energy Efficiency and Renewable Energy on Natural Gas Markets in the Pacific West*, American Council for an Energy-Efficient Economy, Report No. E062, http://aceee.org, January 2006.

[6] The Conservation Resource Advisory Group (CRAG) was established in the 2001 general rate case settlement on conservation. The Company consults with this advisory group on matters relating to the development and implementation of its energy efficiency programs. Company witness Calvin. Shirley identifies the organizations represented in the CRAG in Exhibit No. __ (CES-1T) at 11:9-22.

[7] The threshold target for not incurring penalties is 3.4 million therms over the two years.

This amount continues to compound until the Company files a new rate case and reflects the lower sales volumes in the test year.

As a result of the 2001 general rate case stipulation, the Company faces a penalty up to $750,000 for failing to achieve its gas target. I recommend that for the duration of the partial decoupling mechanism pilot, this penalty mechanism be retained and that the Company continue to use its resource plan and its advisory group to set its gas efficiency targets, which are filed with the Commission every two years.

Q. Are there other ways to address recovery of fixed costs lost due to customer conservation or utility-funded efficiency efforts?

A. Yes. This goal could also be met through straight fixed/variable rate design or, in part, through a lost revenue adjustment for efficiency programs.

Q. Please explain straight fixed/variable rate design.

A. Straight fixed/variable rate design recovers all fixed costs in a customer charge and all variable costs in a volumetric charge.[8] Most of the margin costs in the delivery charge are fixed costs for the utility. Therefore, under the rates in effect today, this type of rate design would result in a customer charge of $25.81 per month, which is a 300 percent increase over today's customer charge of $6.25. If we moved to this level of basic charge today, 45 percent of customers would see a bill increase of 16 percent or higher and 23 percent of customers would see a bill decrease of 14 percent

[8] This type of rate design also cuts the Company's risk for weather-related variances in usage, and, therefore, should also be subject to the same compensation for customers (reduced return on equity) that Staff witness Mr. Hill proposes for the GRNA mechanism, if adopted by the Commission.

or more. This level of increase and abrupt shift in rate structure would constitute rate shock, which, therefore is inadvisable.

Furthermore, such a rate design reduces the potential bill savings a customer could achieve through conservation efforts. Currently, 90 percent of the bill for the average customer is in a volumetric charge. If the customer charge were increased to $25.80, then only 68 percent of the bill would be in a volumetric charge. The result is that the potential bill savings for a customer are reduced by 20 percent, thus creating another disincentive for efficiency, this time at the customer level.

Overall, any increase in the customer charge should be gradual in light of bill impacts and the interest of maintaining an incentive for customers to pursue more efficient use of gas.

Q. Please explain the other alternative to partial decoupling, the lost revenue adjustment for energy efficiency programs.

A. This type of mechanism allows the utility to recover the lost margins associated with its efficiency program activities. The lost margins are calculated by multiplying the margin rates by the savings produced by the utility's efficiency programs. There are three chief concerns with this type of mechanism.

First, the calculation can become quite contentious over the measurement of the savings achieved. There is an incentive for the utility to claim more savings than it achieved in order to increase profits. This could be overcome through sophisticated measurement and verification, but that would bring higher administrative costs.

Second, since this mechanism is limited to utility-funded efforts, it leaves a disincentive for the utility to pursue harder-to-measure educational efforts or support other independent efficiency efforts.

Third, it does not remove the utility's incentive to promote use (such as through gas barbecue promotions) since it can still increase profits through additional sales.

Overall, the partial decoupling mechanism I recommend is preferable to the lost revenue adjustment because it is simpler to implement and better aligns the Company's interests with the goal to encourage more efficient use of gas.

Q. Returning to the differences between the partial decoupling mechanism you propose and PSE's GRNA, you propose a modification to the new customer adjustment. Before explaining the proposed modification, please explain why a new customer adjustment is necessary.

