

**EXHIBIT NO. \_\_\_(JAP-12)  
DOCKETS UE-17\_\_\_/UG-17\_\_\_  
2017 PSE GENERAL RATE CASE  
WITNESS: JON A. PILIARIS**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**Docket UE-17\_\_\_**

**Docket UG-17\_\_\_**

**ELEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE  
PREFILED DIRECT TESTIMONY OF**

**JON A. PILIARIS**

**ON BEHALF OF PUGET SOUND ENERGY**

**JANUARY 13, 2017**

**Puget Sound Energy  
2017 Gas Cost of Service Study  
External Allocators**

Name	Description	Classifier	Total	Residential (16,23,53)	Comm. & Indus. (31,31T)	Large Volume (41,41T)	Interruptible (85, 85T)	Limited Interruptible (86, 86T)	Non-Exclusive Interruptible (87, 87T)	Contracts	Rentals
<b>CUSTOMER EXTERNAL ALLOCATORS</b>											
CUST	Average Customers	CUS	803,774	92.81%	6.95%	0.17%	0.03%	0.03%	0.00%	0.00%	0.00%
				746,008	55,899	1,376	217	249	16	10	-
CUSTXT	Customers (excl. transport)	CUS	803,548	92.84%	6.96%	0.16%	0.01%	0.03%	0.00%	0.00%	0.00%
				746,008	55,897	1,309	83	246	5	-	-
DIR_CUSTXT	Customers (excl. transport)	DIRS	803,548	92.84%	6.96%	0.16%	0.01%	0.03%	0.00%	0.00%	0.00%
				746,008	55,897	1,309	83	246	5	-	-
MTRS_CUS	Customer Meters - Acc 381	CUS	182,624,985	78.56%	20.89%	0.46%	0.00%	0.09%	0.00%	0.00%	0.00%
				143,471,213	38,151,556	835,960	5,261	159,454	-	1,542	-
MTRS_INST	Meters Installation - Acc 382	CUS	35,455,915	92.96%	6.96%	0.07%	0.00%	0.01%	0.00%	0.00%	0.00%
				32,959,939	2,467,466	23,865	170	4,432	-	43	-
MTRS_385	Regulators - Acc 385	CUS	26,649,082	0.43%	55.50%	19.82%	15.48%	3.37%	3.13%	2.28%	0.00%
				115,118	14,790,011	5,280,525	4,124,124	898,334	833,205	607,764	-
SERV	Services	CUS	1,279,163	58.32%	40.65%	0.87%	0.00%	0.16%	0.00%	0.00%	0.00%
				746,008	519,972	11,160	-	2,023	-	-	-
DIR380	Distr. Plant - Services	CUS	11,927,718	0.00%	0.00%	0.00%	82.79%	0.00%	8.38%	8.83%	0.00%
				-	-	-	9,875,434	-	999,280	1,053,004	-
DIR252	Cust. Adv. in Aid of Construction (# cust)	CUS	803,282	92.87%	6.96%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%
				746,008	55,899	1,376					
DIR386	Rental Property	CUS	1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
											1
DIR_DSALES	Direct Distr. Assignment to Sales	DIRS	1,742,032	0.43%	52.18%	14.08%	1.24%	2.62%	0.13%	0.00%	29.33%
				7,487	908,922	245,232	21,671	45,562	2,202	-	510,957
DIR_DTRNSP	Direct Distr. Assignment to Transport	DIRT	100,457	0.00%	0.85%	30.55%	54.20%	1.32%	5.54%	7.54%	0.00%
				-	849	30,690	54,447	1,327	5,566	7,578	-
DIR_CASALES	Direct Cust. Acct. Assignment to Sales	DIRS	420,770	0.00%	43.74%	26.68%	14.10%	6.85%	7.84%	0.00%	0.79%
				-	184,052	112,271	59,316	28,818	33,004	-	3,309
DIR_CATRNSP	Direct Cust. Acct. Assignment to Transport	DIRT	37,538	0.00%	1.89%	14.12%	55.50%	0.36%	12.01%	16.12%	0.00%
				-	709	5,301	20,833	136	4,508	6,052	-

