

**EXHIBIT NO. ___(RG-3C)
DOCKET NO. UG-15___
WITNESS: ROGER GARRATT**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of

PUGET SOUND ENERGY, INC.

**for (i) Approval of a Special Contract for
Liquefied Natural Gas Fuel Service with
Totem Ocean Trailer Express, Inc. and
(ii) a Declaratory Order Approving the
Methodology for Allocating Costs
Between Regulated and Non-regulated
Liquefied Natural Gas Services**

DOCKET NO. UG-15___

**SECOND EXHIBIT (CONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF ROGER GARRATT
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**CONFIDENTIAL PER
WAC 480-07-160**

AUGUST 11, 2015

Budget for Development Phase Activities Associated with the Tacoma LNG Facility

	2012	2013	2014	2015	2016	2017	2018	TOTAL
1 Engineering	\$357,154	\$1,835,721	\$2,205,007	\$3,084,122	—	—	—	\$7,482,004
2 Permitting/Legal	\$135,716	\$697,562	\$1,700,142	\$1,172,431	—	—	—	\$3,705,851
3 Site/Real Estate	\$10,298	\$52,929	\$384,203	\$1,009,876	—	—	—	\$1,457,305
4 Communication/Outreach	\$16,749	\$86,087	\$453,440	\$349,412	—	—	—	\$905,687
5 Development Contingency	—	—	—	—	—	—	—	—
6 Total Development Phase Costs	\$519,917	\$2,672,299	\$4,742,792	\$5,615,840	—	—	—	\$13,550,847

Budget for Construction Phase Activities Associated with the Tacoma LNG Facility

	2012	2013	2014	2015	2016	2017	2018	TOTAL
7 Site, Civil, Foundations, Buildings & Structural	—	—	—	\$668,138	\$3,173,655	\$946,529	\$779,494	\$5,567,816
8 All Foundations	—	—	—	\$230,764	\$1,096,129	\$326,916	\$269,225	\$1,923,034
9 Buildings	—	—	—	\$143,638	\$682,281	\$203,487	\$167,578	\$1,196,985
10 Earthworks	—	—	—	\$92,275	\$438,305	\$130,723	\$107,654	\$768,956
11 Structural	—	—	—	\$201,461	\$956,939	\$285,403	\$235,038	\$1,678,841
12 Receiving Equipment	—	—	—	\$738,842	\$3,509,499	\$1,046,693	\$861,982	\$6,157,016
13 Feed Gas Compressor	—	—	—	\$617,097	\$2,931,209	\$874,220	\$719,946	\$5,142,472
14 Plant Inlet Filter Separator	—	—	—	\$22,178	\$105,348	\$31,419	\$25,875	\$184,820
15 Feed Gas Compressor Aftercooler	—	—	—	\$23,847	\$113,275	\$33,784	\$27,822	\$198,728
16 Gas Chromatograph	—	—	—	\$75,719	\$359,667	\$107,269	\$88,339	\$630,995
17 Pretreatment System	—	—	—	\$2,025,166	\$9,619,541	\$2,868,986	\$2,362,694	\$16,876,387
18 Amine Pretreatment System	—	—	—	\$1,978,830	\$9,399,442	\$2,803,342	\$2,308,635	\$16,490,249
19 Piping	—	—	—	\$46,337	\$220,099	\$65,643	\$54,059	\$386,138
20 LNG Liquefaction Train & Compressors	—	—	—	\$3,179,538	\$15,102,808	\$4,504,346	\$3,709,462	\$26,496,155
21 Liquefaction HX	—	—	—	\$674,476	\$3,203,759	\$955,507	\$786,888	\$5,620,630
22 MRL Compressor	—	—	—	\$2,054,648	\$9,759,577	\$2,910,751	\$2,397,089	\$17,122,065
23 MRL Condensor	—	—	—	\$236,284	\$1,122,351	\$334,736	\$275,665	\$1,969,037
24 MRL Storage Vessel	—	—	—	\$214,131	\$1,017,121	\$303,352	\$249,819	\$1,784,423

Budget for Construction Phase Activities Associated with the Tacoma LNG Facility (continued)

