BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Request of

DOCKET PG-161272

PUGET SOUND ENERGY

ORDER 01

Pursuant to WAC 480-93-020 for Approval to Operate New Piping at a Maximum Allowable Operating Pressure of 960 Pounds per Square Inch Gauge within 500 Feet of an Existing Structure Not Owned by Puget Sound Energy

ORDER APPROVING REQUEST

BACKGROUND

- On December 12, 2016, Puget Sound Energy (PSE or Company) filed with the Washington Utilities and Transportation Commission (Commission) a request for approval to construct and operate new piping, two stages of pressure regulation, overpressure protection, a line heater, and pressure and temperature instrumentation at the Frederickson Gate Station in Tacoma, Washington. The new piping will operate at a pressure of up to 960 pounds per square inch (psig) within 500 feet of one existing commercial building not owned by PSE. Existing piping owned by Williams Northwest Pipeline (NWP) will be retired, and PSE plans to construct and operate a new station in its place.
- The Commission has adopted the Code of Federal Regulations (CFR) Title 49, Part 192 and promulgated Washington Administrative Code (WAC) Chapter 480-93 as the minimum standards for gas pipeline construction. WAC 480-93-020 requires a gas pipeline company to obtain approval from the Commission to operate a gas pipeline at greater than 500 psig within 500 hundred feet of any existing buildings not owned by the gas pipeline company.
- NWP currently owns and supplies gas to the Frederickson Gate Station located at 4910 192nd St SE, Tacoma, Washington. This station provides gas to the Lakewood/Tacoma region via PSE's 16-inch Frederickson Supply main, which currently operates at 380 psig. To serve growing demand in the Tacoma area, PSE must increase both the pressure and flow through the Frederickson Gate Station. To accomplish this, NWP will be retiring its regulation equipment. PSE will rebuild the facilities completely, assuming operation responsibilities and installing new regulation, overpressure protection, and line heating equipment at the existing site. The station will be redesigned, constructed, and

tested for an MAOP of 1000 psig, sufficient to handle line pressure from NWP. The pipeline facilities upstream of regulation will operate at NWP line pressure.

- 4 Commission staff (Staff) reviewed the Company's proposed proximity request and calculations. Staff notes the following:
 - (a) The location of the new facilities would be fully within the fenced gate station grounds.
 - (b) The proposed regulator station materials and connection piping are commensurate with the proposed MAOP.
 - (c) The one building within 500 feet of new facilities is currently located within 500 feet of existing NWP facilities operating at a pressure above 500 psig.
 - (d) At the proposed MAOP of 960 psig, the maximum stress level of the pipe and pipeline fittings would be under 20 percent of specified minimum yield strength.
 - (e) The design and construction specifications meet or exceed the requirements for a class 4 location.
 - (f) The proposed facilities will be pressure tested to 1440 psig prior to operation. This test pressure is 1.5 times the maximum allowable operating pressure.

Staff finds that PSE's proposed construction meets all of the pertinent requirements of Title 49 CFR, Part 192 and WAC Chapter 480-93. Staff agrees with the Company that the selected location of the new pipeline has the least impact on surrounding population densities.

- Staff recommends the Commission approve the Company's request subject to the following conditions, which are designed to minimize the risks to public safety from the proposed pipeline:
 - (a) For underground installations, PSE must electrically inspect the pipe coating and repair any coating defects in accordance with PSE's operating standard prior to backfilling.

- (b) For underground installations, PSE must apply backfill material around the pipe to protect the pipe and coating. The material around the pipe must be free of any sharp rocks or other objects with a maximum particle size of one-half inch and must contain a large percentage of fines, such as sand, native soil, or soil-based select materials.
- (c) PSE must perform radiograph inspections of 100 percent of all welds. PSE must remedy defects in the welds in accordance with PSE's operating standards and procedures. PSE must radiograph all repaired welds to ensure pipeline integrity and compliance with existing standards.
- (d) PSE must install cathodic protection within 90 days after the pipeline is installed.
- (e) PSE must provide telephonic notice to the Commission Pipeline Safety Program followed by an email confirmation at least two business days prior to the beginning of project construction.
- (f) PSE must contact residents within 500 feet of the regulator station and inform them of the project construction and provide any additional information consistent with the public awareness requirements in Title 49 CFR, Part 192.616.

DISCUSSION

The Commission agrees with Staff's analysis and adopts its recommendations. The Commission's primary objective in regulating natural gas pipelines is to protect public safety. The rules the Commission has promulgated to govern pipelines incorporate and exceed federal requirements, and provide flexibility to establish safety standards tailored to individual projects. The Commission's proximity rule, WAC 480-93-020, allows pipeline Staff the opportunity to review construction plans of high pressure pipelines in close proximity to inhabited structures to address safety considerations. Staff's recommended conditions described in paragraph 5 appropriately minimize the public safety risk associated with the proposed pipeline. Accordingly, we approve the Company's request.

FINDINGS AND CONCLUSIONS

- 7 (1) The Commission is an agency of the State of Washington vested by statute with the authority to adopt and enforce rules for gas pipeline safety.
- 8 (2) PSE is a gas pipeline company subject to Commission jurisdiction.

- 9 (3) PSE proposes to construct and operate new piping, two stages of pressure regulation, overpressure protection, a line heater, and pressure and temperature instrumentation at the Frederickson Gate Stationin Tacoma, Washington, to increase the capacity and enhance the reliability of the Company's natural gas distribution system.
- 10 (4) The location PSE has selected for the new pipeline has the least impact on surrounding population densities.
- 11 (5) PSE's construction plans indicate that the proposed pipeline meets or exceeds all of the pertinent requirements of Title 49 CFR, Part 192 and WAC Chapter 480-93.
- 12 (6) The selected location of the proposed new pipe has the least impact on the surrounding community.
- The conditions recommended by Staff add requirements to this installation some of which exceed federal and state regulations that minimize the added risk of the close proximity of the pipeline to a habitable structure.
- 14 (8) This matter came before the Commission at its regularly scheduled open meeting on March 16, 2017.
- The Commission should approve PSE's proposal to construct and operate new piping, two stages of pressure regulation, overpressure protection, a line heater, and pressure and temperature instrumentation at the Frederickson Gate Station in Tacoma, Washington, with an MAOP of up to 960 psig within 500 feet of one existing commercial building as consistent with the public interest with the conditions Staff recommends.

ORDER

THE COMMISSION ORDERS:

16 (1) The Commission approves Puget Sound Energy's proposal to construct and operate a new piping, two stages of pressure regulation, overpressure protection, a line heater, and pressure and temperature instrumentation at the Frederickson Gate Station in Tacoma, Washington, with an MAOP of up to 960 psig within 500 feet of one existing commercial building subject to the conditions in paragraph 5 of this Order.

17 (2) The Commission retains jurisdiction over the subject matter of this docket and Puget Sound Energy effectuate the terms of this Order.

DATED at Olympia, Washington, and effective March 16, 2017.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chairman

ANN E. RENDAHL, Commissioner