

Agenda Date: September 26, 2019  
Item Number: E5

**Docket:** PG-190462  
Company Name: Puget Sound Energy

Staff: Joe Subsits, Chief Pipeline Safety Engineer  
Derek Norwood, Pipeline Safety Engineer

### **Recommendation**

Issue an order approving Puget Sound Energy's (PSE or company) 2019-2021 Pipeline Replacement Program Plan (Plan) filed on May 31, 2019. PSE's plan is consistent with the Commission Policy addressing elevated-risk pipeline facilities in Washington.

### **Background**

On December 31, 2012, the Washington Utilities and Transportation Commission (commission) issued a Policy Statement entitled "Commission Policy on Accelerated Replacement of Pipeline Facilities with Elevated Risk"<sup>1</sup> (Policy Statement). Pursuant to the Policy Statement, each investor-owned gas pipeline utility company filed a Master Plan (Plan) in 2013 for replacing pipe that represents an elevated risk of failure. The Policy Statement also requires that PSE file a Two-Year Plan that specifically identifies the pipe replacement program goals for the upcoming two-year period.

On May 31, 2019, PSE filed its Two-Year Plan for 2019-2021. Staff finds that the company's 2019-2021 Two-Year Plan meets the requirements of the Policy Statement, with respect to pipeline safety.

## **I. Plan Requirements**

Under the Policy Statement, the fourth Two-Year Plan was to be filed by June 1, 2019,<sup>2</sup> covering planned pipeline replacement through 2021. The plan has three parts: (1) a Master Plan for replacing all facilities with an elevated risk of failure; (2) a Two-Year Plan that specifically

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<sup>1</sup> "Commission Policy on Accelerated Replacement of Pipeline Facilities with Elevated Risk (December 31, 2012) (Policy Statement) (Docket UG-120715).

<sup>2</sup> Subsequent plan filings are to be filed by June 1 every two years thereafter (i.e., June 1, 2015, 2017, 2019, etc.). "If the gas company makes no changes to its Master Plan, it need file only the Two-Year plan in each filing after June 1, 2013. If the company makes a material change either to its Master Plan, its Two-Year plan or its Pipe Location Plan, it should file plan changes with the commission within 30 days." Policy Statement at 11, ¶ 43.

identifies the pipe replacement program goals for the upcoming two-year period; and if applicable, (3) a Pipe Location Plan for identifying the location of pipe or facilities that present an elevated risk of failure.<sup>3</sup>

Each Plan must also:

- Target pipe or facilities that pose an elevated risk of failure.
- Be a measured and reasonable response in relation to the elevated risk, and the program must not unduly burden ratepayers.
- Be in the public interest.<sup>4</sup>

## **II. Commission Staff's Review of PSE's 2019-2021 Two-Year Plan**

### **A. Overview**

PSE's plan indicates that the following types of gas pipe with an elevated risk of failure are present within its natural gas service area: DuPont Aldyl "HD" Plastic Pipe (DuPont pipe), Buried Meters, and Sewer Cross Bores. PSE's plan contains a Master Plan, a Two-Year Plan, and a Pipe Identification Plan for each of these types of facilities.

### **B. Evaluation of the Required Plan Elements**

#### **1. Whether the Company's Plan Targets Pipe that Poses an Elevated Risk of Failure**

The three types of facilities in PSE's plan each pose an elevated risk of failure.

- DuPont pipe has the risk of brittle-like cracking due to slow crack growth (SCG). In PSE's experience, SCG is caused by rock impingement, squeezing and other stress concentrations. PSE's experience is similar to industry experience, which is highlighted by a safety recommendation from the National Transportation Safety Board (NTSB) on April 30, 1998<sup>5</sup>.
- Buried meters pose an elevated risk of failure due to potential for corrosion. In 2010, PSE's Distribution Integrity Management Plan (DIMP) identified buried meters as a moderate risk but since that time PSE has seen an increase in the number of hazardous leaks due to corroded meter set components and an increase in the number of buried meter reports. Due to these increases, PSE's DIMP has identified buried meters as a high risk.

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<sup>3</sup> Policy Statement at 11, ¶ 42

<sup>4</sup> Policy Statement at 12-14, ¶¶ 45-56.

<sup>5</sup> NTSB Safety Recommendation P-98-019

- The threat of sewer cross bores was identified through DIMP as an elevated risk to certain pipe installations. Sewer cross bores pose an elevated risk of failure due to the higher consequence that would result if damage to the pipe occurs and gas were to leak into the sewer and nearby buildings.

**2. Whether the pipe replacement program plan contains a plan for identifying the location of pipe that presents elevated risk of failure**

PSE's plan outlines their strategy for identifying the location of all three types of facilities listed.

- DuPont pipe location is continually identified through routine maintenance and planned projects. PSE's initial identification effort confirmed 2,700 original installations that had some amount of DuPont pipe. These installations were determined through historical data and targeted excavations.
- Buried meters are determined through annual leak surveys and continuing surveillance. The current list is approximately 40,000 buried meters in PSE's system with 5,000 new reports each year.
- PSE utilizes a computer model to determine likely locations of sewer cross bores. The presence of a sewer cross bore is confirmed via camera inserted in the sewer pipe. PSE has identified 8,500 locations with a high consequence and 51,500 with lower consequence.

**3. Whether the pipe replacement program plan is a measured and reasonable response in relation to the elevated risk**

Based on staff's review, PSE's plan is a measured and reasonable response in relation to the elevated risk. The plan adequately addresses facilities with an elevated risk of failure. Staff has audited PSE's DIMP<sup>6</sup> and found that it addresses all known threats and implements accelerated actions that adequately addresses those threats. PSE's plan is consistent with their DIMP.

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<sup>6</sup> Inspection number 7230, October 2017.

### **C. Impact on Rates**

In accordance with Paragraph 64 of the commission's policy statement, PSE may submit information for a Cost Recovery Mechanism (CRM). Should this occur, Regulatory Services staff will present the CRM in a separate filing.

### **III. Conclusion**

PSE is remediating elevated-risk pipeline facilities according to their Master Plan. The 2019-2021 Two-Year Plan has been updated to reflect newly added projects and completed projects. Since initiation of the replacement program, PSE has replaced over 139 miles of DuPont pipe and has found 743 sewer cross bores in their system. Staff recommends approval of PSE's 2019-2021 Two-Year Plan filed on May 31, 2019.