A. PSE's gas distribution system continues to grow with new customers being added each year.[9] In order to make an apples-to-apples comparison between baseline margin revenue authorized in this case and actual margin revenue in subsequent years, we need to take into account the new customers that have been added since the test year. To do this, we can either: 1) remove the new customers and the margin revenue they generate from the *actual* margin revenue; or 2) add the new customers and the margin revenue they generate to the *baseline* margin revenue set in the rate case. Either way, an adjustment for new customers is appropriate. PSE's proposed

[9] PSE's 2005 Least Cost Plan projects a gas customer growth rate of 2.5 percent per year in the next 20 years. (Chapter VI, page 14.)

GRNA opts for the latter method – adding the new customers and adjusting the baseline margin revenue to reflect the added costs of serving these customers – and I incorporate it into my partial decoupling mechanism.

Q. What modification do you propose for the new customer adjustment?

A. The new customer adjustment should be modified to reflect that new customers use less energy than existing customers. The below-average use of new customers is one of the contributing factors for why customer use overall is declining. Mr. Amen discusses the declining use trend in his testimony at pages 32-33 of Exhibit No. __ (RJA-1T). New customer use is expected to be below average because new homes are more efficient due to updated building codes and higher appliance standards. Additionally, the increasing penetration of new multifamily housing in PSE's service area, which is typically smaller than a single-family home, is contributing to the decline.

Exhibit No. __ (JRS-4) shows actual use per customer for all residential customers in 2005, compared to the use of new customers added in 2003 and 2004. This exhibit shows that customers added during 2003 and 2004 used 10 percent and 11 percent less, respectively, than the overall average customer in 2005.

Q. What is the result of using average use per customer from the test year to make the new customer adjustment, as PSE proposes for its GRNA?

A. By assuming the use per customer from the test year for new customers added in subsequent years, the mechanism calculates a higher margin deficiency than would

have occurred if the Company had annual rate cases because it calculates more volumes for new customers than they likely used.

A simplified example illustrates the difference this creates in margin deficiency. In the test year, the average use per customer was approximately 68 therms per month. If we assume 40,000 new customers were added during a year, the new customer adjustment would equal approximately $10.3 million (68 therms/customer * 12 months * 40,000 new customers * $0.31615 margin delivery rate). This amount would be added to the baseline margin set in the rate case, along with the revenue from the customer charge for these new customers. Now, if we assume that new customers use 10 percent less than the average customer during the test year, which is 61.2 therms per month, the new customer adjustment would equal approximately $9.3 million (61.2 therms/customer * 12 months * 40,000 new customers * $0.31615 margin delivery rate). The result is that PSE would collect $1 million more in margin revenues based on usage that is not likely to occur. The decoupling mechanism should be designed to restore margin that was actually lost from sales, not provide "phantom margin" revenue. The Company's line extension policy should be taking into account the lower use for new customers in calculating the customer contribution to line extension costs.

Q. How do you recommend that the new customer adjustment be calculated in a decoupling mechanism?

A. The preferred calculation would use the actual use of new customers added since the test year rather than making any assumption about their usage. This will require PSE

to track usage of new customers separately in order to calculate the monthly deferrals. This data would be similar to what was provided in response to Public Counsel Data Request Nos. 14 and 15 (pages 2 and 3 in Exhibit No. __ (JRS-4)). The actual usage of customers added since the test year would be multiplied by the delivery charge to calculate the new customer adjustment.

Exhibit No. __ (JRS-5) compares a simulation of the residential partial decoupling mechanism with and without a modification in new customer usage for the new customer adjustment. In the simulation, I assume a five percent decrease in new customer usage. This is rather conservative compared to the data for 2003 and 2004 new customers shown in Exhibit No. __ (JRS-4). The results show that with this modification to the new customer adjustment, the revenue adjustment to be deferred is between 6 and 11 percent less than under the PSE proposed method.

Q. The third difference between your partial decoupling proposal and PSE's proposed GRNA is that you propose the mechanism as a 3-year pilot, with a cap on the surcharge level. Please explain why the mechanism should be a pilot.

A. Since this is a new mechanism, we should treat it as a pilot in order to allow for further study and evaluation of its various components before it can be reauthorized. Some of the questions that should be followed in the course of the pilot period are:

- What other core customer classes belong in the mechanism?
- What is the best data to use in making the new customer adjustment?
- How well does the mechanism remove PSE's disincentive to promote energy efficiency?

