

**Exh. JL-21**  
**Dockets UE-190529/UG-190530 and**  
**UE-190274/UG-190275 (*consolidated*)**  
**Witness: Jing Liu**

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**DOCKETS UE-190529  
and UG-190530 (*consolidated*)**

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**In the Matter of the Petition of**

**PUGET SOUND ENERGY**

**For an Order Authorizing Deferral  
Accounting and Ratemaking Treatment  
for Short-life UT/Technology Investment**

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**DOCKETS UE-190274 and  
UG-190275 (*consolidated*)**

**EXHIBIT TO TESTIMONY OF**

**Jing Liu**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

*PSE Response to AWEC Data Request 20*

**November 22, 2019**

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**Dockets UE-190529 & UG-190530  
Puget Sound Energy  
2019 General Rate Case**

**AWEC DATA REQUEST NO. 020**

**“CONFIDENTIAL” Table of Contents**

<b>DR NO.</b>	<b>“CONFIDENTIAL” Material</b>
<b>020</b>	Shaded information is designated as CONFIDENTIAL per Protective Order in Dockets UE-190529 and UG-190530 as marked in Attachment A to Puget Sound Energy’s Response to AWEC Data Request No. 020.

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**Dockets UE-190529 & UG-190530  
Puget Sound Energy  
2019 General Rate Case**

**AWEC DATA REQUEST NO. 020:**

Please identify each error and correction to revenue requirement that PSE has identified since the initial filing in this docket. Please also provide updated natural gas and electric revenue requirement workpapers incorporating all known errors and corrections since the initial filing in this docket.

**Response:**

Puget Sound Energy (“PSE”) discovered errors in its Original and Supplemental filings in this case. Correction of the errors on the Supplemental filing increases the traditional revenue requirement by \$1.3 million for electric and \$0.3 million for gas and decreases the electric revenue requirement deficiency by \$9.9 million after attrition for electric and there was no impact after attrition on gas. The table below lays out the changes to the net revenue change since the Original and Supplemental filings.

Description	ORIGINAL FILING			SUPPLEMENTAL FILING			CORRECTED		
	Elec	Gas	Total	Elec	Gas	Total	Elec	Gas	Total
1. Revenue Charge Before Attrition and Riders	\$104.5	\$86.1	\$190.6	\$100.2	\$86.1	\$186.4	\$101.5	\$86.4	\$188.0
2. Changes to Other Price Schedules	\$(3.1)	\$(32.4)	\$(35.5)	\$(3.1)	\$(32.4)	\$(35.5)	\$(3.1)	\$(32.4)	\$(35.5)
3. Net Revenue Change Before Attrition	\$101.4	\$53.7	\$155.1	\$97.1	\$53.7	\$150.8	\$98.4	\$54.0	\$152.5
4. Attrition Adjustment	\$44.5	\$22.1	\$66.6	\$48.8	\$22.1	\$70.9	\$31.5	\$21.7	\$53.2
5. Net Revenue Change After Attrition	\$145.9	\$75.8	\$221.7	\$145.9	\$75.8	\$221.7	\$129.9	\$75.7	\$205.6
6. Reduction to Supported Amount	\$(6.0)	\$(10.4)	\$(16.4)	\$(6.0)	\$(10.4)	\$(16.4)	\$0.0	\$(10.2)	\$(10.2)
7. Net Revenue Change Requested	\$139.9	\$65.5	\$205.4	\$139.9	\$65.5	\$205.4	\$129.9	\$65.5	\$195.4
				<b>Change from Orig to Supp</b>			<b>Change from Supp to Corrected</b>		
				<b>Elec</b>	<b>Gas</b>	<b>Total</b>	<b>Elec</b>	<b>Gas</b>	<b>Total</b>
1. Revenue Charge Before Attrition and Riders				\$(4.3)	\$0.0	\$(4.3)	\$1.3	\$0.3	\$1.6
2. Changes to Other Price Schedules				\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3. Net Revenue Change Before Attrition				\$(4.3)	\$0.0	\$(4.3)	\$1.3	\$0.3	\$1.6
4. Attrition Adjustment				\$4.3	\$0.0	\$4.3	\$(17.2)	\$(0.4)	\$(17.7)
5. Net Revenue Change After Attrition				\$0.0	\$0.0	\$0.0	\$(15.9)	\$(0.1)	\$(16.1)
6. Reduction to Supported Amount				\$0.0	\$0.0	\$0.0	\$6.0	\$0.1	\$6.1
7. Net Revenue Change Requested				\$0.0	\$0.0	\$0.0	\$(9.9)	\$0.0	\$(9.9)

