

**EXH. JDT-10
DOCKETS UE-190529/UG-190530
UE-190274/UG-190275
2019 PSE GENERAL RATE CASE
WITNESS: JOHN D. TAYLOR**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**Docket UE-190529
Docket UG-190530 (*Consolidated*)**

In the Matter of the Petition of

PUGET SOUND ENERGY

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

**Docket UE-190274
Docket UG-190275 (*Consolidated*)**

**FIRST EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED REBUTTAL TESTIMONY OF**

JOHN D. TAYLOR

ON BEHALF OF PUGET SOUND ENERGY

JANUARY 15, 2020

**Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Summary**

Line No.	Description	Total Company	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
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Rate Base										
1	Plant in Service	\$ 4,320,470,005	\$ 2,801,154,653	\$ 1,196,726,321	\$ 151,430,831	\$ 76,155,785	\$ 9,649,796	\$ 53,817,518	\$ 8,186,460	\$ 23,348,641
2	Accumulated Reserve	(1,654,095,499)	(1,060,276,323)	(477,894,269)	(51,799,635)	(27,041,828)	(3,332,151)	(19,120,794)	(2,846,230)	(11,784,267)
3	Other Rate Base Items	(652,931,259)	(359,439,637)	(151,638,443)	(20,687,191)	(10,256,376)	(1,222,718)	(6,961,447)	(998,908)	(1,726,538)
4	TOTAL RATE BASE	\$ 2,113,443,247	\$ 1,381,438,693	\$ 567,193,609	\$ 78,944,004	\$ 38,857,583	\$ 5,094,923	\$ 27,735,277	\$ 4,341,321	\$ 9,837,636
Revenue at Current Rates										
5	Gas Service Revenue	445,447,746	315,481,526	93,663,669	19,499,458	8,489,398	1,989,280	4,605,200	1,719,216	-
6	Rental Revenues	5,310,381	4,714,866	243,618	(14,275)	(117,055)	(101)	-	-	5,310,381
7	Other Revenues	5,039,913	320,196,392	93,907,288	19,485,183	8,372,343	1,989,179	4,605,200	1,719,216	212,860
8	TOTAL REVENUE	\$ 455,798,040	\$ 320,196,392	\$ 93,907,288	\$ 19,485,183	\$ 8,372,343	\$ 1,989,179	\$ 4,605,200	\$ 1,719,216	\$ 5,523,241
Expenses at Current Rates										
9	Operation and Maintenance	158,421,091	112,901,378	34,448,663	4,652,013	2,145,945	386,257	1,798,025	375,678	1,713,133
10	Depreciation Expense	174,350,703	114,519,448	45,727,476	6,076,293	2,997,075	417,536	2,094,327	369,990	2,148,560
11	Taxes Other Than Income	24,633,879	17,266,312	5,130,901	1,003,281	443,711	99,331	269,823	94,091	336,429
12	Income Taxes	4,902,030	1,243,249,811	510,456	71,047	34,971	4,585	24,963	3,807	8,854
13	TOTAL EXPENSES - Current	\$ 359,307,702	\$ 245,920,387	\$ 85,817,495	\$ 11,502,633	\$ 5,621,702	\$ 907,709	\$ 4,187,136	\$ 843,665	\$ 4,206,915
14	Operating Income - Current	\$ 96,490,338	\$ 74,276,005	\$ 8,089,793	\$ 7,682,550	\$ 2,750,641	\$ 1,081,470	\$ 418,064	\$ 875,550	\$ 1,316,265
15	Current Rate of Return	4.57%	5.38%	1.43%	9.73%	7.08%	21.23%	1.51%	20.17%	13.38%
Calculation of Rate Schedule Revenue Requirement at Equal Rates of Return										
16	Required Return	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%
17	Required Operating Income	\$ 159,987,654	\$ 104,574,909	\$ 42,936,556	\$ 5,976,061	\$ 2,944,519	\$ 385,686	\$ 2,099,560	\$ 328,638	\$ 744,724
18	Operating Income (Deficiency)/Surplus	(63,497,316)	(30,298,904)	(34,846,763)	1,706,489	(190,878)	695,785	(1,681,498)	546,912	571,541
19	Revenue Conversion Factor	0.620450								
20	Revenue (Deficiency)/Surplus	\$ (84,203,115)	\$ (44,084,179)	\$ (40,115,799)	\$ 926,993	\$ (665,818)	\$ 639,774	\$ (1,939,107)	\$ 499,303	\$ 445,717
21	Revenue Requirement	\$ 540,001,155	\$ 364,290,571	\$ 134,023,087	\$ 18,558,189	\$ 8,938,159	\$ 1,349,406	\$ 6,544,307	\$ 1,219,913	\$ 5,077,523
22	Revenues Other Than Rate Sch. Rev.	5,039,913	4,714,866	243,618	(14,275)	(117,055)	(101)	-	-	212,860
23	Rate Schedule Revenue Requirement	\$ 534,961,242	\$ 359,575,705	\$ 133,779,469	\$ 18,572,464	\$ 9,055,214	\$ 1,349,506	\$ 6,544,307	\$ 1,219,913	\$ 4,864,664
24	Deficiency / (Surplus) as % of Rate Rev	20.10%	13.98%	42.83%	-4.75%	6.66%	-32.16%	42.11%	-29.04%	0.00%
Expenses at Required Return										
25	Operation and Maintenance	159,020,954	113,408,957	34,518,366	4,661,654	2,149,871	387,360	1,801,213	376,327	1,717,206
26	Depreciation Expense	174,350,703	114,519,448	45,727,476	6,076,293	2,997,075	417,536	2,094,327	369,990	2,148,560
27	Taxes Other Than Income	27,860,795	19,511,144	5,800,340	1,142,649	504,387	113,549	302,738	106,379	379,610
28	Income Taxes	18,781,050	12,276,113	5,040,349	701,534	345,307	45,276	246,469	38,579	87,424
29	TOTAL EXPENSES - Required	\$ 380,013,501	\$ 259,715,662	\$ 91,086,531	\$ 12,562,128	\$ 5,996,640	\$ 963,720	\$ 4,444,746	\$ 891,215	\$ 4,332,739
30	Rate Schedule Revenue as Proposed	\$ 548,637,755	\$ 380,503,345	\$ 122,619,885	\$ 21,508,858	\$ 9,364,130	\$ 1,989,305	\$ 6,028,925	\$ 1,757,818	\$ 4,865,489
31	Other Revenue	5,039,913	4,714,866	243,618	(14,275)	(117,055)	(101)	-	-	212,860
32	Revenue as Proposed	\$ 553,677,668	\$ 385,218,211	\$ 122,863,503	\$ 21,494,583	\$ 9,247,075	\$ 1,989,204	\$ 6,028,925	\$ 1,757,818	\$ 5,078,349
33	Proposed Revenue Increase	\$ 97,879,628	\$ 65,021,819	\$ 28,956,216	\$ 2,009,401	\$ 874,732	\$ 25	\$ 1,423,725	\$ 38,603	\$ (444,892)
34	Proposed Revenue - Revenue Requirement	\$ 553,677,668	\$ 385,218,211	\$ 122,863,503	\$ 21,494,583	\$ 9,247,075	\$ 1,989,204	\$ 6,028,925	\$ 1,757,818	\$ 5,078,349
35	Current Revenue to Cost Ratio	0.83	0.88	0.70	1.05	0.94	1.47	0.70	1.41	1.09
36	Parity Ratio	1.00	1.05	0.84	1.13	1.01	1.77	0.85	1.69	1.31
37	Proposed Revenue to Cost Ratio	1.03	1.06	0.92	1.16	1.03	1.47	0.92	1.44	1.00
38	Parity Ratio	1.00	1.03	0.89	1.13	1.01	1.44	0.90	1.41	0.98

Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Functional Rate Base

	System Total	Residential (16,23.53)	Comm. & Includ. (31,31T)	Large Volume (41,41T)	Interruptible (85,85T)	Limited Interruptible (86, 86T)	Non-Exclusive Interruptible (87, 87T)	Contracts	Rentals
Gas Supply									
Demand	\$ 2,289,161	\$ 1,634,043	\$ 582,420	\$ 69,675	\$ 1,568	\$ 1,455	\$ -	\$ -	\$ -
Commodity	\$ 466,358	\$ 303,605	\$ 116,464	\$ 31,834	\$ 4,628	\$ 4,382	\$ 7,014	\$ (1,581)	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 2,755,519	\$ 1,937,649	\$ 698,885	\$ 101,509	\$ 6,196	\$ 5,847	\$ 7,014	\$ (1,581)	\$ -
Storage									
Demand	\$ 38,657,286	\$ 27,234,058	\$ 8,755,875	\$ 1,646,800	\$ 241,221	\$ 310,805	\$ 468,526	\$ -	\$ -
Commodity	\$ 6,016,453	\$ 3,086,491	\$ 1,184,191	\$ 435,713	\$ 456,028	\$ 46,575	\$ 620,656	\$ 186,800	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 23,544,044	\$ 18,806,152	\$ 5,990,197	\$ 716,608	\$ 16,125	\$ 14,983	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 68,217,784	\$ 47,126,702	\$ 15,930,262	\$ 2,799,121	\$ 713,373	\$ 372,343	\$ 1,089,183	\$ 186,800	\$ -
Transmission									
Demand	\$ 1,713	\$ 1,093	\$ 397	\$ 86	\$ 49	\$ 5	\$ 60	\$ 23	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 1,713	\$ 1,093	\$ 397	\$ 86	\$ 49	\$ 5	\$ 60	\$ 23	\$ -
Distribution									
Demand	\$ 785,954,767	\$ 550,389,412	\$ 106,240,595	\$ 31,318,889	\$ 4,539,132	\$ 499,823	\$ 1,580,857	\$ 1,386,057	\$ -
Commodity	\$ 370,331,898	\$ 208,671,051	\$ 80,060,581	\$ 29,457,626	\$ 25,930,942	\$ 2,593,258	\$ 22,954,870	\$ 1,203,570	\$ 9,358,763
Customer	\$ 855,670,112	\$ 548,138,901	\$ 271,218,755	\$ 14,758,646	\$ 7,946,693	\$ 1,554,070	\$ 1,534,088	\$ 1,360,197	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 2,012,156,777	\$ 1,307,199,364	\$ 547,519,931	\$ 75,535,161	\$ 37,876,766	\$ 4,647,152	\$ 26,069,815	\$ 3,949,824	\$ 9,358,763
Gas Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 29,462,489	\$ 25,173,886	\$ 3,043,305	\$ 436,518	\$ 92,378	\$ 67,003	\$ 170,326	\$ -	\$ 479,073
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 29,462,489	\$ 25,173,886	\$ 3,043,305	\$ 436,518	\$ 92,378	\$ 67,003	\$ 170,326	\$ -	\$ 479,073
Transport Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 848,965	\$ -	\$ 829	\$ 71,610	\$ 168,820	\$ 2,573	\$ 398,879	\$ 206,255	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 848,965	\$ -	\$ 829	\$ 71,610	\$ 168,820	\$ 2,573	\$ 398,879	\$ 206,255	\$ -
TOTAL									
Demand	\$ 826,902,928	\$ 579,258,606	\$ 205,579,288	\$ 33,035,450	\$ 4,781,971	\$ 812,088	\$ 2,049,444	\$ 1,386,080	\$ -
Commodity	\$ 376,814,709	\$ 212,061,148	\$ 81,361,236	\$ 29,925,173	\$ 25,851,596	\$ 2,644,226	\$ 23,582,541	\$ 1,388,789	\$ -
Customer	\$ 855,870,112	\$ 548,138,901	\$ 271,218,755	\$ 14,758,646	\$ 7,946,693	\$ 1,554,070	\$ 1,534,088	\$ 1,360,197	\$ 9,358,763
Direct Sales	\$ 53,006,534	\$ 41,980,038	\$ 9,033,501	\$ 1,153,126	\$ 108,503	\$ 81,966	\$ 170,326	\$ -	\$ 479,073
Direct Transport	\$ 848,965	\$ -	\$ 829	\$ 71,610	\$ 168,820	\$ 2,573	\$ 398,879	\$ 206,255	\$ -
Sub-total	\$ 2,113,443,247	\$ 1,381,438,693	\$ 567,193,609	\$ 78,944,004	\$ 38,857,983	\$ 5,094,923	\$ 27,735,277	\$ 4,341,321	\$ 9,857,836

**Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Functional Revenue Requirement**

	System Total	Residential (16,23.53)	Comm. & Incls. (31,31T)	Large Volume (41,41T)	Interruptible (85, 85T)	Limited Interruptible (86, 86T)	Non-Exclusive Interruptible (87, 87T)	Contracts	Rentals
Gas Supply									
Demand	\$ 659,031	\$ 470,428	\$ 167,674	\$ 20,059	\$ 451	\$ 419	\$ -	\$ -	\$ -
Commodity	\$ 3,112,293	\$ 1,985,240	\$ 765,390	\$ 213,377	\$ 45,640	\$ 28,938	\$ 66,545	\$ (2,836)	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 3,771,325	\$ 2,465,668	\$ 933,064	\$ 233,436	\$ 46,092	\$ 29,357	\$ 66,545	\$ (2,836)	\$ -
Storage									
Demand	\$ 10,104,805	\$ 7,118,835	\$ 2,288,738	\$ 430,465	\$ 63,054	\$ 81,243	\$ 122,470	\$ -	\$ -
Commodity	\$ 1,204,983	\$ 618,166	\$ 237,171	\$ 87,265	\$ 91,333	\$ 9,328	\$ 124,306	\$ 37,412	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 3,083,155	\$ 2,200,810	\$ 784,432	\$ 93,842	\$ 2,112	\$ 1,959	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 14,392,943	\$ 9,937,812	\$ 3,310,342	\$ 611,572	\$ 156,499	\$ 92,530	\$ 246,776	\$ 37,412	\$ -
Transmission									
Demand	\$ 3,074	\$ 1,961	\$ 713	\$ 154	\$ 88	\$ 9	\$ 107	\$ 41	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 3,074	\$ 1,961	\$ 713	\$ 154	\$ 88	\$ 9	\$ 107	\$ 41	\$ -
Distribution									
Demand	\$ 159,463,465	\$ 111,322,065	\$ 38,716,793	\$ 6,413,132	\$ 1,050,110	\$ 114,462	\$ 506,765	\$ 340,138	\$ -
Commodity	\$ 113,153,285	\$ 69,308,138	\$ 24,157,237	\$ 7,561,318	\$ 5,776,793	\$ 689,568	\$ 4,944,164	\$ 385,288	\$ 330,759
Customer	\$ 218,775,320	\$ 146,908,714	\$ 62,218,810	\$ 3,000,143	\$ 1,624,093	\$ 320,444	\$ 305,589	\$ 278,313	\$ 4,119,214
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 491,392,050	\$ 327,538,917	\$ 126,092,841	\$ 16,974,592	\$ 8,450,996	\$ 1,124,473	\$ 5,756,519	\$ 1,003,740	\$ 4,449,973
Gas Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 29,609,980	\$ 24,346,213	\$ 3,684,555	\$ 632,086	\$ 86,458	\$ 99,233	\$ 133,883	\$ -	\$ 627,551
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 29,609,980	\$ 24,346,213	\$ 3,684,555	\$ 632,086	\$ 86,458	\$ 99,233	\$ 133,883	\$ -	\$ 627,551
Transport Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 831,782	\$ -	\$ 1,572	\$ 106,350	\$ 198,026	\$ 3,803	\$ 340,476	\$ 181,556	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 831,782	\$ -	\$ 1,572	\$ 106,350	\$ 198,026	\$ 3,803	\$ 340,476	\$ 181,556	\$ -
TOTAL									
Demand	\$ 170,230,376	\$ 118,913,290	\$ 42,173,919	\$ 6,863,809	\$ 1,113,704	\$ 196,132	\$ 629,343	\$ 340,180	\$ -
Commodity	\$ 117,470,541	\$ 71,921,544	\$ 25,159,798	\$ 7,861,960	\$ 5,913,766	\$ 727,834	\$ 5,135,015	\$ 419,864	\$ 330,759
Customer	\$ 218,775,320	\$ 146,908,714	\$ 62,218,810	\$ 3,000,143	\$ 1,624,093	\$ 320,444	\$ 305,589	\$ 278,313	\$ 4,119,214
Direct Sales	\$ 32,683,135	\$ 26,547,023	\$ 4,468,987	\$ 725,928	\$ 86,570	\$ 101,193	\$ 133,883	\$ -	\$ 627,551
Direct Transport	\$ 831,782	\$ -	\$ 1,572	\$ 106,350	\$ 198,026	\$ 3,803	\$ 340,476	\$ 181,556	\$ -
Sub-total	\$ 540,001,155	\$ 364,280,571	\$ 134,023,087	\$ 19,558,189	\$ 8,838,159	\$ 1,349,406	\$ 6,544,307	\$ 1,219,913	\$ 5,077,523
TOTAL REVENUE REQUIREMENT									
	\$ 422,530,614	\$ 292,369,027	\$ 108,863,289	\$ 10,696,229	\$ 3,024,392	\$ 621,572	\$ 1,409,291	\$ 800,049	\$ 4,746,765

Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Unit Costs

	System Total	Residential (16,23.53)	Comm. & Incls. (31,317)	Large Volume (41,417)	Interruptible (85, 857)	Limited Interruptible (86, 867)	Non-Exclusive Interruptible (87, 877)	Contracts	Rentals
Gas Supply									
Demand (per Peak Day therm per month)	\$ 0.0054	\$ 0.0055	\$ 0.0055	\$ 0.0042	\$ 0.0006	\$ 0.0050	\$ -	\$ -	\$ -
Commodity (per therm)	\$ 0.0026	\$ 0.0033	\$ 0.0033	\$ 0.0025	\$ 0.0005	\$ 0.0031	\$ 0.0005	\$ (0.0001)	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ 0.0032	\$ 0.0040	\$ 0.0040	\$ 0.0027	\$ 0.0005	\$ 0.0032	\$ 0.0005	\$ (0.0001)	\$ -
Storage									
Demand (per Peak Day therm per month)	\$ 0.0831	\$ 0.0839	\$ 0.0757	\$ 0.0888	\$ 0.0827	\$ 0.9613	\$ 0.4264	\$ -	\$ -
Commodity (per therm)	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ 3.084	\$ 2.375	\$ 1.1531	\$ 5.8585	\$ 6.1925	\$ 7.7225	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ 0.0095	\$ 0.0126	\$ 0.0107	\$ 0.0060	\$ 0.0017	\$ 0.0098	\$ 0.0020	\$ 0.0010	\$ -
Transmission									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ 0.0001	\$ 0.0001	\$ 0.0004	\$ 0.0001	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution									
Demand (per Peak Day therm per month)	\$ 1.3117	\$ 1.3126	\$ 1.3139	\$ 1.3377	\$ 1.3774	\$ 1.3544	\$ 1.7645	\$ 0.5626	\$ -
Commodity (per therm)	\$ 0.0947	\$ 0.1131	\$ 0.1027	\$ 0.0874	\$ 0.0638	\$ 0.0746	\$ 0.0401	\$ 0.0104	\$ -
Customer (per customer per month)	\$ 21.9483	\$ 15.8553	\$ 91.4588	\$ 173.4387	\$ 1,085.7737	\$ 117.0784	\$ 1,697.7191	\$ 2,319.2789	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ 0.2282	\$ 0.2947	\$ 0.2717	\$ 0.1615	\$ 0.0754	\$ 0.0869	\$ 0.0442	\$ 0.0196	\$ -
Gas Costs									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Specific Costs									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ 2.971	\$ 2.628	\$ 5.416	\$ 39.461	\$ 253.544	\$ 36.590	\$ 2,231.386	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transport Specific Costs									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 296.747	\$ 50.722	\$ 89.086	\$ 161.390	\$ 152.124	\$ 2,837.299	\$ 1,512.963	\$ -	\$ -
TOTAL									
Demand (per Peak Day therm per month)	\$ 1.4002	\$ 1.4021	\$ 1.3951	\$ 1.4317	\$ 1.4608	\$ 2.3208	\$ 2.1912	\$ 0.5627	\$ -
Commodity (per therm)	\$ 0.0983	\$ 0.1174	\$ 0.1070	\$ 0.0909	\$ 0.0663	\$ 0.0787	\$ 0.0417	\$ 0.0113	\$ -
Customer (per customer per month)	\$ 21.95	\$ 15.86	\$ 91.46	\$ 173.44	\$ 1,085.77	\$ 117.08	\$ 1,697.72	\$ 2,319.28	\$ -
Direct Sales (per sales customer per month)	\$ 3.28	\$ 2.87	\$ 6.57	\$ 45.32	\$ 289.74	\$ 37.31	\$ 2,231.39	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ 296.75	\$ -	\$ 50.72	\$ 83.09	\$ 161.39	\$ 152.12	\$ 2,837.30	\$ 1,512.96	\$ -
Demand and Commodity (per therm)	\$ 0.2408	\$ 0.3114	\$ 0.2864	\$ 0.1702	\$ 0.0776	\$ 0.0999	\$ 0.0468	\$ 0.0205	\$ -
All Customer (per customer per month)	\$ 25.31	\$ 18.72	\$ 98.03	\$ 221.55	\$ 1,218.55	\$ 155.44	\$ 4,333.05	\$ 3,832.24	\$ -
PDAY									
	121,572,960	84,811,016	30,229,088	4,794,156	762,387	84,510	287,208	604,596	0
COM_1									
	1,194,623,705	612,852,104	235,132,259	86,514,963	90,548,323	9,247,991	123,371,198	37,090,867	0
CUST									
	9,967,759	9,265,563	680,293	17,298	1,568	2,737	180	120	0
CUSTXT									
	9,964,956	9,265,563	680,262	16,018	341	2,712	60	0	0
TRANSQUS									
	2,803	0	31	1,280	1,227	25	120	120	0

Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Summary - Compromise Method

Line No.	Description	Total Company	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
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Rate Base										
1	Plant in Service	\$ 4,320,470,005	\$ 2,783,254,449	\$ 1,190,021,209	\$ 149,409,250	\$ 76,036,898	\$ 10,744,573	\$ 61,010,312	\$ 26,645,672	\$ 23,348,641
2	Accumulated Reserve	(1,654,095,499)	(1,053,814,759)	(475,473,877)	(51,069,891)	(26,998,549)	(3,727,345)	(21,717,228)	(9,509,583)	(11,784,267)
3	Other Rate Base Items	(652,931,259)	(562,925,907)	(150,686,843)	(20,403,300)	(10,239,540)	(1,376,458)	(7,971,533)	(3,591,140)	(1,726,538)
4	TOTAL RATE BASE	\$ 2,113,443,247	\$ 1,372,513,783	\$ 663,850,489	\$ 77,938,059	\$ 38,797,809	\$ 5,640,771	\$ 31,321,551	\$ 13,544,949	\$ 9,837,836
Revenue at Current Rates										
5	Gas Service Revenue	445,447,746	315,481,526	93,663,669	19,499,458	8,489,398	1,989,280	4,605,200	1,719,216	-
6	Rental Revenues	5,310,381	4,714,866	243,618	(14,275)	(117,055)	(101)	-	-	5,310,381
7	Other Revenues	5,039,913	320,196,392	93,907,288	19,485,183	8,372,343	1,989,179	4,605,200	1,719,216	212,860
8	TOTAL REVENUE	\$ 455,798,040	\$ 320,196,392	\$ 93,907,288	\$ 19,485,183	\$ 8,372,343	\$ 1,989,179	\$ 4,605,200	\$ 1,719,216	\$ 5,523,241
Expenses at Current Rates										
9	Operation and Maintenance	158,421,091	112,518,504	34,305,245	4,608,772	2,143,381	409,674	1,951,874	770,508	1,713,133
10	Depreciation Expense	174,350,703	113,896,764	45,494,229	6,005,969	2,992,905	455,619	2,344,538	1,012,119	2,148,560
11	Taxes Other Than Income	24,633,879	17,245,473	5,126,840	1,002,056	443,638	99,894	274,179	105,269	336,429
12	Income Taxes	4,902,030	1,235,217,68	507,447	70,140	34,917	5,077	28,188	12,190	8,854
13	TOTAL EXPENSES - Current	\$ 359,307,702	\$ 244,895,958	\$ 85,453,761	\$ 11,586,938	\$ 5,614,841	\$ 970,363	\$ 4,958,179	\$ 1,900,086	\$ 4,206,915
14	Operating Income - Current	\$ 96,490,338	\$ 75,300,434	\$ 8,473,526	\$ 7,798,245	\$ 2,757,502	\$ 1,018,816	\$ 6,420	\$ (180,871)	\$ 1,316,265
15	Current Rate of Return	4.57%	5.49%	1.50%	10.01%	7.11%	18.06%	0.02%	-1.34%	13.38%
Calculation of Rate Schedule Revenue Requirement at Equal Rates of Return										
16	Required Return	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%
17	Required Operating Income	\$ 159,987,654	\$ 103,899,293	\$ 42,683,482	\$ 5,899,760	\$ 2,936,904	\$ 427,006	\$ 2,371,041	\$ 1,025,953	\$ 744,724
18	Operating Income (Deficiency)/Surplus	(63,497,316)	(28,598,860)	(34,209,956)	1,898,486	(178,492)	591,810	(2,364,621)	(1,206,224)	571,541
19	Revenue Conversion Factor	0.620450								
20	Revenue (Deficiency)/Surplus	\$ (84,203,115)	\$ (42,322,855)	\$ (38,452,292)	\$ 1,127,040	\$ (653,953)	\$ 531,439	\$ (2,650,873)	\$ (1,327,338)	\$ 445,717
21	Revenue Requirement	\$ 540,001,155	\$ 362,519,247	\$ 133,359,580	\$ 18,358,143	\$ 8,926,295	\$ 1,457,740	\$ 7,256,073	\$ 3,046,553	\$ 5,077,523
22	Revenues Other Than Rate Sch. Rev.	5,039,913	4,714,866	243,618	(14,275)	(117,055)	(101)	-	-	212,860
23	Rate Schedule Revenue Requirement	\$ 534,961,242	\$ 357,804,381	\$ 133,115,961	\$ 18,372,418	\$ 9,043,351	\$ 1,457,841	\$ 7,256,073	\$ 3,046,553	\$ 4,864,664
24	Deficiency / (Surplus) as % of Rate Rev	20.10%	13.42%	42.12%	-5.78%	6.53%	-26.72%	57.56%	77.21%	0.00%
Expenses at Required Return										
25	Operation and Maintenance	159,020,954	113,026,063	34,374,948	4,618,413	2,147,307	410,776	1,955,062	771,158	1,717,206
26	Depreciation Expense	174,350,703	113,896,764	45,494,229	6,005,969	2,992,905	455,619	2,344,538	1,012,119	2,148,560
27	Taxes Other Than Income	27,860,795	19,500,305	5,796,280	1,141,424	504,314	114,212	307,094	117,557	379,610
28	Income Taxes	18,781,050	12,196,802	5,010,640	692,576	344,776	50,127	278,338	120,367	87,424
29	TOTAL EXPENSES - Required	\$ 380,013,501	\$ 255,619,954	\$ 90,676,097	\$ 12,458,383	\$ 5,989,301	\$ 1,050,734	\$ 4,865,032	\$ 2,021,201	\$ 4,352,799
30	Rate Schedule Revenue as Proposed	\$ 547,992,206	\$ 380,542,034	\$ 121,353,024	\$ 21,450,333	\$ 10,235,147	\$ 1,968,309	\$ 6,019,690	\$ 1,757,818	\$ 4,665,850
31	Other Revenue	5,039,913	4,714,866	243,618	(14,275)	(117,055)	(101)	-	-	212,860
32	Revenue as Proposed	\$ 553,032,119	\$ 385,256,900	\$ 121,596,642	\$ 21,436,058	\$ 10,118,091	\$ 1,968,209	\$ 6,019,690	\$ 1,757,818	\$ 4,878,710
33	Proposed Revenue Increase	\$ 97,234,079	\$ 65,060,508	\$ 27,689,354	\$ 1,950,876	\$ 1,745,749	\$ (20,971)	\$ 1,414,491	\$ 38,603	\$ (644,531)
34	Proposed Revenue - Revenue Requirement	\$ 553,032,119	\$ 385,256,900	\$ 121,596,642	\$ 21,436,058	\$ 10,118,091	\$ 1,968,209	\$ 6,019,690	\$ 1,757,818	\$ 4,878,710
35	Current Revenue to Cost Ratio	0.83	0.88	0.70	1.06	0.94	1.36	0.63	0.56	1.09
36	Parity Ratio	1.00	1.06	0.85	1.27	1.13	1.64	0.76	0.68	1.31
37	Proposed Revenue to Cost Ratio	1.02	1.06	0.91	1.17	1.13	1.35	0.83	0.58	0.96
38	Parity Ratio	1.00	1.04	0.89	1.14	1.10	1.32	0.81	0.56	0.94

Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Functional Rate Base - Compromise Method

	System 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
Gas Supply									
Demand	\$ 2,289,161	\$ 1,634,043	\$ 582,420	\$ 69,675	\$ 1,568	\$ 1,455	\$ -	\$ -	\$ -
Commodity	\$ 466,358	\$ 303,605	\$ 116,464	\$ 31,834	\$ 4,628	\$ 4,392	\$ 7,014	\$ (1,581)	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 2,755,519	\$ 1,937,649	\$ 698,885	\$ 101,509	\$ 6,196	\$ 5,847	\$ 7,014	\$ (1,581)	\$ -
Storage									
Demand	\$ 38,657,286	\$ 27,234,058	\$ 8,755,875	\$ 1,646,800	\$ 241,221	\$ 310,805	\$ 468,526	\$ -	\$ -
Commodity	\$ 6,016,453	\$ 3,086,491	\$ 1,184,191	\$ 435,713	\$ 456,026	\$ 46,575	\$ 620,656	\$ 186,800	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 23,544,044	\$ 16,806,152	\$ 5,990,197	\$ 716,608	\$ 16,125	\$ 14,963	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 68,217,784	\$ 47,126,702	\$ 15,930,262	\$ 2,799,121	\$ 713,373	\$ 372,343	\$ 1,089,183	\$ 186,800	\$ -
Transmission									
Demand	\$ 1,713	\$ 1,093	\$ 397	\$ 86	\$ 49	\$ 5	\$ 60	\$ 23	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 1,713	\$ 1,093	\$ 397	\$ 86	\$ 49	\$ 5	\$ 60	\$ 23	\$ -
Distribution									
Demand	\$ 785,964,767	\$ 547,412,525	\$ 195,179,547	\$ 31,150,613	\$ 5,260,819	\$ 579,822	\$ 2,338,332	\$ 4,033,109	\$ -
Commodity	\$ 370,331,688	\$ 202,723,027	\$ 77,778,510	\$ 28,617,987	\$ 24,609,481	\$ 3,059,108	\$ 25,783,670	\$ 7,760,146	\$ -
Customer	\$ 855,870,112	\$ 548,138,901	\$ 271,218,755	\$ 14,758,646	\$ 7,946,693	\$ 1,554,070	\$ 1,534,088	\$ 1,360,197	\$ 9,388,763
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 2,012,156,777	\$ 1,296,274,453	\$ 544,176,812	\$ 74,527,216	\$ 37,816,992	\$ 5,192,999	\$ 29,656,090	\$ 13,153,452	\$ 9,388,763
Gas Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 29,462,489	\$ 25,173,886	\$ 3,043,305	\$ 436,518	\$ 92,378	\$ 67,003	\$ 170,326	\$ -	\$ 479,073
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 29,462,489	\$ 25,173,886	\$ 3,043,305	\$ 436,518	\$ 92,378	\$ 67,003	\$ 170,326	\$ -	\$ 479,073
Transport Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 848,965	\$ -	\$ 829	\$ 71,610	\$ 168,820	\$ 2,573	\$ 398,879	\$ 206,255	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 848,965	\$ -	\$ 829	\$ 71,610	\$ 168,820	\$ 2,573	\$ 398,879	\$ 206,255	\$ -
TOTAL									
Demand	\$ 826,902,928	\$ 576,281,720	\$ 204,518,240	\$ 32,867,174	\$ 5,503,657	\$ 892,086	\$ 2,806,918	\$ 4,033,132	\$ -
Commodity	\$ 376,814,709	\$ 206,113,124	\$ 79,079,165	\$ 29,085,504	\$ 25,070,135	\$ 3,110,076	\$ 26,411,340	\$ 7,945,365	\$ -
Customer	\$ 855,870,112	\$ 548,138,901	\$ 271,218,755	\$ 14,758,646	\$ 7,946,693	\$ 1,554,070	\$ 1,534,088	\$ 1,360,197	\$ 9,388,763
Direct Sales	\$ 53,006,534	\$ 41,980,038	\$ 9,033,501	\$ 1,153,126	\$ 108,503	\$ 81,966	\$ 170,326	\$ -	\$ 479,073
Direct Transport	\$ 848,965	\$ -	\$ 829	\$ 71,610	\$ 168,820	\$ 2,573	\$ 398,879	\$ 206,255	\$ -
Sub-total	\$ 2,113,443,247	\$ 1,372,513,763	\$ 565,850,489	\$ 77,936,059	\$ 38,797,809	\$ 5,640,771	\$ 31,321,551	\$ 13,544,949	\$ 9,857,836

Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Functional Revenue Requirement - Compromise Method

	System Total	Residential (16,23,53)	Comm. & Includ. (31,31T)	Large Volume (41,41T)	Interruptible (85,85T)	Limited Interruptible (86, 86T)	Non-Exclusive Interruptible (87, 87T)	Contracts	Rentals
Gas Supply									
Demand	\$ 659,031	\$ 470,428	\$ 167,674	\$ 20,059	\$ 451	\$ 419	\$ -	\$ -	\$ -
Commodity	\$ 3,112,293	\$ 1,995,240	\$ 765,390	\$ 213,377	\$ 46,640	\$ 28,938	\$ 66,545	\$ (2,836)	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 3,771,325	\$ 2,465,668	\$ 933,064	\$ 233,436	\$ 46,092	\$ 29,357	\$ 66,545	\$ (2,836)	\$ -
Storage									
Demand	\$ 10,104,805	\$ 7,118,835	\$ 2,288,738	\$ 430,465	\$ 63,054	\$ 81,243	\$ 122,470	\$ -	\$ -
Commodity	\$ 1,204,983	\$ 618,166	\$ 237,171	\$ 87,265	\$ 91,333	\$ 9,328	\$ 124,306	\$ 37,412	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 3,083,155	\$ 2,200,810	\$ 784,432	\$ 93,842	\$ 2,112	\$ 1,959	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 14,392,943	\$ 9,937,812	\$ 3,310,342	\$ 611,572	\$ 156,499	\$ 92,530	\$ 246,776	\$ 37,412	\$ -
Transmission									
Demand	\$ 3,074	\$ 1,961	\$ 713	\$ 154	\$ 88	\$ 9	\$ 107	\$ 41	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 3,074	\$ 1,961	\$ 713	\$ 154	\$ 88	\$ 9	\$ 107	\$ 41	\$ -
Distribution									
Demand	\$ 159,463,465	\$ 110,731,243	\$ 39,506,208	\$ 6,379,734	\$ 1,193,343	\$ 130,339	\$ 657,101	\$ 865,498	\$ -
Commodity	\$ 113,153,265	\$ 68,127,636	\$ 23,704,315	\$ 7,394,669	\$ 5,621,696	\$ 782,025	\$ 5,505,595	\$ 1,696,569	\$ 330,759
Customer	\$ 218,775,320	\$ 146,908,714	\$ 62,218,810	\$ 3,000,143	\$ 1,624,093	\$ 320,444	\$ 305,589	\$ 278,313	\$ 4,119,214
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 491,392,050	\$ 325,767,593	\$ 125,429,333	\$ 16,774,546	\$ 8,439,132	\$ 1,232,807	\$ 6,468,286	\$ 2,830,381	\$ 4,449,973
Gas Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ 29,609,980	\$ 24,346,213	\$ 3,684,555	\$ 632,086	\$ 86,458	\$ 99,233	\$ 133,883	\$ -	\$ 627,551
Direct Transport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 29,609,980	\$ 24,346,213	\$ 3,684,555	\$ 632,086	\$ 86,458	\$ 99,233	\$ 133,883	\$ -	\$ 627,551
Transport Specific Costs									
Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport	\$ 831,782	\$ -	\$ 1,572	\$ 106,350	\$ 198,028	\$ 3,803	\$ 340,476	\$ 181,556	\$ -
Sub-total	\$ 831,782	\$ -	\$ 1,572	\$ 106,350	\$ 198,028	\$ 3,803	\$ 340,476	\$ 181,556	\$ -
TOTAL									
Demand	\$ 170,230,376	\$ 119,322,468	\$ 41,963,333	\$ 6,830,411	\$ 1,256,936	\$ 212,010	\$ 779,679	\$ 865,539	\$ -
Commodity	\$ 117,470,541	\$ 70,741,042	\$ 24,706,876	\$ 7,695,311	\$ 5,758,670	\$ 820,291	\$ 5,696,446	\$ 1,721,145	\$ 330,759
Customer	\$ 218,775,320	\$ 146,908,714	\$ 62,218,810	\$ 3,000,143	\$ 1,624,093	\$ 320,444	\$ 305,589	\$ 278,313	\$ 4,119,214
Direct Sales	\$ 32,693,135	\$ 26,547,023	\$ 4,468,987	\$ 725,928	\$ 88,570	\$ 101,193	\$ 133,883	\$ -	\$ 627,551
Direct Transport	\$ 831,782	\$ -	\$ 1,572	\$ 106,350	\$ 198,028	\$ 3,803	\$ 340,476	\$ 181,556	\$ -
Sub-total	\$ 540,001,155	\$ 362,519,247	\$ 133,359,580	\$ 18,358,143	\$ 8,926,236	\$ 1,457,740	\$ 7,256,073	\$ 3,046,553	\$ 5,077,523
TOTAL FIXED COSTS									
	\$ 422,530,614	\$ 291,778,205	\$ 106,652,703	\$ 10,662,831	\$ 3,167,625	\$ 637,449	\$ 1,559,627	\$ 1,325,408	\$ 4,746,765

