



July 30, 2014

David Lykken
Pipeline Safety Director
Washington Utilities and Transportation Commission
Pipeline Safety Section
1300 S. Evergreen Park Drive S.W.
PO Box 47250
Olympia, WA 98504-7250

RECEIVED
JUL 30 2014
State of Washington
UTC
Pipeline Safety Program

Dear Mr. Lykken,

RE: South Tacoma Supply #2 Pressure Authorization

Pursuant to WAC 480-93-020, Puget Sound Energy (PSE) requests approval to operate the existing South Tacoma Supply #2 pipeline at a pressure of 490 psig. This system will provide additional natural gas supply to the Tacoma area ensuring reliability as growth increases.

The South Tacoma Supply #2 pipeline extends from the Clover Creek limit station to a location near the intersection of 112th Street South and Interstate 5 as outlined in Exhibit B. It was constructed in 1995, and consists of approximately 5.2 miles of 12" pipe. Currently operating at 250 psig, it was designed and tested for the current maximum allowable operating pressure (MAOP) of 500 psig.

The 12" main will operate at a hoop stress below 20 percent SMYS at an operating pressure of 490 psig.

Several upgrades to existing facilities, as well as the design and installation of some new facilities are planned as part of this project. Please refer to the attached document summary for a description of this project as well as future projects that are integral to the pressure increase of the South Tacoma Supply #2 pipeline.

The design, construction, operation and maintenance of the existing and new pipelines subject of this request exceed the minimum federal safety regulations in the following areas:

- **Class location:** The design and construction specifications meet or exceed the requirements for a Class 4 location. (192.5)

- **Design Factor:** PSE's design factor of 0.20 exceeds the 0.40 factor for Class 4 locations. (192.111)
- **Valve Spacing:** Valves were installed at a spacing less than 1 mile apart in accordance with PSE's standards. This spacing exceeds the 2-1/2 mile requirement for transmission line valves in Class 4 locations. (192.179). There are no specific valve spacing requirements for high-pressure distribution systems. (192.181)
- **Nondestructive Testing:** PSE's radiographic inspection plan for the new construction is identical to the Class 3 and Class 4 requirements for transmission lines. In addition, ten percent of welds on the existing 12" line were radiographically examined. This exceeds the minimum federal safety regulations which do not require nondestructive testing of pipelines operating below 20%SMYS. (192.241 and 192.243)
- **Cover:** PSE's standards require a minimum cover of 36" over high-pressure distribution mains. This exceeds the minimum federal requirements of 24". (192.327(b)) For the Tacoma Supply #2 main, the main was installed with a minimum cover of 48" wherever possible.
- **Leakage Survey:** In accordance with PSE standards, portions of the 12" main near high occupancy structures (HOS) is leak surveyed on an annual basis. The remainder is leak surveyed once every 3 years which exceeds the federal and state requirement of 5 years for mains outside of business districts and places of public assembly. (192.723 and WAC 480-93-188)

PSE is planning on providing notification to the identified property owners in advance of any scheduled open hearing with regard to this request. If you require any additional information, please call me at (425) 462-3923.

Sincerely,

Stephanie Silva

Stephanie Silva
Gas Compliance Program Manager

Enclosures: Exhibit A- General Information
Exhibit B- Map
Exhibit C- Structure Survey

Cc: Booga Gilbertson, VP Operations Services
Cathy Koch, Director Compliance
Cheryl McGrath, Manager Compliance Programs
David Landers, Manager Engineering
Duane Henderson, Manager Gas System Integrity
Doug Loreen, Director Project Delivery