

**Exh. JL-7C**  
**Dockets UE-170033/UG-170034**  
**Witness: Jing Liu**  
**CONFIDENTIAL VERSION**

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**DOCKETS UE-170033 and  
UG-170034 (*Consolidated*)**

**EXHIBIT TO  
TESTIMONY OF**

**Jing Liu**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

*PSE Production Cost Trend Analysis*

**June 30, 2017**

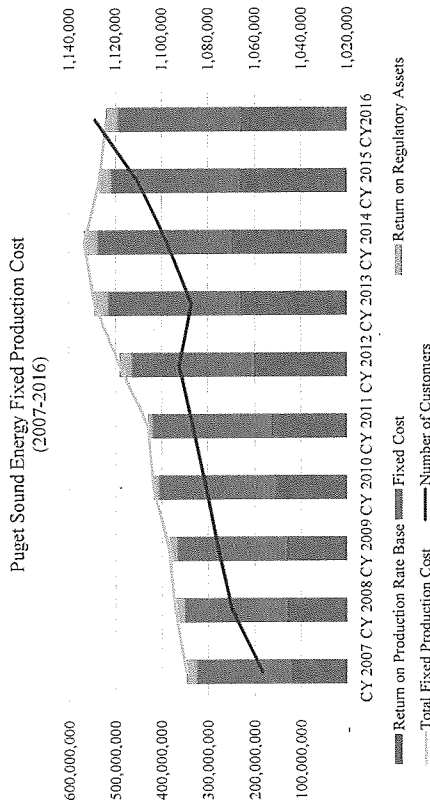
**CONFIDENTIAL PER PROTECTIVE ORDER**

PSE Production Cost Trend Analysis  
 2007-2016

Cost Classification	UE-080563		UE-090476		UE-100520		UE-110599		UE-120441		UE-130471		UE-140526		UE-150523		UE-160459		UE-161135		
	CY 2007	CY 2008	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025	CY 2026	
<b>Production Cost</b>																					
Return on Production Rate Base	120,031,396	128,696,979	131,167,987	154,630,803	163,284,389	201,247,405	228,064,496	249,742,452	230,499,656	228,330,553	287,867,217	288,450,085	277,867,217	264,676,296	274,325,814	535,773,715	567,634,078	719,420,819	697,783,983	700,791,197	700,791,197
Fixed Cost	201,244,736	219,579,616	234,006,526	250,434,051	255,519,793	261,810,461	287,652,762	294,441,541	277,867,217	264,676,296	308,18,934	308,18,934	29,441,541	27,406,842	535,773,715	567,634,078	719,420,819	697,783,983	700,791,197	700,791,197	700,791,197
Return on Regulatory Assets	25,722,356	21,948,369	18,313,667	12,583,534	10,558,905	27,564,235	30,818,934	29,441,541	27,406,842	27,325,814	490,624,102	546,536,192	567,634,078	535,773,715	520,332,663	520,332,663	520,332,663	520,332,663	520,332,663	520,332,663	520,332,663
<b>Total Fixed Production Cost</b>	<b>346,998,488</b>	<b>370,224,964</b>	<b>383,488,180</b>	<b>417,648,388</b>	<b>429,363,087</b>	<b>490,624,102</b>	<b>546,536,192</b>	<b>567,634,078</b>	<b>535,773,715</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>	<b>520,332,663</b>
Percent Change		6.7%	3.6%	8.9%	2.8%	14.3%	11.4%	3.9%	-5.6%	-2.9%											
Variable Cost	892,075,356	970,542,365	1,026,398,480	959,911,643	924,512,910	801,041,072	726,709,199	719,420,819	697,783,983	700,791,197	1,411,136	198,200	2,460,254	4,911,255							
Adjustments	(12,814,965)	(10,009,794)	(3,518,698)	(2,686,674)	(2,507,322)	(1,411,136)	-	198,200	2,460,254	4,911,255											
<b>Total Variable Production Cost</b>	<b>879,260,390</b>	<b>960,532,571</b>	<b>1,022,879,782</b>	<b>957,224,969</b>	<b>922,005,588</b>	<b>799,629,936</b>	<b>726,709,199</b>	<b>719,619,018</b>	<b>700,244,237</b>	<b>705,702,452</b>											
Percent Change		9.2%	6.5%	-6.4%	-3.7%	-13.3%	-9.1%	-1.0%	-2.7%	0.8%											
Hedging Cost	226,377	318,409	430,915	305,434	298,852	1,128,354	857,606	721,121	738,525	526,847											
Percent Change		40.7%	35.3%	-29.1%	-2.2%	277.6%	-24.0%	-15.9%	2.4%	-28.7%											
<b>Total Power Cost Recovery</b>	<b>1,226,485,255</b>	<b>1,331,075,944</b>	<b>1,406,798,877</b>	<b>1,375,178,791</b>	<b>1,351,667,527</b>	<b>1,291,380,391</b>	<b>1,274,102,997</b>	<b>1,287,974,218</b>	<b>1,236,756,477</b>	<b>1,226,561,962</b>											
Percent Change		8.5%	5.7%	-2.2%	-1.7%	-4.5%	-1.3%	1.1%	-4.0%	-0.8%											
<b>Number of Customers</b>	<b>1,056,428</b>	<b>1,069,382</b>	<b>1,075,420</b>	<b>1,080,692</b>	<b>1,086,282</b>	<b>1,092,306</b>	<b>1,086,983</b>	<b>1,097,559</b>	<b>1,110,041</b>	<b>1,128,704</b>											
Percent Change		1.2%	0.6%	0.5%	0.5%	0.6%	-0.5%	1.0%	1.1%	1.7%											

Note:

\* The fixed production costs are compiled from annual Power Cost Adjustment filings from 2008 to 2017. Under the settlement agreement in UE-1301617, certain cost items were re-classified between the fixed and variable cost categories. The information here reflects the re-classification.  
 \* The customer growth data is from PSE Response to UTC Staff Data Request No. 265.



CY 2007 CY 2008 CY 2009 CY 2010 CY 2011 CY 2012 CY 2013 CY 2014 CY 2015 CY 2016  
 Return on Production Rate Base Fixed Cost  
 Total Fixed Production Cost Number of Customers