EXH. JAP-34T DOCKETS UE-170033/UG-170034 2017 PSE GENERAL RATE CASE WITNESS: JON A. PILIARIS

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

Docket UE-170033 Docket UG-170034

PUGET SOUND ENERGY,

Respondent.

PREFILED SUPPLEMENTAL DIRECT TESTIMONY (NONCONFIDENTIAL) OF

JON A. PILIARIS

ON BEHALF OF PUGET SOUND ENERGY

PUGET SOUND ENERGY

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

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charge related to transformer, feeder and substation costs to serve each customer. The transformer component is determined by applying PSE's current transformer lease charges to the number and size of transformers serving each campus during the test year. The transformer rate is calculated by dividing the total transformer cost for the campus by the coincident demand of the campus during the test year. The feeder and substation components of the distribution rate use a load-based percentage to allocate the costs of the feeder and substation unique to each campus, with the resulting cost for each campus divided by the same test year coincident demand used to derive the transformer rates.

Q. Has PSE identified errors in these calculations since filing its direct case?

- A. Yes. As discussed in PSE's Response to WUTC Data Request No. 101, which is provided as Exh. JAP-35, the customer specific distribution feeder and substation charges were initially calculated incorrectly. Specifically, the database used to calculate the load-weighted percentage for allocating feeder and substation costs in the original filing only contained a subset of the actual customer load data for each circuit and substation. As a result, the load share of various distribution feeders and substations attributed to many Schedule 40 campuses was overstated. This resulted in similarly overstated rates for many campuses.
- Q. Has PSE correctly recalculated the customer-specific distribution feeder and substation costs and associated rates?

A.	Yes. The results were provided to the parties in PSE's Response to WUTC Data
	Request No. 101 and are provided as workpapers supporting my supplemental
	testimony.

- Q. What are the implications of these corrected calculations for customers not served under Schedule 40?
- A. Since the feeder and substation costs were over-allocated to Schedule 40 customers, and therefore included in their rates, a corresponding amount was under-allocated to other customers, and therefore not included in the rates of other customers. The net effect of the corrected calculations was to reduce the distribution rates for most customers¹ served under Schedule 40 and increase them slightly for other customers.
- Q. Has PSE reflected the correctly allocated costs in this supplemental filing?
- A. Yes. Along with the other changes being proposed as part of this supplemental filing, PSE incorporated the corrected allocations in the overall results presented later in this testimony.
- Q. Is PSE also filing corrected tariff sheets to reflect these corrected calculations?
- A. Not at this time. PSE proposes to update the allocation of costs to rate classes and the calculation of all rates, including those for Schedule 40, in its compliance

¹ Several campuses are the only load on certain feeders; therefore, their costs calculated in the original filing are unchanged in this supplemental filing.

tariff filing to reflect the approved revenue requirement. However, PSE felt it was important to provide an update of the proposed rates and their calculations at this time to reflect these and other changes discussed in this testimony.

III. UPDATE TO NATURAL GAS PRO FORMA REVENUE

- Q. Has PSE discovered any errors that would impact its filed natural gas pro forma revenue?
- A. Yes. Subsequent to its filing on January 13, 2017, PSE discovered an error in its weather normalization calculations for natural gas service, where an incorrect historic period was used to estimate the natural gas weather normalization coefficients. This error was first reported in PSE's Response to WUTC Data Request No. 006 and was further explained in PSE's Response to WUTC Data Request No. 046, which are provided as Exh. JAP-36. As noted in part (b) of PSE's Response to WUTC Data Request No. 046, the impact of this error was to reduce PSE's natural gas pro forma revenue by \$50,044.

Q. Has PSE reflected these corrected amounts in this supplemental filing?

A. Yes. The updated natural gas pro forma revenue is reflected in this supplemental filing. For ease of reference, the updated natural gas pro forma revenue is presented in Exh. JAP-37, updating the amounts previously presented in Exh. JAP-4. These updated pro forma revenue are also used to calculate the new revenue deficiency discussed in the Prefiled Supplemental Direct Testimony of Ms. Susan E. Free, Exh. SEF-8T.