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DIR_CSISALES_908	Direct Cust. Service Assignment to Sales_908	DIRS	225,475	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
				-	-	-	-	-	-	-	225,475
DIR_CSITRNSP_908	Direct Cust. Service Assignment to Transport_908	DIRT	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
				-	-	-	-	-	-	-	-
TRANSCUS	Transport Customers	DIRT	227	0.00%	0.92%	29.41%	59.08%	1.40%	4.78%	4.41%	0.00%
				-	2	67	134	3	11	10	-
SALES_902	Sales Meter Reading Costs	DIRS	231,802	0.88%	71.83%	16.72%	6.60%	3.45%	0.52%	0.00%	0.00%
				2,039	166,513	38,749	15,291	7,993	1,216	-	-
TRANS_902	Transport Meter Reading Costs	DIRT	45,699	0.00%	1.14%	23.57%	61.98%	0.38%	5.70%	7.22%	0.00%
				-	521	10,773	28,323	174	2,606	3,301	-
DIR_CSI_910	Direct Cust. Service Assignment to 910	CUS	76,069	0.00%	40.31%	25.65%	17.49%	6.32%	8.18%	1.32%	0.72%
				-	30,666	19,514	13,303	4,806	6,226	1,004	549
DIR904	Uncollectibles	CUS	5,391,531	81.92%	13.07%	0.40%	3.00%	0.00%	0.00%	0.00%	1.61%
				4,416,742	704,757	21,540	161,956	-	-	-	86,536
DIR235	Customer Deposit	CUS	4,458,742	69.20%	26.00%	1.52%	1.46%	0.22%	0.00%	0.00%	1.59%
				3,085,578	1,159,091	67,974	65,166	9,923	-	-	71,011
DIR920_TRNSPT	Acct. 920 Direct Assignment to Transport	DIRT	17,858	0.00%	1.14%	23.57%	61.98%	0.38%	5.70%	7.22%	0.00%
				-	204	4,210	11,068	68	1,019	1,290	-
DIR921_TRNSPT	Acct. 921 Direct Assignment to Transport	DIRT	92,215	0.00%	1.14%	23.57%	61.98%	0.38%	5.70%	7.22%	0.00%
					1,052	21,739	57,152	351	5,259	6,662	-
DIR926_SALES	Acct. 926 Direct Assignment to Sales	DIRS	464,294	0.46%	66.24%	21.11%	5.47%	4.43%	2.10%	0.00%	0.19%
				2,131	307,548	98,024	25,385	20,582	9,734	-	890
DIR926_TRNSPT	Acct. 926 Direct Assignment to Transport	DIRT	60,451	0.00%	1.15%	24.67%	57.91%	0.74%	6.69%	8.83%	0.00%
				-	697	14,914	35,008	446	4,046	5,339	-
DIR408_SALES	Acct. 408 Direct Assignment to Sales	DIRS	192,949	0.29%	58.32%	23.18%	8.59%	5.32%	4.17%	0.00%	0.12%
				569	112,529	44,724	16,581	10,258	8,053	-	235
DIR408_TRNSPT	Acct. 408 Direct Assignment to Transport	DIRT	50,855	0.00%	1.24%	22.77%	59.90%	0.49%	6.79%	8.82%	0.00%
				-	628	11,579	30,461	250	3,451	4,485	-

