



Puget Sound Energy, Inc.
P.O. Box 90868
Bellevue, WA 98009-0868

July 11, 2007

Carole J. Washburn, Secretary
Washington Utilities and Transportation Commission
PO Box 47250
Olympia, WA 98504-7250

Attn: Alan Rathbun, Pipeline Safety Director

RE: District Regulator RS 2302 Pressure Authorization

Dear Mr. Rathbun:

Pursuant to WAC 480-93-020, Puget Sound Energy (PSE) requests approval to operate the existing regulator station RS 2302 located at the South Tacoma Gate Station at a pressure exceeding 500 psig. The regulator station is located at the beginning of 8" South Tacoma Lateral that is owned and operated by Williams Northwest Pipeline (WNWP).

The station was designed for an MAOP of 720 psig and all station components are rated to at least 720 psig. The station piping was originally tested to 696 psig and has an MAOP of 464 psig. PSE proposes to retest the station at 870 psig in order to operate the inlet piping of the station at a MAOP of 562 psig (MAOP of WNWP's mainline). The station will operate at less than 20% SMYS at an MAOP of 562 psig.

This facility exceeds the minimum federal safety regulations in the following design, operation and maintenance areas:

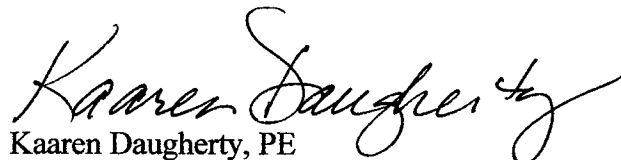
- **Class Location** – the design and construction specifications meet or exceed the requirements for Class 4 location even though the land parcel is situated in a Class 3 location. (192.5)
- **Design Factor** – the design factor of the station is 0.2, exceeding the 0.40 factor for a Class 4 location. (192.111)

Exhibit A provides a schematic of the South Tacoma lateral and associated facilities. Exhibit B provides additional information regarding the design, construction, operation and maintenance of this facility. If you require any additional information, please call me at (425) 462-3748.

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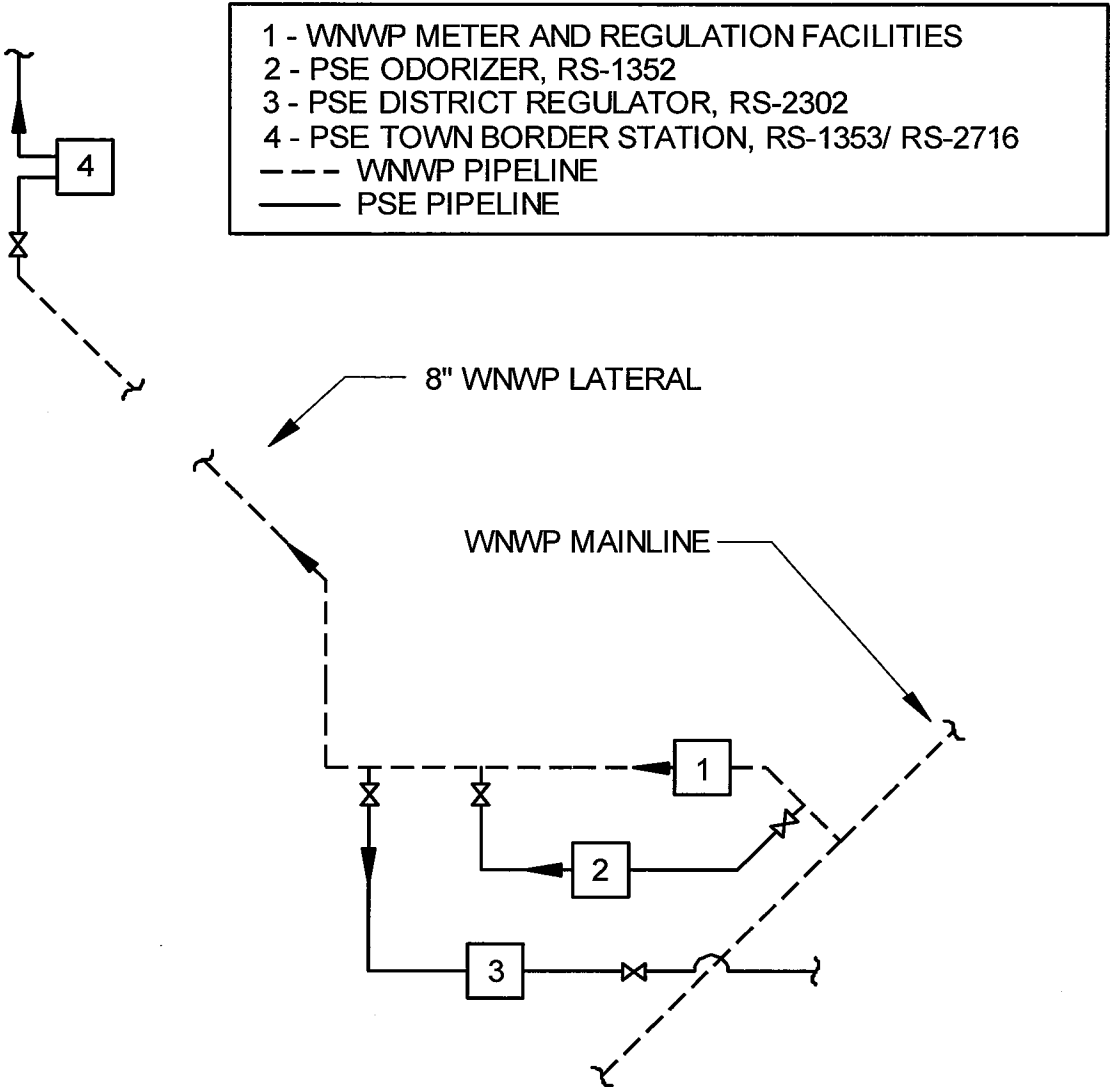
Sincerely,