IV. UPDATED ESTIMATES FOR RESIDENTIAL ELECTRIC THIRD-BLOCK RATES

- Q. Please provide an overview of how PSE developed its third-block electric residential rate.
- A. The third-block electric residential rate calculated in PSE's original filing was set at a level that reflects PSE's long run avoided cost of power and delivery. This includes the avoided cost of generation, transmission and distribution capacity; energy costs; line losses; and an adder for conservation benefits. PSE used the then-current assumptions in these calculations.
- Q. What did the results of this analysis show in the original filing?
- A. It showed that the long run avoided cost for residential electric service was below the current second tier block rate, leading PSE to the conclusion that this may not be an appropriate time to implement a three-block rate structure.
- Q. Have any of the assumptions used for this analysis changed since the original filing?
- A. Yes. The original filing used, in part, assumptions tied to its Schedule 91 rate, which also reflects long-run avoided costs. At the time of the general rate case filing, a new set of rates for Schedule 91 was being considered by the Commission, and the assumptions underlying those proposed rates were used to support the third-block rate calculations in PSE's direct filing. Subsequent to PSE's rate case filing, it made changes recommended by Commission Staff to assumptions used to calculate the rates within Schedule 91. These changes

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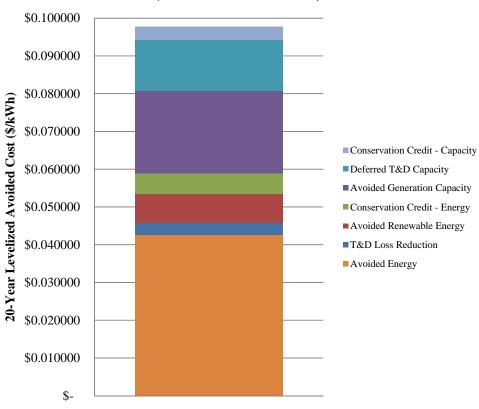
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related to the assumed avoided generation capacity costs, which raised them in the first five years of the projections and lowered them in the later years. These Schedule 91 rates were subsequently approved in Docket UE-161240.

- Q. Has PSE updated its third-block residential electric rate calculations to reflect its updated avoided cost assumptions?
- A. Yes. A summary of the new results are presented in the graph below.

Figure 1

Long-Run Avoided Cost - Residential (\$0.097774/kWh)



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Q. What is the net effect of these updated third-block rate calculations?

A. The net effect is that the calculated third-block rate increased from 8.9742 cents per kWh to 9.7774 per kWh. However, this continues to be below PSE's existing tail block rates for residential electric services. Therefore, PSE's fundamental conclusion that this is not the appropriate time to adopt a third-block rate structure remains unchanged.

V. SCHEDULE 95 RATES FOR UPDATED POWER COSTS

Q. Were power costs updated as part of PSE's supplemental filing?

- A. Yes. The details of this power cost update are presented in the Prefiled Supplemental Direct Testimony of Mr. Paul K. Wetherbee, Exh. PKW-8CT.

 These power costs were updated under two different assumptions: (i) PSE continues to serve the load of Microsoft under Schedule 40; and (ii) PSE does not serve this load.
- Q. Why did PSE update its power costs with and without this Microsoft load?
- A. As noted in my prefiled direct testimony, the issue of whether Microsoft will be allowed to take retail access service for its loads that are currently served under Schedule 40 is the subject of ongoing discussion in Docket UE-161123. It is unclear at this time if this request will be granted and, if so, when Microsoft may

 be in a position to begin taking retail access service.² However, the first uncertainty (i.e., whether it will be granted) should be resolved prior to the hearings in this general rate case proceeding.

Q. Why is it necessary to address this issue at this time?

A. If Microsoft takes retail wheeling service, there will be cost recovery implications. As PSE is proposing that remaining customers receive one hundred percent of the stranded cost payment that would be made by Microsoft in consideration of the higher power costs Microsoft is leaving behind, fairness dictates that remaining customers should also bear one hundred percent of those higher costs. In other words, the benefits should follow the burdens.

In order for this to occur, two things must occur simultaneously with Microsoft beginning to take retail service. First, customers should begin receiving the stranded cost payment made by Microsoft. Second, customers' rates should be increased to reflect the higher power costs that underlie the stranded cost payment. The power cost update without Microsoft load that is presented in the Prefiled Supplemental Direct Testimony of Mr. Paul K. Wetherbee, Exh. PKW-8CT forms the foundation for power costs that will need to be recovered from remaining customers after Microsoft begins taking retail wheeling service.

² At the time of this supplemental filing, PSE is working with parties to convert the current tariff filing into a special contract for retail wheeling service pursuant to an all-party settlement in this proceeding. PSE expects this special contract, the settlement agreement and supportive testimony to be filed no later than April 11, 2017.

