BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of	)	DOCKET PG-081328
	)	
PUGET SOUND ENERGY,	)	ORDER 01
	)	
Petitioner,	)	
	)	
Seeking Authorization to Operate a Facility with a Maximum Allowable Operating Pressure Greater Than 500 PSIG Pursuant to WAC 480-93-020	)	ORDER GRANTING PETITION
. . . . .	)	

BACKGROUND

1 On July 18, 2008, Puget Sound Energy (PSE or Company) filed with the Washington Utilities and Transportation Commission (Commission) a petition requesting Commission approval to operate a pipeline at greater than 500 psig (pounds per square inch gauge).

2 A gas pipeline company must have permission from the Commission to operate a pipeline at greater than 500 psig within one hundred feet of certain buildings described in WAC 480-93-020.

3 PSE proposes to construct a new Beaver Lake gate station to replace the existing gate station at the Williams Northwest Pipeline's North Bend Delivery Meter Station. The new gate station will have higher capacity and pressure ratings to serve increased demands for natural gas.

4 WAC 480-93-020(1)(a) requires a gas pipeline company to petition the Commission for approval prior to operating a pipeline above 500 psig that is within five hundred feet of the following places: "(i) A building that is in existence or under construction prior to the date authorization for construction is filed with the commission, if the building is not owned and used by the petitioning gas pipeline company in its gas operations; or (ii) A high occupancy structure or area that is in existence or under construction prior to the date authorization for construction is filed with the commission; or (iii) A public highway, as defined in RCW 81.80.010(3)." The term "building" is defined in WAC 480-93-005(2), and the term "high occupancy structure or area" is defined in WAC 480-93-005(14).

5 PSE is required to have Commission approval in this instance because PSE has identified eight buildings within 500 feet of the proposed gate station. PSE distributed notices to each of the identified property owners, communicating project details and alerting them to the scheduled Commission open meeting.

6 The Commission has adopted the Code of Federal Regulations, Title 49, Part 192, and Washington Administrative Code chapter 480-93 as minimum standards for natural gas pipeline construction. Federal regulations define a Class 3 location as, among others, those with 46 or more buildings intended for human occupancy or where the pipeline lies within 100 yards of a building. In Class 3 Locations, a pipeline's hoop stress is typically limited to no more than 50 percent of the specified minimum yield strength (SMYS) of the pipe. PSE's proposed gate station is located in an area classified as a Class 3 Location.

7 The most restrictive natural gas pipeline safety rules specify that pipelines within 220 yards of buildings with four or more stories above ground (Class 4 Location) be operated at pressures producing a hoop stress of no greater than 40 percent of SMYS.

8 To provide additional safety, PSE proposes to design and construct the Beaver Lake gate station to exceed the requirements for Class 4 Location within the limits prescribed for a Class 3 Location, *i.e.*, at a hoop stress less than 20 percent of SMYS.

9 Commission Staff reviewed the request and Staff found that PSE's proposed additional measures for the construction and operation of the Beaver Lake gate station located in a Class 3 Location will provide added safety to the public.

10 Commission Staff reviewed the request and Staff recommended the Commission grant the petition subject to the following condition(s):

a. Filings and Notices:

1. PSE will notify the Commission 48 hours prior to the commencement of construction.

2. PSE will submit a map of the gate station to the Commission within 30 days of project completion.

b. Design and Construction:

1. PSE will construct the Beaver Lake gate station to maintain the hoop stress level of the pipe below 20 percent of SMYS of the pipe material at the maximum allowable operating pressure (MAOP) of 960 pounds per square inch gauge.

2. PSE will perform radiographic inspection of 100 percent of all girth welds unless impractical, in which case at least 90 percent of the welds will be inspected. Upon request by the Commission, PSE will provide written documentation where radiographs are impractical including the certified radiographer's statement. PSE will inspect all welds and any defects will be remedied in accordance with PSE standards. PSE will radiograph all repaired welds to ensure pipeline integrity and compliance with existing standards.

3. The gate station piping will be configured to accommodate a pig launcher that may be used in the future to launch in-line inspection tools such as "smart pigs" for the 12" high pressure main.

4. PSE will test the gate station piping to a minimum 1440 psig using nitrogen as the test medium. This test pressure is 1.5 times of the MAOP of 960 psig.

5. PSE will bury the high pressure pipeline with at least three feet of cover to provide additional protection.

FINDINGS AND CONCLUSIONS

11 (1) The Washington Utilities and Transportation Commission is an agency of the State of Washington vested by statute with the authority to adopt and enforce rules for gas pipeline safety. *RCW 81.88.040 and RCW 81.88.065*.

12 (2) PSE is a gas pipeline company and subject to Commission jurisdiction.

13 (3) In WAC 480-93, the Commission has adopted minimum standards for gas pipeline construction. Pursuant to these standards, gas pipelines are designed to withstand higher pressure than the maximum allowable operating pressure

(MAOP) prescribed by these rules. The most restrictive gas pipeline safety rules specify that pipelines in a highly populated area within 220 yards of buildings with four or more stories above ground (Class 4 locations) must be operated at pressures producing a hoop stress of no greater than 40 percent of the SMYS of the pipe.

14 (4) PSE is proposing to build the new Beaver Lake gate station in Sammamish and operate the gate station at a pressure exceeding 500 psig in King County, Washington. The new gate station (RS 2745) is to replace the existing gate station (RS 2498) at the same site to meet the gas demand in the area. PSE agrees to the conditions in Paragraph 9 of this Order. These conditions exceed the minimum regulatory requirements.

15 (5) This matter came before the Commission at its regularly scheduled meeting on August 14, 2008.

16 (6) After reviewing PSE's petition and giving due consideration to all relevant matters and for good cause shown, the Commission finds it is consistent with the public interest to conditionally grant PSE's request to operate at greater than 500 psig.

O R D E R

THE COMMISSION ORDERS:

17 (1) After the effective date of this Order, the petition of Puget Sound Energy for authorization to operate a pipeline at greater than 500 pounds per square inch gage is granted.

18 (2) This authorization is conditioned on:

(a) Puget Sound Energy is proposing to build the new Beaver Lake gate station in Sammamish and operate the gate station at a pressure exceeding 500 psig in King County, Washington.

(b) The new gate station (RS 2745) is to replace the existing gate station (RS 2498) at the same site to meet the gas demand in the area.

(c) Puget Sound Energy agrees to the conditions in Paragraph 9 of this Order. These conditions exceed the minimum regulatory requirements.

19 (3) The Commission retains jurisdiction over the subject matter and Puget Sound Energy to effectuate the provisions of this Order.

The Commissioners, having determined this Order to be consistent with the public interest, directed the Executive Director and Secretary to enter this Order.

DATED at Olympia, Washington, and effective August 14, 2008.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Executive Director and Secretary