- What would the bill impacts have been if weather was included?
- Was there any discernable effect on service quality due to the existence of the mechanism?

The interested parties, including PSE and the Commission, should work together in the early stages of the mechanism to develop a comprehensive list of areas for further study, monitoring and evaluation.

Q. Why should the pilot be limited to three years?

A. First, for a pilot, three years is a reasonable amount of time to study the initial effects of a decoupling mechanism. Three years provides at least two full years of implementation, while in the third year the mechanism can be evaluated for continued implementation.

Second, decoupling addresses the level of revenue the Company is recovering each year, based on what was authorized in a rate case. Decoupling does not address the costs the Company is incurring each year. In a rate case, the Commission examines what costs are incurred to serve customers, overall and at the customer class level. While decoupling provides the utility with the variances between actual and authorized *revenues*, it does not provide for any variances between actual and authorized *costs*.

If a decoupling mechanism is allowed to go on too long without a rate case, we risk violating the cost-based principle of regulation by creating a potential mismatch between current costs and rates. A revenue requirement is based on a snapshot in time regarding revenues, expenses, rate base, customers, and usage. The

proposed mechanism locks in the revenue (margin) from the last rate case, but costs may change on the whole through operational efficiencies or as incurred by different customer classes. Therefore, any approved mechanism should be in place for only a relatively short period of time to minimize any potential mismatch of revenues and costs over time. I recommend that the mechanism expire after three years, with renewal only through a general rate case.

Q. Why do you propose a cap on any surcharge and what should the cap be?

A. There should be a cap on any surcharge in order to provide customers with some certainty as to the rate impacts this mechanism could produce. I propose to set the cap for residential customers at 1.50 percent of total class revenue and 0.50 percent for the commercial schedules. These levels should allow the Company to fully recover its lost margins due to non-weather related changes in consumption, while also giving customers some assurance that the mechanism will not result in wild rate swings. It also gives customers some assurance that the mechanism is not going to significantly reduce their benefit of a lower bill for undertaking energy efficiency improvements. Setting the cap lower could result in not fully removing the Company's disincentive for pursuing energy efficiency.

Q. Lastly, please explain why you propose that the partial decoupling mechanism be limited to Residential Schedule 23, Commercial and Industrial General Service Schedule 31, and Commercial and Industrial Heating Schedule 36.

A. I recommend that the pilot mechanism be limited to these schedules for several reasons. First, these schedules have simple rate structures—a customer charge and one block delivery rate—that make it relatively simple to calculate the mechanism. Other sales schedules, such as Large Volume Schedule 41, have a demand charge and multiple blocks, which may necessitate further refinement in a decoupling mechanism. Second, these schedules have been experiencing declining usage per customer, as shown in Exhibit No. __ (JRS-6). Third, PSE has energy efficiency programs targeted to these schedules. Fourth, these schedules have a relatively large number of customers, so the reduced benefit of lower bills due to individual conservation efforts as a result of restoring lost margin to the Company is minimized by averaging over the entire class.

The Company's proposed GRNA also included two other rate schedules in the mechanism—Multiple Unit Housing Service Schedule 51 and Propane Service Schedule 53. Schedule 51 should be excluded because: 1) it is a relatively small schedule of about 340 customers in six buildings; and 2) it has not shown a consistent decline in use per customer. The changes in its use per customer over the past 10 years have varied considerably, as seen in Exhibit No. __ (JRS-6). In fact, the average annual change in the last five years is a 4.33 percent increase in use per customer. This fact argues that this schedule is not contributing to lost margins.

Propane Service Schedule 53 should also be excluded because: 1) it currently has only five customers; and 2) propane service is intended to be a temporary service to bridge the timing gap between when a new home or neighborhood is constructed and when the gas main to that area is completed.

Q. Does this complete your discussion of decoupling?

A. Yes

VI. ELECTRIC CONSERVATION INCENTIVE MECHANISM

Q. What is the purpose of a conservation incentive mechanism?

A. An incentive mechanism rewards a utility's performance in achieving energy savings through its energy efficiency programs.