Q. How will the rates of PSE's remaining customers be changed as a result of Microsoft taking retail wheeling service?

- A. The rates of PSE's remaining customers will need to reflect the impact the loss of Microsoft's load will have on the recovery of PSE's "fixed" and "variable" production costs.³ PSE proposes to recover the updated fixed production costs through its electric decoupling mechanism. PSE further proposes to reflect the change in its variable production costs that results from Microsoft taking retail wheeling service through its Schedule 95, in much the same way PSE's rates are adjusted to reflect changes to power costs between general rate cases.
- Q. Has PSE prepared an analysis showing the impact of Microsoft taking retail wheeling service on remaining customers' rates?
- A. Yes, a preliminary estimate of the fixed production cost impacts was presented in Exh. JAP-33C, supporting my prefiled direct testimony. The update to this exhibit will be discussed later in my testimony. The impacts related to the recovery of PSE's variable costs are presented in Exh. JAP-38. This exhibit allocates the approximately \$2.3 million revenue deficiency shown on line 11 of page 1 of Exh. KJB-16 using the peak credit allocation methodology and assumptions used to allocate power costs in this case.

³ For purposes of this discussion, "fixed" and "variable" power costs are defined consistent with the way they are presented in Exh. KJB-15 and Exh. KJB-16, supporting the Prefiled Supplemental Direct Testimony of Ms. Katherine J. Barnard, Exh. KJB-10T.

Q. Is PSE requesting the Commission to approve these contingent rate calculations in this proceeding?

A. While this is PSE's preference, it would also understand that the Commission may wish not to do so at this time. However, it is PSE's intent to give parties full opportunity to examine these proposed rates in this proceeding so as to facilitate a smooth and quick⁴ update to these rates if and when Microsoft begins taking retail wheeling service after the conclusion of this rate case.

VI. UPDATED BASE RATES

- Q. Has PSE updated its proposed electric rates to reflect the corrections and cost updates noted earlier in your testimony?
- A. Yes. These proposed electric rates, set to recover the updated electric revenue requirement discussed in the Prefiled Supplemental Direct Testimony of Ms. Katherine J. Barnard, Exh. KJB-10T, are presented in Exh. JAP-39. Table 1 below summarizes the results in Exh. JAP-39 and shows a comparison of the base rate changes proposed in this supplemental filing versus the initial filing. Table 1 shows that proposed rate increases have dropped for all customers, largely as a result of the lower power costs. Notably, the proposed increases in the supplemental filing for the Schedule 40 customers are significantly lower than originally proposed. This is due in large part to the corrected allocation of certain distribution costs as discussed earlier in my testimony.

⁴ PSE intends for these filings to take effect no later than the 30 day from filing.

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Table 1 - Proposed Electric Base Rate Increases in Initial and Supplemental Filings

		Proposed Base Rate In		
Customer Class	Rate Schedule	Initial Filing	Supplemental Filing	
Residential	7	8.3 %	8.2 %	
General Service, < 51 kW	8/24	6.2 %	6.1 %	
General Service, 51 - 350 kW	11/25/7A/29	6.2 %	6.1 %	
General Service, >350 kW	12/26	6.2 %	6.1 %	
Primary Service, Gen & Irr.	10/31/35	6.2 %	6.1 %	
Primary Service, Schools	43	8.3 %	8.2 %	
Campus Rate*	40	13.3 %	8.4 %	
High Voltage	46/49	6.2 %	6.1 %	
Lighting Service	50 – 59	8.3 %	8.2 %	
Choice/Retail Wheeling	448/449	6.1 %	6.0 %	
Total Jurisdictional Retail Sales	n/a	7.6 %	7.3 %	
Firm Resale	5	128.4 %**	128.5 %**	
System Total/Average		7.6 %	7.3 %	

^{*}Campus Rate increase proposal reflects customer-specific distribution rates.

Q. Has PSE also updated its rates for its Lighting customers as part of this supplemental filing?

A. No. As shown above, PSE proposes to increase the overall rates of Lighting customers by 8.17 percent based on the updated revenue requirement presented in this supplemental filing versus the proposed 8.32 percent overall increase in the initial filing. Given this small difference, the voluminous number of rates that would need to be updated and the fact that these rates will need to be updated yet

^{**}Reflects the rate increase necessary to move non-jurisdictional rates to parity.

again in PSE's compliance filing, the presentation of updated lighting rates have not been included in this supplemental filing. At compliance, PSE proposes to flow the final electric revenue requirement through its electric cost of service and rate design models, and ultimately through its updated lighting study presented in Exh. JAP-20 through Exh. JAP-23 to determine the final rates for Lighting customers.