Puget Sound Energy - 2019 Gas Cost of Service Study
Proposed Test Year
Unit Costs - Compromise Method

	System Total	Residential (16,23.53)	Comm. & Includ. (31,31T)	Large Volume (41,41T)	Interruptible (85,85T)	Limited Interruptible (66, 86T)	Non-Exclusive Interruptible (67, 87T)	Contracts	Rentals
Gas Supply									
Demand (per Peak Day therm per month)	\$ 0.0054	\$ 0.0055	\$ 0.0055	\$ 0.0042	\$ 0.0006	\$ 0.0050	\$ -	\$ -	\$ -
Commodity (per therm)	\$ 0.0026	\$ 0.0033	\$ 0.0033	\$ 0.0025	\$ 0.0005	\$ 0.0031	\$ 0.0005	\$ (0.0001)	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ 0.0032	\$ 0.0040	\$ 0.0040	\$ 0.0027	\$ 0.0005	\$ 0.0032	\$ 0.0005	\$ (0.0001)	\$ -
Storage									
Demand (per Peak Day therm per month)	\$ 0.0831	\$ 0.0839	\$ 0.0757	\$ 0.0898	\$ 0.0827	\$ 0.9613	\$ 0.4264	\$ -	\$ -
Commodity (per therm)	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ 0.0010	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ 0.3084	\$ 0.2375	\$ 1.1531	\$ 5.8585	\$ 6.1925	\$ 0.7225	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ 0.0095	\$ 0.0126	\$ 0.0107	\$ 0.0060	\$ 0.0017	\$ 0.0098	\$ 0.0020	\$ 0.0010	\$ -
Transmission									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ 0.0001	\$ 0.0001	\$ 0.0004	\$ 0.0001	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution									
Demand (per Peak Day therm per month)	\$ 1.3117	\$ 1.3056	\$ 1.3069	\$ 1.3307	\$ 1.5653	\$ 1.5423	\$ 2.2879	\$ 1.4315	\$ -
Commodity (per therm)	\$ 0.0947	\$ 0.1112	\$ 0.1008	\$ 0.0855	\$ 0.0621	\$ 0.0846	\$ 0.0447	\$ 0.0465	\$ -
Customer (per customer per month)	\$ 21.9483	\$ 15.8553	\$ 91.4588	\$ 173.4387	\$ 1,035.7737	\$ 117.0784	\$ 1,697.7191	\$ 2,319.2789	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ 0.2282	\$ 0.2918	\$ 0.2688	\$ 0.1592	\$ 0.0753	\$ 0.0987	\$ 0.0500	\$ 0.0688	\$ -
Gas Costs									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales Specific Costs									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ 2.971	\$ 2.628	\$ 5.416	\$ 39.461	\$ 253.544	\$ 36.590	\$ 2,231.386	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transport Specific Costs									
Demand (per Peak Day therm per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer (per customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Sales (per sales customer per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand and Commodity (per therm)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 296.747	\$ -	\$ 50.722	\$ 83.086	\$ 161.390	\$ 152.124	\$ 2,837.299	\$ 1,512.963	\$ -
TOTAL									
Demand (per Peak Day therm per month)	\$ 1.4002	\$ 1.3951	\$ 1.3882	\$ 1.4247	\$ 1.6487	\$ 2.5087	\$ 2.7147	\$ 1.4316	\$ -
Commodity (per therm)	\$ 0.0983	\$ 0.1154	\$ 0.1051	\$ 0.0889	\$ 0.0636	\$ 0.0887	\$ 0.0462	\$ 0.0464	\$ -
Customer (per customer per month)	\$ 21.95	\$ 15.86	\$ 91.46	\$ 173.44	\$ 1,035.77	\$ 117.08	\$ 1,697.72	\$ 2,319.28	\$ -
Direct Sales (per sales customer per month)	\$ 3.28	\$ 2.87	\$ 6.57	\$ 46.32	\$ 299.74	\$ 37.31	\$ 2,231.39	\$ -	\$ -
Direct Transport (per transp. cust. per month)	\$ 296.75	\$ -	\$ 50.72	\$ 83.09	\$ 161.39	\$ 152.12	\$ 2,837.30	\$ 1,512.96	\$ -
Demand and Commodity (per therm)	\$ 0.2408	\$ 0.3085	\$ 0.2835	\$ 0.1679	\$ 0.0775	\$ 0.1116	\$ 0.0526	\$ 0.0697	\$ -
All Customer (per customer per month)	\$ 25.31	\$ 18.72	\$ 98.03	\$ 221.55	\$ 1,218.55	\$ 155.44	\$ 4,333.05	\$ 3,832.24	\$ -
PDAY									
	121,572,960	84,811,016	30,229,088	4,794,156	762,387	84,510	287,208	604,596	0
COM 1	1,194,623,705	612,852,104	235,132,259	86,514,963	90,548,323	9,247,991	123,237,198	37,090,867	0
JUST	9,967,759	9,265,563	680,293	17,298	1,568	2,737	180	120	0
JUSTXT	9,964,956	9,265,563	680,262	16,018	341	2,712	60	0	0
TRANSUS	2,803	0	31	1,280	1,227	25	120	120	0
	0	0	0	0	0	0	0	0	0