As I discussed above for natural gas decoupling, there is value to society and customers for the utility to promote conservation or energy efficiency. PSE's integrated resource plans have shown that energy efficiency is a cost-effective resource that helps keep rates low by avoiding or deferring new supply-side investments, as well as reducing emissions and lowering customers' bills.

Q. Please describe PSE's proposal.

A. PSE's proposed mechanism is described in the testimony of Company witness Calvin Shirley, Exhibit No. __ (CES-1T). The mechanism itself is shown in Exhibit No. __ (CES-4). If the Company achieves a baseline target of energy savings from its programs each year, the Company would receive an incentive payment, which is calculated as a percent of the total annual program expenditures. Conversely, if the Company falls short of the baseline target, a penalty is applied as a fixed dollar amount per kilowatt-hour (kWh) below the target. There are three ranges for the level of achievement on both the incentive side and the penalty side. The incentives

escalate from 10 percent to 20 percent of program expenditures and penalties escalate from $0.04 to $0.06 per kWh. There is a deadband of 80 to 100 percent of the baseline target in which no penalties apply.

Other provisions described by Mr. Shirley are that:

- The baseline target would be set each year, with review and input of the Conservation Resource Advisory Group (CRAG).
- Programs must be cost-effective, as determined by both the Total Resource Cost and Utility Cost tests, in order to be counted toward an incentive.
- Incentive and penalty amounts would not be included in calculations of program cost-effectiveness.
- Incentives and penalties would be calculated on an annual basis and collected or paid through the existing electric tariff rider, Schedule 120. A new electric tariff, Schedule 121, would describe the incentive/penalty process.
- The incentive or penalty amount would be projected and recovered in the year in which the Company expects to achieve the savings and based on the projected annual budget.
- All savings would be measured using the same protocols used to support PSE's recent energy efficiency program filings, which utilize data from the Regional Technical Forum.[10]
- No after-the-fact adjustments to program energy savings would be applied.
- The baseline target for 2007, the first year the Company would be eligible for incentives, would be 16.5 aMW, which is 50 percent of the two-year target of

[10] The Regional Technical Forum is an advisory committee established by the Northwest Power and Conservation Council in 1999 to develop standards to verify and evaluate conservation savings.

33 aMW for 2006 and 2007. Since this was established as a two-year target, the Company must achieve at least 16.5 aMW in 2006 to be eligible for any incentive in 2007.

Q. Do you support PSE's proposed mechanism?

A. No. I agree that an electric conservation incentive mechanism is reasonable, but I do not recommend that the mechanism proposed by PSE be adopted. Below, I recommend an alternative incentive mechanism.

Q. First, please explain why you support the creation of an electric conservation incentive mechanism.

A. There are several reasons why I support the creation of an electric conservation incentive mechanism. First, in its last two integrated resource plans, PSE has robustly evaluated and modeled the conservation potential in its service area. It has then aggressively pursued the cost-effective energy efficiency it identified in these plans, culminating in the achievement of 19.6 aMW in 2006. Since 2003, PSE has saved enough energy through its programs to serve over 40,000 customers for a year.

Second, PSE is currently subject to penalties for failing to meet savings targets, which it sets biennially. This penalty mechanism was created through the 2001 rate case Settlement Terms for Conservation, in Docket UE-011570 and UG-011571. The mechanism, however, does not reward PSE for meeting or exceeding the target. This one-sided mechanism does not encourage PSE to more aggressively take advantage of opportunities to capture savings that would exceed the target.

Finally, the Company faces regulatory disincentives to support energy efficiency because: 1) it does not earn a return on these investments as with supply-side resources; and 2) it may lose revenue through lower sales.

All in all, I support the creation of an incentive mechanism for PSE since it has made a good faith effort to capture the customer and societal value of energy efficiency, despite facing regulatory disincentives. An incentive mechanism will provide a fair counter-balance to the current penalty structure, encourages the Company to pursue all opportunities for cost-effective savings, and reward it for pursuing an alternative to the supply-side resources that will minimize long-term costs and environmental impacts.