- Q. Has PSE updated its proposed natural gas rates to reflect the corrections and cost updates noted earlier in your testimony?
- A. Yes. These proposed natural gas rates, set to recover the updated natural gas revenue requirement discussed in the Prefiled Supplemental Direct Testimony of Ms. Susan E. Free, Exh. SEF-8T, are presented in Exh. JAP-40. Table 2 summarizes the proposed overall increases proposed to base rates and margin rates in Exh. JAP-40 and compares these results with PSE's initial filing. As shown in Table 2, the results are very similar, with only modest changes to the proposed rates of a few classes. These changes are the result of two factors, the lower revenue requirement presented in Exh. SEF-8T and a correction to the calculation of the base rate increase.⁵

⁵ The base rate increases were originally calculated relative to total revenues at proposed rates, rather than total revenue at existing rates.

Table 2 - Proposed Natural Gas Base and Margin Rate Increases in Initial and Supplemental Filings

		Proposed Initial		Proposed Suppleme	
Customer Class	Rate Schedule	Base Rate Increase*	Margin Increase	Base Rate Increase*	Margin Increase
Residential	16/23/53	2.7 %	4.8 %	2.7 %	4.8 %
Commercial & Industrial	31/31T	3.5 %	7.3 %	3.6 %	7.2 %
Large Volume	41/41T	1.8 %	4.8 %	2.0 %	4.8 %
Interruptible	85/85T	2.3 %	4.8 %	2.5 %	4.8 %
Limited Interruptible	86/86T	0.9 %	2.4 %	0.9 %	2.4 %
Non-exclusive Interruptible	87/87T	2.5 %	7.3 %	2.6 %	7.2 %
Special Contracts		5.9 %	6.3 %	6.3 %	6.3 %
Rentals	71/72/74	0.0 %	0.0 %	0.0 %	0.0 %
Total/System Average		2.8 %	5.3 %	2.8 %	5.2 %

^{*} Includes gas costs

VII. UPDATED DECOUPLING CALCULATIONS

- Q. Has PSE updated its proposed electric decoupling mechanism to reflect the proposed rates in this supplemental filing?
- A. Yes. The allowed revenue proposed in PSE's electric decoupling mechanism, originally presented in Exh. JAP-30, has been updated to reflect the proposed electric rates in this supplemental filing. The updated electric decoupling analysis presented in my Exh. JAP-41 shows a modest difference from the original filing, with most classes seeing an approximate 0.5 percent (or less) increase in allowed revenue, except for the group containing Schedules 40, 46 and 49, which saw a

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decrease of about 3.5 percent. These changes largely reflect the corrections made to the Schedule 40 distribution rate calculations noted earlier in this testimony.

- Q. Has PSE updated its proposed natural gas decoupling mechanism to reflect the proposed rates in this supplemental filing?
- A. Yes. The allowed revenue proposed in PSE's natural gas decoupling mechanism, originally presented in Exh. JAP-31 have been updated to reflect the proposed natural gas rates in this supplemental filing. This updated gas decoupling analysis is presented in my Exh. JAP-42. As expected, with very little change to overall rates, this updated natural gas decoupling analysis shows equally small impacts to the allowed revenue per customer originally proposed, with the vast majority of customers seeing a small decrease in annual allowed revenues.
- Q. Has PSE updated its proposed electric decoupling mechanism to reflect the contingent calculations where Microsoft is assumed to take retail wheeling service?
- A. Yes. The allowed revenue proposed in PSE's contingent electric decoupling mechanism calculations where Microsoft is assumed to be taking retail wheeling service, originally presented in Exh. JAP-33 have been updated in Exh. JAP-43 to reflect the updated fixed production costs presented in Exh. KJB-16 in this supplemental filing and the reallocation of these costs to remaining customers. This updated electric decoupling analysis that assumes Microsoft has begun to take retail wheeling service shows results very similar to the original analysis, where most customers see a 0.3 percent to 0.4 percent increase in allowed revenue

and the decoupling group containing customers served under Schedules 40, 46 and 49 see almost a three percent reduction in allowed revenue. As with the other electric decoupling analysis, the majority of the change in results is tied to the correction to the Schedule 40 distribution rate calculations noted earlier in this testimony.