Kaaren Daugherty, PE
Consulting Engineer – Standards and Compliance

Attachment

cc: Eric Markell
Karl Karzmar
Sue McLain
Duane Henderson
Stephanie Kreshel

Exhibit A
South Tacoma Gate Station, Lateral and Town Border Station Schematic



SCHEMATIC A
S TACOMA LATERAL AND FACILITIES

Exhibit B - GENERAL INFORMATION

South Tacoma Lateral

Background:

For capacity reasons, PSE is requesting Williams NW Pipeline (WNWP) to increase their operating pressure on the 8" South Tacoma Lateral from 458 psig to 562 psig. PSE has three facilities on the 8" lateral. An odorizer (RS-1352) and District Regulator (RS-2302) co-located with the South Tacoma Gate Station operated by Williams NW Pipeline, at the 6100 block of 176th ST E, Puyallup, and the Town Border Station (TBS) at the terminus of the lateral, at 13311 Chesney Rd, Puyallup.

The inlet to the district regulator is tied into WNWP's facilities downstream of their regulation and therefore requires an MAOP of 562 psig. This is equivalent to the MAOP of WNWP's lateral. All regulator station equipment was designed for an MAOP of 720 psig but the original test pressure limits the MAOP to 464 psig. The station will be retested to establish an MAOP of 562 psig. All station piping is below a 0.2 design factor at 562 psig.

Scope:

The piping included in this request includes the inlet piping to district regulator RS 2302 located at the gate station. The pressure authorization request for the odorizer piping was submitted previously under separate cover. The pressure authorization for the TBS was received under Docket PG-061768.

Proximity Survey:

RS 2302 is located in the Puyallup area at the 6100 block of 176th St. E in Puyallup, Washington. A tax parcel review of the area within 500 feet of the existing station fence line was conducted. There are no well-defined areas where buildings with four or more stories aboveground are prevalent. The closest public right of way to PSE's facilities is approximately 275 feet. The zoning for this station is Employment Center. Information on tax parcels and buildings intended for human occupancy within 500 feet of the existing fence surrounding the station is presented in Exhibit C. This site is classified as a Class 3 Location.