Q. What are your objections to the mechanism proposed by PSE?

A. The proposed mechanism does not adequately balance the interests of ratepayers and the Company. First, the mechanism inappropriately links the incentive payment to the expenditure level, which does not discourage the Company to control program costs. Second, the 20 percent deadband below the target is unreasonable because it gives the Company too much leeway and weakens the target. Third, it is inappropriate to recover the incentive prospectively; an incentive should be recovered based on actual achievement, not potential achievement. Fourth, incorporating the full incentive into the rider in March does not provide adequate time to review and verify the reported savings for the prior year. Moreover, this short period of review is exacerbated by not allowing after-the-fact adjustments to savings.

The mechanism I propose corrects all of these deficiencies and better protects customers from harmful, unintended consequences of an incentive mechanism.

Q. Please describe the incentive mechanism you recommend.

A. The mechanism I recommend is presented in Exhibit No. __ (JRS-7). Additionally, Public Counsel witness Elizabeth Klumpp and I have agreed upon a set of criteria for an incentive mechanism, which is contained in Exhibit No. __ (JRS-8).

I recommend that the incentive mechanism be comprised of two components: 1) a $ per MWh incentive or penalty; and 2) a share of the value of the savings from the efficiency programs. These are shown as Columns D and E, respectively, in Exhibit No. __ (JRS-7). I recommend that the Company receive an incentive once they achieve the baseline target, and, thereafter, receive a higher incentive on the incremental savings achieved above the baseline target. I propose a deadband of 10 percent below the target in which no penalties would be incurred.

In my proposed mechanism, there are five ranges above and below the target (and deadband) with escalating levels of incentives or penalties. The incentive or penalty in each range applies to the incremental savings or shortfall from the previous range. For instance, if the Company achieves energy savings that are 115 percent of the baseline target, PSE would receive an incentive of $10/MWh and 5 percent of the shared value for the savings up to the baseline target. For the energy savings above the target, but less than 110 percent, it would receive an incentive of $20/MWh and 10 percent of the shared value. And, finally, for the savings above 110

percent of the target it would receive an incentive of $20/MWh and 20 percent of the shared value.

Q. First, please explain the $ per MWh incentive.

A. The $ per MWh incentive will provide the Company with a known, and minimum, level of incentive for meeting and exceeding the baseline target. The $20 per MWh level was guided by the unit costs for the distribution and transmission system from the electric cost of service, found on page 4 of Exhibit No. __ (DWH-4). These are the costs that may not be recovered between rate cases if customer usage declines as a result of energy efficiency. Production-related costs are not included because the Company recovers these costs in the Power Cost Adjustment. At the baseline target, the incentive is set at half this amount, or $10 per MWh, increasing to $20 per MWh for all savings exceeding the target.

The fixed $ per MWh is preferable to the Company's proposed incentive calculation of a percentage of the total expenditures. Under PSE's proposal, it would receive a higher incentive if it spends more to achieve savings; thus creating a perverse incentive that is not in the public interest. In fact, the Company could nearly double its expenditures to achieve the same level of savings, with the programs remaining cost-effective, but with the customers getting less value from the programs.

Q. Please explain the second component of your proposed mechanism, the shared savings incentive.

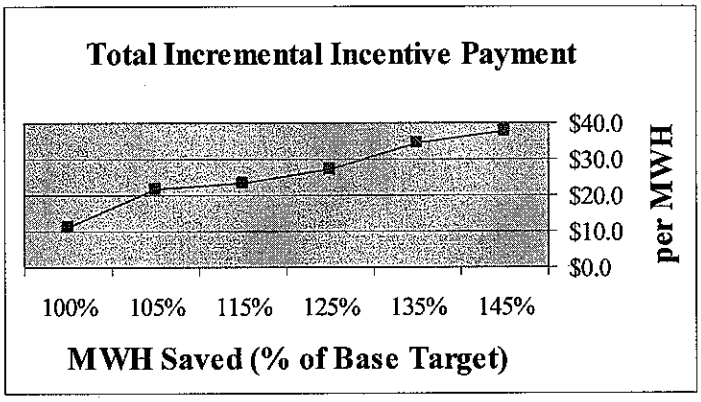
A. The shared savings incentive will provide the Company with a portion of the first-year value of the savings that are achieved through the programs. The shared savings are the difference between the avoided costs of the supply system and the total resource costs of the programs. The total resource costs are the total costs of the measures: utility costs plus customer costs minus any quantified non-energy benefits. The table below shows the shared savings incentive, on a levelized basis, based on PSE's current portfolio of programs. These numbers are taken from Mr. Shirley's Exhibit No. __ (CES-5), page 6. The total resource cost will be updated annually based on actual program results.