VIII. UPDATED RATE IMPACTS

- Q. Has PSE updated its proposed electric rate impacts to reflect the proposed rates in this supplemental filing?
- A. Yes. The electric rate impacts originally presented in Exh. JAP-19 have been updated in Exh. JAP-44 to reflect the proposed electric rates in this supplemental filing that are presented in my Exh. JAP-39. They have also been updated to reflect the recent filing of three electric adjusting price schedules: Schedule 120 (Electric Conservation Service Rider), Schedule 140 (Property Tax Tracker) and Schedule 142 (Revenue Decoupling Adjustment Mechanism). A summary of the updated overall electric rate impacts are presented in Table 3 below, where these results are compared with the initial filing. Table 3 shows that overall system-level impacts fell from 4.1 percent to 3.2 percent, largely as a result of lower power costs, as well as the updates to the other adjusting electric price schedules. However, the class-specific results are mixed, with most customers experiencing lower increases in the updated supplemental filing. These mixed results are primarily a function of the updates to the adjusting price schedules, particularly Schedule 142. As with Table 1 above, the largest difference was for customers

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Table 3 - Estimated Overall Impacts of Proposed Electric Rates in Initial and Supplemental Filing

	_	Overall Impact	
Customer Class	Rate Schedule	Initial Filing	Supplemental Filing
Residential	7	4.0 %	2.6 %
General Service, < 51 kW	8/24	2.8 %	3.8 %
General Service, 51 - 350 kW	11/25/7A/29	4.8 %	4.1 %
General Service, >350 kW	12/26	4.3 %	4.5 %
Primary Service, Gen & Irr.	10/31/35	4.2 %	4.4 %
Primary Service, Schools	43	6.7 %	5.5 %
Campus Rate*	40	12.1 %	6.1 %
High Voltage	46/49	4.6 %	3.0 %
Lighting Service	50 - 59	(3.4) %	(3.4) %
Choice/Retail Wheeling	448/449	0.6 %	0.6 %
Total Jurisdictional Retail Sales	n/a	4.1 %	3.2 %

^{*}Includes base rates, as well as Schedules 95, 141, 142 and 149.

Q. Based on these updated results, what is the overall monthly bill impact on the typical PSE residential customer taking electric service?

A. The estimated overall monthly bill impact for the typical PSE residential customer using 900 kWh per month fell from a \$3.73 per month increase in the initial filing to \$2.41 per month in the supplemental filing.

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Q. Has PSE updated its proposed natural gas rate impacts to reflect the proposed rates in this supplemental filing?

A. Yes. The natural gas rate impacts originally presented in Exh. JAP-28 have been updated in Exh. JAP-45 to reflect the proposed natural gas rates in this supplemental filing that are presented in my Exh. JAP-40. They have also been updated to reflect the recent filing of three natural gas electric adjusting price schedules: Schedule 120 (Natural Gas Conservation Service Rider), Schedule 140 (Property Tax Tracker) and Schedule 142 (Revenue Decoupling Adjustment Mechanism). A summary of the updated overall natural gas rate impacts are presented in Table 4 below, where these results are compared with the initial filing. Table 4 shows that overall system-level impacts fell from 2.4 percent decrease to a 3.2 percent decrease. However, as with the electric impacts, the class-specific results are mixed for natural gas customers, with some customers experiencing higher or lower decreases, or no change at all. Again, these mixed results are primarily a function of the updates to the adjusting price schedules, particularly Schedule 142. For customers whose Schedule 142 rates proposed on March 31, 2017 increased, the overall decrease in Table 4 increased.

		Overall Impact*		
Customer Class	Rate Schedule	Initial Filing	Supplemental Filing	
Residential	16/23/53	(2.9) %	(4.2) %	
Commercial & Industrial	31/31T	(1.0) %	(0.3) %	
Large Volume	41/41T	(0.9) %	(1.2) %	
Interruptible	85/85T	(2.7) %	(2.7) %	
Limited Interruptible	86/86T	(1.5) %	(1.7) %	
Non-exclusive Interruptible	87/87T	(2.3) %	(2.3) %	
Special Contracts		0.7 %	0.7 %	
Rentals	71/72/74	(9.6) %	(9.5) %	
Total/System Average		(2.4) %	(3.2) %	

^{*} Includes base schedules, as well as Schedule 101, 141, 142 and 149.

- Q. Based on these updated results, what is the overall monthly bill impact on the typical PSE residential customer taking natural gas service?
- A. The estimated overall monthly bill impact for the typical PSE residential customer using 64 therms per month increased from a \$2.01 per month bill reduction in the initial filing to a \$2.93 per month bill reduction in the supplemental filing.
- Q. Have the rates for the three updated electric and natural gas adjusting price schedules been approved by the Commission?
- A. No. However, these are better estimates of the rates for these adjusting price schedules than presented in PSE's initial filing and, therefore, provide a more

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