**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 DIECT TESTIMONY OF ROGER GARRATT
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**Redacted**

**Version**

**AUGUST 11, 2015**

**Budget for Development Phase Activities Associated with the Tacoma LNG Facility**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |  | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **TOTAL** |
| *1* | Engineering | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *2* | Permitting/Legal | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *3* | Site/Real Estate | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *4* | Communication/Outreach | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *5* | Development Contingency | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *6* | **Total DevelopmentPhase Costs** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$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** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *8* | All Foundations | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *9* | Buildings | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *10* | Earthworks | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *11* | Structural | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *12* | **Receiving Equipment** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *13* | Feed Gas Compressor | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *14* | Plant Inlet Filter Separator | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *15* | Feed Gas Compressor Aftercooler | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *16* | Gas Chromatograph | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *17* | **Pretreatment System** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *18* | Amine Pretreatment System | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *19* | Piping | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *20* | **LNG Liquefaction Train & Compressors** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *21* | Liquefaction HX | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *22* | MRL Compressor | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *23* | MRL Condensor | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *24* | MRL Storage Vessel | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |

**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** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *26* | Tank Concrete (double, wall, rf) | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *27* | Tank Seismic Isolators | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *28* | LTC Tank | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *29* | BOG Compressor | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *30* | Storage Piping | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *31* | BOG Piping | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *32* | **Vaporization Train** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *33* | LNG Vaporizer | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *34* | LNG IN-tank Loading Pumps | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *35* | Vaporization Pumps | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *36* | Piping | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *37* | **Truck Loading System** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *38* | Loading Station | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *39* | Truck Weigh Scale | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *40* | Piping | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *41* | **Blair Marine Fueling System** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |

**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** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *43* | Instrumentation | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *44* | Electrical  | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *45* | Electrical to Facilities | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *46* | **Balance of Plant (Utilities, Safety, Security and Telecom)** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *47* | Essential Generator | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *48* | Flare | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *49* | Flare Piping | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *50* | WPG Cooling Exchanger | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *51* | Instrument Air System | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *52* | Water Treatment Unit | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *53* | **Start Up and Commissioning** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *54* | **CBI Phase II Credit** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *55* | **Project Management & Outside Services** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *56* | PSE Labor | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *57* | Outside Services/QA | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *58* | Rent - Lease | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *59* | Permitting Support and Mitigation | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |  | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **TOTAL** |
| *60* | **Insurance** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *61* | Builders Risk Insurance | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *62* | Pollution Insurance | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *63* | Marine Insurance | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *64* | **Plant Sales Tax** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *65* | Sales Tax | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *66* | Payment in Lieu of Sales Tax  | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *67* | **Contingency and OH's** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *68* | Contingency: 5% on EPC Initial Scope of Work | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *69* | Contingency: 20% on Substation and Direct Line to TOTE | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *70* | Contingency: 50% on Geotech and Demolition | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *71* | Construction OH | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *72* | **Total ConstructionPhase Costs** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$297,153,958** |

**Budget for Natural Gas Distribution Upgrades**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |  | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **TOTAL** |
| *73* | Baseline Estimate | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *74* | Contingency on Baseline Estimate | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *75* | Permitting Mitigations | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ |
| *76* | **Total Natural Gas Distribution Improvements** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$53,504,290** |

**Total Budget for the Tacoma LNG Project**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |  | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **TOTAL** |
| *77* | Total DevelopmentPhase Costs(Page 1, line 6) | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$13,550,847** |
| *78* | Total ConstructionPhase Costs(Page 5, line 72) | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$297,153,958** |
| *79* | Total Natural GasDistribution Improvements(Page 6, line 76) | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$53,504,290** |
| *80* | **Total Tacoma LNGProject Costs** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | **$364,209,096** |

**Total Closing Gross Plant for the Tacoma LNG Project**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |  | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **TOTAL** |
| *81* | Total Tacoma LNGProject Costs(Page 7, line 80) | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $364,209,096 |
| *82* | AFUDC | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $60,238,111 |
| *83* | AFUDC Reserve | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $(3,468,583) |
| *84* | **Total Tacoma LNGProject Closing Gross Plant** | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $█████ | $420,978,623 |