Attached as Attachment A to PSE's Response to AWEC Data Request No. 020 is a zip file which contains a full set of the workpapers provided on September 24, 2019, in support of PSE's Supplemental filing updated for the corrections discussed below. Also included in Attachment A in the electric and gas models<sup>1</sup> are tabs titled "Rlfwd" and "Impacts." The "Rlfwd" tabs present the impacts of the corrections on the revenue change before attrition and riders ("traditional deficiency") and the "Impacts" tabs present the impacts on the net revenue change requested ("attrition deficiency").

The primary driver of the decrease in the electric attrition deficiency is related to five proforma adjustments that were inadvertently excluded from the attrition revenue requirement deficiency calculation that was presented in the Second and Third Exhibits to the Prefiled Direct Testimony of Ronald J. Amen, Exh. RJA-3 and Exh. RJA-4. The adjustments are:

1. 7.06EP "Regulatory Assets and Liabilities,"
2. 7.05EP "Storm Damage,"
3. 6.20E&GP "Deferred Gains / Losses,"
4. 7.21E&GP "Environmental Remediation," and
5. 6.26E&GP "Remove Unprotected DFIT."

The above adjustments were inadvertently excluded from the attrition calculation because they were not included in the attrition base amounts that were calculated in the Eighth Exhibit to the Prefiled Direct Testimony of Susan E. Free, Exh. SEF-9, which is the starting point for the attrition calculation. Because amortizations are specifically calculated amounts that are known for the rate year, the attrition revenue requirement should not calculate amortizations differently than in the traditional revenue requirement. In order to ensure that the amortizations were calculated the same in the traditional and the attrition calculations, the above adjustments should have been included in developing the attrition base amounts in Exh. SEF-9. Their omission was apparent in PSE's Response to AWEC Data Request No. 015. Updating the electric workpapers with these corrected items decreases the attrition deficiency by \$15.9 million (\$4.3 million of which is related to the Shuffleton update made at Supplemental) which is offset by \$6 million for the fact that PSE's request would no longer exceed 6.9% so the reduction to the requested attrition of \$6 million is no longer necessary. These impacts result in a net decrease to the electric attrition deficiency of \$9.9 million. Updating the gas model with these corrected items increases the attrition deficiency by

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<sup>1</sup> 190529-30-PSE-WP-SEF-14.00E-ELECTRIC-MODEL-SUPPLEMENTAL-19GRC-09-2019.xlsx and  
NEW-PSE-WP-SEF-4.00G-GAS-MODEL-19GRC-06-2019.xlsx

\$0.1 million. However, the attrition deficiency still exceeds the 7.9% limit requested for gas in this proceeding and so this change is absorbed by the attrition reduction and results in no change to the gas attrition deficiency.