Design Specifications:

The district regulator has been designed, constructed, and operated in accordance with the requirements for Class 4 locations. The piping layout and configuration is typical of a district regulator on property owned by PSE. All of the piping is on either PSE or WNWP property and located within a secure fence enclosure.

Operating Pressures:

The district regulator receives regulated gas from WNWP at a pressure up to 464 psig. The district regulator then reduces the pressure to 60 psig to serve a downstream intermediate pressure distribution system. The Maximum Operating Pressure (MOP), as determined by this application, is 562 psig.

Pipe and Fitting Specifications:

The pipe and fitting specifications with the corresponding percentage of specified minimum yield strength at MAOP/MOP are shown in the table below.

Material Specification	% SMYS @ MAOP/MOP (562 psig)
Pipe: 4" x 0.188", X42	16.53
Weld Fittings 4" x 0.237" Y-42	13.12
Pipe: 2" x 0.154", GrB	12.78
Pipe: 6" x 0.280", X42	16.34
Weld Fittings 6" x 0.280" Y-42	13.20

All welded branch connections (i.e. purges and blow downs) have sufficient reinforcement not to increase the stress level of the pipe. All other pipeline components (valves, regulators, strainers, etc.) have a working pressure rating of at least 720 psig.

Cathodic Protection:

The cathodic protection is provided by a galvanic system. The system is monitored and maintained in accordance with the requirements of section 2600 of the PSE Gas Operating Standards. The following standards are applicable to the station:

- 2600.1000 Cathodic Protection Requirements
- 2600.1200 Test Station Requirements
- 2600.1300 Designing and Installing Cathodic Protection Systems
- 2600.1400 Electrical Isolation and Grounding Requirements
- 2600.1500 Monitoring Cathodic Protection
- 2600.1900 Remedial Measures for Corrosion Control

Pressure Testing:

RS 2302 is to be retested to 870 psig in accordance with the written uprate plan submitted under separate cover to the Commission. All testing will be done in accordance with PSE Gas Operating Standard 2525.3300 and in accordance with the approved test procedure.

Operation and Maintenance:**Damage Prevention:**

Pipeline facility warning signs are installed and monitored in accordance with PSE Gas Operating Standards 2525.2500 and 2575.1100. PSE is an active member in the local One-Call

System and works closely with the local municipalities and permitting agencies prior to any construction starting in the vicinity of its facilities. In addition, it is PSE standard practice to monitor construction work taking place in the vicinity of its high pressure odorizers and regulating stations. These facilities are expected to be at low risk from third party damage since they will be enclosed within a fence and located on property owned by either WNWP or PSE.

Leakage Surveys:

Leakage surveys are conducted annually in accordance with PSE Operating Standard 2625.1100 and PSE Gas Field Procedure 4700.1600.

Pressure Monitoring:

Remote telemetry units (RTU) monitor the pressures in the system. The RTU polls system pressures every 3 seconds. The pressure will be monitored 24-hours a day in PSE's 24-Hour Operations Center.

Exhibit C – Addresses, Land Use, and Distance of Structures from South Tacoma Gate Station

#	Distance (feet) of Structure from Station fencing	Address	City	State, Zip	Land Use	Zoning
1	382	6114 176TH ST E	PUYALLUP/SOUTH HILL	WA, 98375	RESIDENTIAL	EMPLOYMENT CENTER
2	409	6118 176TH ST E	PUYALLUP/SOUTH HILL	WA, 98375	RESIDENTIAL	EMPLOYMENT CENTER
3	427	5915 176TH ST E	PUYALLUP/SOUTH HILL	WA, 98375	COMMERCIAL/RESIDENTIAL	EMPLOYMENT CENTER
4	472	6003 176TH ST E	PUYALLUP/SOUTH HILL	WA, 98375	RESIDENTIAL	EMPLOYMENT CENTER
5	338	5918 176TH ST E	PUYALLUP/SOUTH HILL	WA, 98375	RESIDENTIAL	EMPLOYMENT CENTER
6	103	6024 176TH ST E	PUYALLUP/SOUTH HILL	WA, 98375	RESIDENTIAL	EMPLOYMENT CENTER