Shared Savings Calculation	
Avoided Costs	$0.059
Total Resource Cost	- $0.041
Shared Savings Incentive	$0.018

Shared savings are a win-win opportunity because the utility shareholders benefit only if customers benefit. My proposed mechanism provides the Company with a larger share of the value of the savings the more it exceeds the baseline target. The Company can receive a higher incentive within any range if it keeps its costs low because if the program costs decrease, then the total resource costs decrease, resulting in a higher incentive. This mechanism encourages and rewards cost control by the utility.

Q. Next, why do you propose to apply the incentives only to the incremental savings above the baseline target?

A. The rate which customers pay an incentive for the next kWh should increase with each kWh saved. The table below shows how the incremental rate in Exhibit No. __ (JRS-7) goes up as the Company exceeds the baseline. This ensures that customers are not worse off, in the sense that they are paying less for the kWh savings, when the Company achieves savings well above the target.



Q. Why do you propose a deadband of 10 percent below the baseline target in which the Company would not incur penalties?

A. Projecting savings on a program level is an imperfect science: assumptions are made on such things as the rate of customer replacement or adoption of a measure. Factors outside of the Company's control, such as the economy, influence whether a customer will invest in a more energy-efficient appliance or undertake a renovation to upgrade lighting, for example, even with incentives from the utility. Therefore, I do not believe we should penalize the Company for not perfectly estimating the savings it could achieve in a given year. A 10 percent deadband is a reasonable cushion. It recognizes the difficulty of making a projection but still encourages the Company to adapt or modify its programs to achieve results, as conditions warrant.

Q. Please discuss your joint exhibit with Public Counsel on the requirements for an incentive mechanism, Exhibit No. __ (JRS-8).

A. Public Counsel and Staff have agreed on a set of conditions or requirements under which an incentive mechanism should be implemented. Although Staff and Public Counsel mechanisms differ slightly, these conditions apply to both. Some of the conditions are the same as proposed by the Company, such as items 1, 2 and 10. Others are modifications to what the Company proposes or are entirely new.

Q. Item 3 is a modification to the Company's proposal, please explain the difference.

A. PSE proposed to set the baseline target on an annual basis, rather than biennially, which is the current practice. This aspect is retained. However, the Company proposed to project the incentive (or penalty) for recovery during the same year in which it is achieving the relative target. This is unreasonable because the incentive should be paid on actual achievement, not projected achievement. Moreover, I do not foresee circumstances in which the Company would project not meeting a target that it sets each year. If it was collecting a projected incentive for meeting the target, yet failed to achieve it, the Company would receive the time value of the money by collecting an incentive from ratepayers; however, ratepayers do not receive the time value of the penalty which they are owed.

Q. Please explain item 4, which states that savings must exceed 75 percent of the projected savings in each sector.

A. This is intended to ensure that the Company's efforts are balanced equitably across customer sectors. All customer classes contribute to fund the programs so all customer sectors should be able to participate to achieve bill benefits.

Q. Please explain item 5, the weighted average measure life of the program portfolio must be a minimum of nine years.

A. This is intended to ensure that PSE continues to pursue measures with longer lives that are a significant resource for customers. The Company's current portfolio has the weighted average measure life of 10 years, which is shown on page 6, in Exhibit No. __ (CES-5). The Company's 2004-2005 portfolio had a weighted average measure life of 11 years. The nine-year minimum measure life ensures that the Company maintains this course with its portfolios, rather than relying on a short-life measure that will be replaced again and again for which the Company may count savings.