The remaining corrections impact the traditional revenue requirement but have no impact on the attrition deficiency as the categories to which these adjustments are made are appropriately replaced with an independent determination in the attrition calculation. These include:

6. Schedule 139 Green Direct capital project removal from rate base: PSE inadvertently recorded software related to the Green Direct program to a common future use capital order in December 2018. The impact of this correction is a decrease to the traditional revenue requirement of \$20,000 on electric and \$10,000 on gas. There is no impact to the attrition deficiency. Please refer to PSE's Response to WUTC Staff Data Request Nos. 071 and 123 for further detail.
7. Carrying charges on Get to Zero ("GTZ") deferral: PSE inadvertently applied the quarterly FERC rate instead of its authorized after-tax allowed return of 6.89 percent when calculating the rate year carrying charges on the GTZ depreciation deferral. The impact of this correction was an increase to the traditional revenue requirement of \$102,000 on electric and \$52,000 on gas. There was no impact to the revenue requirement after attrition. Please see PSE's Response to WUTC Staff Data Request No. 073 for further detail.
8. Gas transport: PSE inadvertently used incorrect fixed gas transportation rates for Cascade Natural Gas in the worksheet titled "28C Fixed Gas Transport" in *PSE-Exh-PKW-03C-6-20-19(C).xlsx*. The impact of this power costs correction was an increase to the traditional revenue requirement of \$687,000 on electric. There was no impact to the revenue requirement after attrition. Please refer to PSE's Response to WUTC Staff Data Request No. 159 for further detail.

The following tables depict the impacts for the corrections to the errors explained above and their impacts on the electric and gas attrition deficiencies:

Electric Impacts			7.62%				1.457807%	
			2.87%				1.0146	
			21%			0.751381	Revenue	Requirement
Description	Impacts Attrition?	Rate Base In Attrition	ROR & TBPF	P&L	Difference in Escalation	Conversion Factor	Growth Factor From Attrition if applicable	(Deficiency) or Surplus
<b>Amount Requested in Original Filing:</b>								<b>139,881,759</b>
<b>Certain proforma adjustments that should have been included in attrition:</b>								
Reg Asset/Liab Adjustment	Yes	\$ (23,391,892)	1,641,479	\$ (11,519,134)	\$ (328,317)	\$ (14,640,997)	\$ (210,371)	\$ (14,430,627)
Storm Amortization	Yes	-	-	13,521,272	n/a	14,216,232	\$ 204,267	14,011,965
Def G/L Amortization	Yes	-	-	(3,533,964)	(210,838)	(3,937,276)	\$ (56,573)	(3,880,702)
Environmental Amortization	Yes	-	-	152,048	9,071	169,400	\$ 2,434	166,966
Unprotected EDIT Reversals	Yes	-	-	(9,006,372)	n/a	(11,986,425)	\$ (172,228)	(11,814,197)
<b>Error corrections to proforma adjustments that impact traditional deficiency but don't impact attrition deficiency:</b>								
Remove Schedule 139 Green Direct Rate Base from Oct 2018	No	\$ (211,404)	14,835	-	n/a	19,743	n/a	19,743
GTZ interest Rate correction	No	-	-	(76,439)	n/a	(101,732)	n/a	(101,732)
Power Cost Correction per Staff DR 159	No	-	-	(516,507)	n/a	(687,411)	n/a	(687,411)
<b>Reversal of above because attrition eliminates these traditional adjustments:</b>								
Remove Schedule 139 Green Direct Rate Base from Oct 2018	No	211,404	(14,835)	-	-	(19,743)	-	(19,743)
GTZ interest Rate correction	No	-	-	76,439	-	101,732	-	101,732
Power Cost Correction per Staff DR 159	No	-	-	516,507	-	687,411	-	687,411
Total Before Attrition Limitation		\$ (23,391,892)	\$ 1,641,479	\$ (10,386,150)	\$ (530,084)	\$ (16,179,066)	\$ (232,471)	\$ (15,946,595)
Loss of Attrition Limitation								6,005,578
<b>Total Impact</b>								<b>\$ (9,941,018)</b>
<b>Amount per AWEC 020</b>								<b>129,940,741</b>