	2012	2013	2014	2015	2016	2017	2018	TOTAL	
25	LNG Tank Storage and Boil Off Gas System	—	—	—	\$8,281,133	\$39,335,387	\$11,731,607	\$9,661,323	\$69,009,450
26	Tank Concrete (double, wall, rf)	—	—	—	\$5,122,656	\$24,332,619	\$7,257,097	\$5,976,433	\$42,688,805
27	Tank Seismic Isolators	—	—	—	\$148,252	\$704,198	\$210,024	\$172,961	\$1,235,435
28	LTC Tank	—	—	—	\$2,063,540	\$9,801,815	\$2,923,348	\$2,407,463	\$17,196,166
29	BOG Compressor	—	—	—	\$754,739	\$3,585,009	\$1,069,213	\$880,528	\$6,289,489
30	Storage Piping	—	—	—	\$68,952	\$327,523	\$97,682	\$80,444	\$574,602
31	BOG Piping	—	—	—	\$122,994	\$584,223	\$174,242	\$143,493	\$1,024,953
32	Vaporization Train	—	—	—	\$976,358	\$4,637,700	\$1,383,174	\$1,139,084	\$8,136,315
33	LNG Vaporizer	—	—	—	\$528,017	\$2,508,080	\$748,024	\$616,020	\$4,400,141
34	LNG IN-tank Loading Pumps	—	—	—	\$228,373	\$1,084,769	\$323,528	\$266,435	\$1,903,104
35	Vaporization Pumps	—	—	—	\$96,751	\$459,569	\$137,064	\$112,877	\$806,261
36	Piping	—	—	—	\$123,217	\$585,281	\$174,557	\$143,753	\$1,026,808
37	Truck Loading System	—	—	—	\$443,956	\$2,108,791	\$628,938	\$517,949	\$3,699,633
38	Loading Station	—	—	—	\$115,537	\$548,802	\$163,678	\$134,793	\$962,811
39	Truck Weigh Scale	—	—	—	\$115,537	\$548,802	\$163,678	\$134,793	\$962,811
40	Piping	—	—	—	\$212,881	\$1,011,187	\$301,582	\$248,362	\$1,774,012
41	Blair Marine Fueling System	—	—	—	\$672,218	\$3,193,037	\$952,309	\$784,255	\$5,601,820

Budget for Construction Phase Activities Associated with the Tacoma LNG Facility (continued)

	2012	2013	2014	2015	2016	2017	2018	TOTAL
42 Electrical, Instrumentation and Control Systems	—	—	—	\$3,434,687	\$16,314,766	\$4,865,807	\$4,007,136	\$28,622,396
43 Instrumentation	—	—	—	\$1,013,563	\$4,814,424	\$1,435,881	\$1,182,490	\$8,446,358
44 Electrical	—	—	—	\$2,397,124	\$11,386,342	\$3,395,927	\$2,796,645	\$19,976,038
45 Electrical to Facilities	—	—	—	\$24,000	\$114,000	\$34,000	\$28,000	\$200,000
46 Balance of Plant (Utilities, Safety, Security and Telecom)	—	—	—	\$1,887,125	\$8,963,844	\$2,673,427	\$2,201,646	\$15,726,042
47 Essential Generator	—	—	—	\$394,809	\$1,875,341	\$559,312	\$460,610	\$3,290,072
48 Flare	—	—	—	\$304,165	\$1,444,786	\$430,901	\$354,860	\$2,534,711
49 Flare Piping	—	—	—	\$987,859	\$4,692,329	\$1,399,467	\$1,152,502	\$8,232,156
50 WPG Cooling Exchanger	—	—	—	\$111,041	\$527,444	\$157,308	\$129,548	\$925,340
51 Instrument Air System	—	—	—	\$42,914	\$203,841	\$60,795	\$50,066	\$357,617
52 Water Treatment Unit	—	—	—	\$46,337	\$220,103	\$65,645	\$54,060	\$386,146
53 Start Up and Commissioning	—	—	—	\$1,079,729	\$5,128,712	\$1,529,616	\$1,259,684	\$8,997,740
54 CBI Phase II Credit	—	—	—	\$(114,000)	\$(541,500)	\$(161,500)	\$(133,000)	\$(950,000)
55 Project Management & Outside Services	—	—	—	—	\$5,272,000	\$4,082,000	\$6,822,000	\$16,176,000
56 PSE Labor	—	—	—	—	\$960,000	\$960,000	\$3,700,000	\$5,620,000
57 Outside Services/QA	—	—	—	—	\$2,000,000	\$750,000	\$750,000	\$3,500,000
58 Rent - Lease	—	—	—	—	\$1,812,000	\$1,872,000	\$1,872,000	\$5,556,000
59 Permitting Support and Mitigation	—	—	—	—	\$500,000	\$500,000	\$500,000	\$1,500,000