Q. Item 7 describes how the penalty or incentive will be recovered. Please explain why the payment is divided for recovery over two years.

A. I agree with the Company that the current tariff rider, Schedule 120, is the best place to recover any incentive payment in order to minimize annual bill changes for customers. The Commission Order that established the rider requires that PSE file by March 1, for rates to be effective April 1, each year to account for projected

expenditures in the then-current year and any variances from expenditures and collections during the prior year.[11] Also pursuant to the Order, PSE files semi-annual reports on its program achievements on August 15 and February 15. The February 15 report includes the overall results from the program year, which ends December 31.

The time period between the February 15 report, which is when we receive the program results, and April 1, which is when any incentives would begin getting recovered through the rider, is too short of a time period for Staff to review the program results in order to assess an incentive. If customers are paying an incentive, there is a larger burden to verify that the savings claimed were actually achieved to ensure that customers are getting what they paid for. Therefore, I propose that the Company begin recovering 75 percent of any incentive based on the results in the February 15 report. The remaining 25 percent will be collected through the rider the following year, subject to ex-post verification. Parties may raise disputes over the savings results in the annual rider/incentive filing.

Q. What is the ex-post verification?

A. As noted in item 8, PSE will establish an evaluation committee that will develop evaluations plans and review savings assumptions and program results. This committee will be comprised of PSE staff and two to three CRAG members and/or other external experts, including Commission Staff. The committee will identify two or three programs each year in which detailed evaluations will be undertaken to review measure savings assumptions, program design or realization rates. Results of

[11] Order in Docket No. UE-970686 (May 16, 1997).

the evaluations, such as revised measure savings assumptions, will be applied to programs prospectively, unless previously specified. Additionally, the committee may audit other program results to verify achievements for recovery of the remaining 25 percent of the incentive. The committee will employ the use of third-party firms, when necessary, to perform the evaluation work. The work of the committee may result in changes to the annual savings claim, which may increase or decrease the incentive or penalty assessed in the prior year. Any changes, however, are not expected to exceed 25 percent of the total.

Q. Lastly, what baseline target do you recommend be set for 2007, the 1st year the Company will be eligible for incentives?

A. In its December 2005 energy efficiency program filing, the Company established a target of 33 aMW for the 2006-2007 period.[12] This is the target it currently needs to meet or exceed to avoid penalties. The Company also identified a stretch goal of 40 aMW for the two-year period. I propose that we retain the current penalty target so the Company would continue to incur penalties if it fails to achieve 16.5 aMW, which is half of the 33 aMW, as would be the case absent this mechanism. After accounting for the 10 percent deadband, this results in a baseline target for incentives to begin once the Company reaches 18.3 aMW. This is an aggressive, yet achievable target.

The Company proposed that the baseline target for incentives be set at 16.5 aMW. Taking into account the 20 percent deadband it proposed, penalties would

[12] Docket No. UE-051780.

only start if the Company achieved less than 13.2 aMW. Under the Company's proposal, the Company's risk of incurring penalties is less than the status quo and therefore should be rejected.

Q. What incentive would the Company receive for meeting the baseline target of 18.3 aMW?

A. As shown in Exhibit No. __ (JRS-7), PSE would receive an incentive of $1.7 million for meeting this target. This would be a 6 percent increase in the current Schedule 120 rider and a 0.11 percent increase in revenue.[13] If PSE achieved its stretch goal of 20 aMW in 2007, its incentive would be $2 million.

Q. How will the baseline target be set after 2007?

A. After 2007, PSE will work with the CRAG to develop the annual target, based on the program experience in the prior year and the conservation supply curve analysis from the Company's most recent integrated resource plan. The Company will file the baseline target with the Commission each year.

Q. Does this conclude your testimony on the electric conservation incentive mechanism?

A. Yes.

[13] As a comparison, under PSE's proposed mechanism the Company would receive approximately a $3,000,000 incentive if it achieved 18.5 aMW.