Gas Impacts			7.62%						
			2.87%						
			21.00%		1.45%	0.754097			
			0.754097		0.00%	0.954553		1.0143	
Description	Impacts Attrition?	Rate Base In Attrition	ROR & TBPFI	P&L	Difference in Escalation	Conversion Factor	Growth Factor From Attrition if applicable	Requirement (Deficiency) or Surplus	
<b>Amount Requested in Original Filing:</b>									<b>65,472,810</b>
<b>Certain proforma adjustments that should have been included in attrition:</b>									
Def G/L Amortization	Yes		\$ -	\$ (91,958)	\$ (3,144.13)	\$ (99,630)	\$ (1,406)	\$ (98,224)	
Environmental Amortization	Yes		-	856,891	29,298	928,381	\$ 13,101	\$ 915,279	
Unprotected EDIT Reversals	Yes		-	(722,630)	n/a	(958,272)	\$ (13,523)	\$ (944,749)	
<b>Error corrections to proforma adjustments that impact traditional deficiency but don't impact attrition deficiency:</b>									
Remove Schedule 139 Green Direct Rate Base from Oct 2018	No	\$ (105,391)	7,396		n/a	\$ 9,807	n/a	\$ 9,807	
GTZ interest Rate correction	No			(39,045)	n/a	\$ (51,778)	n/a	\$ (51,778)	
<b>Reversal of above because attrition eliminates these traditional adjustments:</b>									
Remove Schedule 139 Green Direct Rate Base from Oct 2018	No	105,391	(7,396)	-		\$ (9,807)		\$ (9,807)	
GTZ interest Rate correction	No	-	-	39,045		\$ 51,778		\$ 51,778	
Total Before Attrition Limitation		\$ -	\$ -	\$ 42,302	\$ 26,154	\$ (129,522)	\$ (1,828)	\$ (127,694)	
Impact on Attrition Limitation								127,695	
<b>Total Impact</b>								<b>\$ 0</b>	
<b>Amount per AWEC 020</b>									<b>65,472,810</b>

There are some other items which need correcting but are more administrative in nature and do not impact either the traditional or attrition deficiencies.

The Tenth Exhibit to the Prefiled Direct Testimony of Susan E. Free, Exh. SEF-11, contains the fixed and variable baseline rate that PSE is requesting approval of in this proceeding. In conversations with WUTC Staff, it was brought to PSE's attention that the gross plant and accumulated depreciation amounts associated with the Energy Imbalance Market ("EIM") were inadvertently omitted from amounts on row 6 in tab "Rate Base Summarized" in workpaper *NEW-PSE-WP-SEF-11.01E-Exhibit-A-1-19GRC-06-2019.xlsx*. This omission results in PSE's production rate base reported on line 5 of Exh. SEF-11 being understated by \$4.3 million. The relevant workpaper within Attachment A makes the correction to production rate base by including these EIM amounts in row 6 in the referenced tab.

In PSE's Response to WUTC Staff Data Request No. 006, PSE provided information on an incorrect cell reference in the workpapers of Mr. Amen that had no impact on the revenue requirement. Cell M-128 of the tab named "Electric CBR," in workpaper *NEW-PSE-WP-RJA-3-and-4-Attrition-Study-19GRC-06-2019*, which is related to Advanced Metering Infrastructure electric accumulated deferred income taxes, has been corrected to link to cell H-41 on the tab named "AMI."

Finally, included in Attachment A are the production operations and maintenance workpapers supporting the Prefiled Direct Testimony of Ronald J. Roberts, Exh. RJR-

1T. PSE inadvertently provided an incorrect version of this workpaper and the work paper in Attachment A (*RJR\_WB\_C\_2019\_GRC\_Production\_OM\_WorkPaper\_Rvn17Apr(C).xlsx*) now agrees to Exh. RJR-7. This submission has no impact on the revenue requirement in this proceeding as the revenue requirement was calculated by using the amounts in Exh. RJR-7 rather than by using amounts from the incorrect workpaper.

Shaded information is designated as CONFIDENTIAL per Protective Order in Dockets UE-190529 and UG-190530 as marked in Attachment A to PSE's Response to AWEC Data Request No. 020.

**ATTACHMENT A to PSE's Response to  
AWEC Data Request No. 020**