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<b>COMMODITY EXTERNAL ALLOCATORS</b>											
OTHREV	Other Operating Revenue	COM	4,380,514	93.77% 4,107,523	4.55% 199,202	0.12% 5,141	-2.19% (96,114)	0.03% 1,341	0.18% 7,828	0.00% 7	3.55% 155,585
SALESREV	Sales Margin Revenue	COM	412,420,856	73.80% 304,383,541	21.44% 88,429,327	2.94% 12,133,761	1.03% 4,241,106	0.51% 2,088,976	0.28% 1,144,144	0.00% -	0.00% -
GASREV	Gas Cost Recovery Revenue	COM	374,239,634	64.52% 241,458,159	23.58% 88,240,149	5.22% 19,551,216	3.48% 13,012,175	0.96% 3,588,371	2.24% 8,389,564	0.00% -	0.00% -
STRREV	Sales, Transportation and Rental Margin Revenue	COM	434,535,123	70.05% 304,383,541	20.35% 88,444,666	3.11% 13,505,385	3.18% 13,826,318	0.50% 2,175,329	1.10% 4,788,874	0.32% 1,369,462	1.39% 6,041,548
TRANSREV	Margin Revenue from Transportation for Others	COM	16,072,719	0.00% -	0.10% 15,339	8.53% 1,371,623	59.64% 9,585,212	0.54% 86,353	22.68% 3,644,730	8.52% 1,369,462	0.00% -
SGTREV	Sales, Gas & Transportation Revenue	COM	802,733,208	68.00% 545,841,700	22.01% 176,684,815	4.12% 33,056,600	3.34% 26,838,493	0.72% 5,763,701	1.64% 13,178,438	0.17% 1,369,462	0.00% -
STREV	Sales & Transportation Margin Revenue	COM	428,493,575	71.04% 304,383,541	20.64% 88,444,666	3.15% 13,505,385	3.23% 13,826,318	0.51% 2,175,329	1.12% 4,788,874	0.32% 1,369,462	0.00% -
COM1	Weather Normalized Volumes	COM	1,142,550,752	50.57% 577,787,183	18.78% 214,593,771	4.78% 54,558,711	11.06% 126,370,130	0.87% 9,978,634	10.70% 122,253,420	3.24% 37,008,902	0.00% -
COM1XT_COM	Weather Normalized Volumes (excl. Transportation)	COM	908,473,164	63.60% 577,787,183	23.62% 214,570,890	5.46% 49,642,742	3.73% 33,867,439	1.06% 9,606,000	2.53% 22,998,910	0.00% -	0.00% -
SEAS3_COM	Seasonal 3	COM	1.0000	70.61% 0.7061	21.47% 0.2147	3.70% 0.0370	1.92% 0.0192	1.09% 0.0109	1.21% 0.0121	0.00% -	0.00% -
COM1GS	Weather Normalized Volumes	COM	1,142,550,752	50.57% 577,787,183	18.78% 214,593,771	4.78% 54,558,711	11.06% 126,370,130	0.87% 9,978,634	10.70% 122,253,420	3.24% 37,008,902	0.00% -
PDAYXT_COM	Peak Day (excl. transport)	COM	9,270,425	71.95% 6,669,726	24.50% 2,271,093	3.38% 313,378	0.10% 9,351	0.07% 6,877	0.00% -	0.00% -	0.00% -
TF1_COM	TF-1 Allocator (Annual, Winter & Peak Day Sales)	COM	1.0000	67.35% 0.6735	23.61% 0.2361	4.52% 0.0452	2.27% 0.0227	0.74% 0.0074	1.51% 0.0151	0.00% -	0.00% -
SEAS2_COM	Seasonal 2	COM	594,699,907	66.18% 393,573,773	22.83% 135,768,146	4.81% 28,628,145	3.06% 18,203,186	1.07% 6,354,495	2.05% 12,172,162	0.00% -	0.00% -
JPTF2_COM	TF-2 Allocator (Seasonal Sales & Peak Day x Transport)	COM	1.0000	71.29% 0.7129	24.31% 0.2431	3.54% 0.0354	0.44% 0.0044	0.18% 0.0018	0.23% 0.0023	0.00% -	0.00% -
A_MAINS	Average for Mains	COM	573,784,071	54.98% 315,483,718	20.42% 117,172,625	5.19% 29,790,181	9.63% 55,251,976	0.95% 5,448,540	6.77% 38,870,149	2.05% 11,766,882	0.00% -