Budget for Construction Phase Activities Associated with the Tacoma LNG Facility (continued)

	2012	2013	2014	2015	2016	2017	2018	TOTAL
60 Insurance	—	—	—	—	\$320,000	\$640,000	\$640,000	\$1,600,000
61 Builders Risk Insurance	—	—	—	—	\$240,000	\$480,000	\$480,000	\$1,200,000
62 Pollution Insurance	—	—	—	—	\$80,000	\$160,000	\$160,000	\$400,000
63 Marine Insurance	—	—	—	—	\$20,000	\$40,000	\$40,000	\$100,000
64 Plant Sales Tax	—	—	—	\$1,509,463	\$6,312,313	\$5,033,369	\$2,963,040	\$15,818,185
65 Sales Tax	—	—	—	\$1,509,463	\$6,312,313	\$2,783,369	\$963,040	\$11,568,185
66 Payment in Lieu of Sales Tax	—	—	—	—	—	\$2,250,000	\$2,000,000	\$4,250,000
67 Contingency and OH's	—	—	—	\$4,599,616	\$18,456,371	\$6,708,830	\$2,669,716	\$32,434,533
68 Contingency: 5% on EPC Initial Scope of Work	—	—	—	\$1,170,845	\$5,561,512	\$1,658,697	\$1,365,985	\$9,757,039
69 Contingency: 20% on Substation and Direct Line to TOTE	—	—	—	—	\$395,379	\$2,581,515	—	\$2,976,894
70 Contingency: 50% on Geotech and Demolition	—	—	—	\$2,400,000	\$7,600,000	\$500,000	—	\$10,500,000
71 Construction OH	—	—	—	\$1,028,771	\$4,899,480	\$1,968,619	\$1,303,731	\$9,200,601
72 Total Construction Phase Costs	—	—	—	\$34,181,969	\$158,103,817	\$63,501,707	\$41,366,465	\$297,153,958

Budget for Natural Gas Distribution Upgrades

	2012	2013	2014	2015	2016	2017	2018	TOTAL
73 Baseline Estimate	\$50,674	\$203,060	\$452,417	\$801,433	\$3,783,740	\$28,441,110	—	\$33,732,433
74 Contingency on Baseline Estimate	—	—	—	—	\$1,808,499	\$13,593,886	—	\$15,402,386
75 Permitting Mitigations	—	—	—	—	\$513,049	\$3,856,422	—	\$4,369,471
76 Total Natural Gas Distribution Improvements	\$50,674	\$203,060	\$452,417	\$801,433	\$6,105,288	\$45,891,418	—	\$53,504,290

Total Budget for the Tacoma LNG Project

	2012	2013	2014	2015	2016	2017	2018	TOTAL
77 Total Development Phase Costs (Page 1, line 6)	\$519,917	\$2,672,299	\$4,742,792	\$5,615,840	—	—	—	\$13,550,847
78 Total Construction Phase Costs (Page 5, line 72)	—	—	—	\$34,181,969	\$158,103,817	\$63,501,707	\$41,366,465	\$297,153,958
79 Total Natural Gas Distribution Improvements (Page 6, line 76)	\$50,674	\$203,060	\$452,417	\$801,433	\$6,105,288	\$45,891,418	—	\$53,504,290
80 Total Tacoma LNG Project Costs	\$570,591	\$2,875,359	\$5,195,209	\$40,599,242	\$164,209,105	\$109,393,125	\$41,366,465	\$364,209,096

Total Closing Gross Plant for the Tacoma LNG Project

	2012	2013	2014	2015	2016	2017	2018	TOTAL
81 Total Tacoma LNG Project Costs (Page 7, line 80)	\$570,591	\$2,875,359	\$5,195,209	\$40,599,242	\$164,209,105	\$109,393,125	\$41,366,465	\$364,209,096
82 AFUDC	\$22,167	\$157,765	\$483,565	\$2,296,162	\$10,414,669	\$21,815,201	\$25,048,581	\$60,238,111
83 AFUDC Reserve	—	—	—	—	\$(651,964)	\$(1,234,229)	\$(1,582,390)	\$(3,468,583)
84 Total Tacoma LNG Project Closing Gross Plant	\$592,759	\$3,033,123	\$5,678,773	\$42,895,403	\$173,971,811	\$129,974,098	\$64,832,656	\$420,978,623