VII. ELECTRIC DEMAND RESPONSE PROGRAMS

Q. What is PSE's proposal for demand response programs?

A. In the direct testimony of Company witness Mr. Shirley, beginning at page 20 in Exhibit No. __ (CES-1T), PSE proposes four new electric demand response pilot programs and a modification to its existing demand response buyback program in Schedule 93. PSE would implement the pilots during the winter of 2007-2008.

Q. Why is the Company proposing pilots for these types of programs?

A. In its 2005 Least Cost Plan, PSE prepared a preliminary assessment of demand response programs to reduce the need for peak resources, address distribution or transmission system constraints in congested areas, and reduce exposure to high market prices in critical peak hours.

Mr. Shirley argues that these pilots will aid PSE in determining the practical feasibility and cost-effectiveness of the programs as a resource. More specifically, the pilots are intended to test: 1) customer participation; 2) costs of customer recruitment and communication; and 3) the magnitude of load reductions.

Q. What are the pilot programs proposed by PSE?

A. The pilots consist of a critical peak pricing program, a community-based incentive program, a residential load control program, and a commercial load control program. For the existing demand response buyback program, Schedule 93, PSE proposes to lower the threshold for customer eligibility, increase the credit to participating customers and enhance marketing for customer recruitment. Mr. Shirley provides

more explanation of these programs on pages 22-29 in his direct testimony in Exhibit No. __ (CES-1T).

Q. Does PSE provide detailed program designs and implementation plans for these programs in this case?

A. No. Mr. Shirley states: "PSE proposes to develop detailed program designs and implementation plans by the summer of 2007, with input from Commission staff and stakeholders and based on the funding level authorized by the Commission in this proceeding."[14]

Q. What are the estimated costs for these programs and what accounting treatment does PSE propose for recovery of the costs?

A. PSE estimates the total costs of the pilots to be approximately $3 million. In its original filing, PSE made a proforma adjustment (Adjustment 4.3) to include these costs in the test year's results of operation, as described in Company witness Mr. Story's direct testimony on page 42 in Exhibit No. __ (JHS-1T). In his Supplemental Direct Testimony, submitted July 10, 2006, page 8, Mr. Story makes an adjustment (Adjustment 16.3) to remove these costs to reflect discussions between the parties.

Q. What did the discussions on the demand response programs entail?

A. The parties agree that PSE should work with the stakeholders to continue to develop the individual programs, then make a tariff filing for the programs, and seek recovery of the program costs through the electric energy efficiency rider. Using the rider to

[14] Exhibit No. __ (CES-1T) at 23: 15-18.

recover costs of any of the programs that are ultimately authorized by the Commission will allow the costs to be expensed in the year in which they are incurred, rather than set in rates that may not be changed for several years.

The program costs should not be recovered in this proceeding because these costs are for short-term program pilots that should not be in the revenue requirement. Since these are not on-going costs to be incurred by the Company, it is inappropriate to include them in general rates that will not be changed until the Company's next rate case.

Additionally, the lack of detailed program designs and implementation plans leave us unable to recommend approval, at this time, for the individual program pilots and their expected costs.

Q. What is the electric energy efficiency rider?

A. This rider, Schedule 120, recovers PSE's annual electric energy efficiency expenditures. Specifically, it is a surcharge on customer bills that is reset each year to recover PSE's expected expenditures for its energy efficiency programs, as well as to true up any over or under-collections from the previous year. It was established in 1997 to minimize the regulatory lag for recovery of these costs. The Company makes an annual filing for the surcharge on March 1, with the new rates becoming effective April 1. Currently, the rider rates are designed to recover approximately $29 million from April 1, 2006 to March 31, 2007.[15]

[15] Docket No. UE-060335.

Q. If any stakeholder decides to oppose implementation of any of the pilots or their costs, will they have the opportunity to bring their objections before the Commission?

A. Yes. At the time the Company makes the tariff filing for the program pilots, or when the Company files for recovery of the costs through the rider, if this is done separately, then any stakeholder may bring their concerns, objections or support before the Commission at the open meeting.

Q. Does this conclude your testimony on the demand response pilots?

A. Yes.

Q. Does this also conclude your direct testimony?

A. Yes.