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<b>DEMAND EXTERNAL ALLOCATORS</b>											
PAVG	Peak and Average	DEM	1.0000	63.87%	22.26%	4.02%	4.56%	0.34%	3.70%	1.24%	0.00%
				0.6387	0.2226	0.0402	0.0456	0.0034	0.0370	0.0124	-
PA_MAINS	Peak and Average for Mains	DEM	1,738,739,608	65.33%	22.81%	4.16%	4.08%	0.37%	2.40%	0.85%	0.00%
				1,135,867,548	396,519,661	72,388,541	70,923,254	6,386,726	41,814,058	14,839,819	-
PDAY	Peak Day (Design Day)	DEM	9,471,096	70.42%	23.98%	3.66%	1.35%	0.08%	0.25%	0.26%	0.00%
				6,669,726	2,271,093	346,325	127,408	7,627	23,934	24,983	-
PDAYXT	Peak Day (excl. transport)	DEM	9,270,425	71.95%	24.50%	3.38%	0.10%	0.07%	0.00%	0.00%	0.00%
				6,669,726	2,271,093	313,378	9,351	6,877	-	-	-
SEAS2_DEM	Seasonal 2	DEM	594,699,907	66.18%	22.83%	4.81%	3.06%	1.07%	2.05%	0.00%	0.00%
				393,573,773	135,768,146	28,628,145	18,203,186	6,354,495	12,172,162	-	-
SEAS3_DEM	Seasonal 3	DEM	1.0000	70.61%	21.47%	3.70%	1.92%	1.09%	1.21%	0.00%	0.00%
				0.7061	0.2147	0.0370	0.0192	0.0109	0.0121	-	-
JPTF2_DEM	TF-2 Allocator (Seas.Sales & Peak Day x Transport)	DEM	1.0000	71.29%	24.31%	3.54%	0.44%	0.18%	0.23%	0.00%	0.00%
				0.7129	0.2431	0.0354	0.0044	0.0018	0.0023	-	-
COM1XT_DEM	Weather Normalized Volumes x Transport	DEM	908,473,164	63.60%	23.62%	5.46%	3.73%	1.06%	2.53%	0.00%	0.00%
				577,787,183	214,570,890	49,642,742	33,867,439	9,606,000	22,998,910	-	-
TF1_DEM	TF-1 Allocator (Annual, Winter & Peak Day Sales)	DEM	1	67.35%	23.61%	4.52%	2.27%	0.74%	1.51%	0.00%	0.00%
				0.6735	0.2361	0.0452	0.0227	0.0074	0.0151	-	-

**Puget Sound Energy  
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Name	Description	Total
INDUSMR	Industrial Measurement & Regulation (Acct. 385)	37,287,940
MRHREG	Meters & House Regulators (Accts. 381 & 383)	91,270,843
CUSINSTL	Customer Installation (Accts. 382 & 384)	237,681,691
PLT	Plant - Prod., Stor.(x JP Bal.), Trans., Distr.	3,363,833,107
OML	O&M Labor Expense (excluding JP Balancing Exp.)	36,794,775
PRODPT	Production Plant	6,075,135
TRANPT	Transmission Plant	-
DISTPT	Distribution Plant excluding Rentals	3,205,221,755
PLTXR	Plant excluding Rentals	3,344,312,879
PROD_OML	Production O&M Labor Exp. (Accounts 717 - 742)	101,219
GAS	Gas Costs	-
STORPT	Underground Storage Plant	34,557,222
DIST_OML	Distribution O&M Labor Exp. (Accounts 871 - 894)	25,487,854
DMAINS	Mains Plant (Account 376)	1,738,739,608
CUSTACC	Customer Account Expense (Accounts 902 - 904)	27,395,219
CSI	Customer Service & Information Expense (Accounts 908 & 909)	2,215,682
OM	O&M Expenses Excluding Gas & A&G	88,386,547
BASE	Rate Base	1,760,693,633
MR_EXP	Meter Reading Expenses	7,604,872
STOR_OML	Underground Storage O&M Labor (Excluding JP Bal.)	598,552
GENPLT	General Plant	147,904,174

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Name	Description	Total
DSERV	Distribution Service Plant (Account 380)	991,874,138
DMAINS_SERV	Distribution Mains & Services Plant (Accounts 376 & 380)	2,730,613,746
NETPLT	Net Plant - Prod., Stor. (x JP Bal.), Trans., Distr.	2,089,558,260
LNGPLT	Local Storage (LNG) Plant	14,498,012
DISTOM	Distribution O&M Operating Exp. (Accounts 871 - 879)	32,344,885
DMAINT	Distr. O&M Maintenance (Accounts 887 - 893)	14,227,627
EXP903	Customer Collection & Record Expenses (Account 903)	17,418,045
EXP908	Customer Assistance Expenses (Account 908)	(11,507,415)
EXP912	Demonstrating & Selling Expenses (Account 912)	1,884
LSTORPT	Local Storage Plant	14,498,012