Agenda Date: October 26, 2017

Item Number: A1

Docket: PG-170413

Company Name: Northwest Natural Gas Company

Staff: Joe Subsits, Chief Pipeline Safety Engineer

Lex Vinsel, Pipeline Safety Engineer

Recommendation

Issue an order approving Northwest Natural's (NW Natural or company) Pipeline Replacement Plan (Plan) filed on May 25, 2017.

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" (Policy Statement). Pursuant to the Policy Statement, each investor-owned gas pipeline utility company filed a plan for replacing pipe that represents an elevated risk of failure.

On May 27, 2016, NW Natural filed its 2015-2017 Plan indicating that they currently have no known facilities requiring accelerated replacement due to an elevated risk of failure in Washington State. This Plan was filed late due to the fact that NW Natural assumed that since they have no known facilities presenting an elevated risk that they did not need to file a Plan.

On May 25, 2017, NW Natural filed its Pipeline Replacement Plan. The Plan reviews the pipe replacement history of Cast Iron and Bare Steel pipe prior to 2015. Staff finds that NW Natural's Plan meets the requirements of the Policy Statement, with respect to pipeline safety.

I. Plan Requirements

In accordance with the Policy Statement, the third Two Year-Plan was to be filed by June 1, 2017,² covering planned pipeline replacement through 2019. The Plan consists of three parts: (1) a Master Plan for replacing all facilities with an elevated risk of failure; (2) a Two-Year Plan that specifically identifies the pipe replacement program goals for the upcoming two

¹ "Commission Policy on Accelerated Replacement of Pipeline Facilities With Elevated Risk (December 31, 2012) (Policy Statement) (Docket 120715).

² 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.

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.³

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.⁴

II. Commission Staff Review of Northwest Natural's Plan

A. Overview

NW Natural has no known pipeline facilities in Washington that could be considered to have an elevated risk of failure. NW Natural Pipeline Replacement Plan (dated May 25, 2017) documents the removal of the facilities requiring accelerated replacement due to an elevated risk of failure. NW Natural completed the removal of Cast Iron pipe in 2000 and Bare Steel pipe in 2015.

NW Natural DIMP indicates that Celcon Service Tee Caps (Celcon Caps) exist in Washington and that they pose a slightly elevated risk of failure. NW Natural replaces Celcon Caps when found during routine operations and maintenance activities. To date, no leaks have been reported in Washington State due to the failure of Celcon Caps.

The company is not aware of the existence of any other infrastructure in Washington that might pose an elevated risk; therefore the Plan does not contain a Pipe Location Plan.

B. Evaluation of the Required Plan Elements

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

According to Northwest Natural's Plan, the only remaining facilities in its system that have an elevated risk of failure are Celcon Caps. The company has evaluated the risk of Celcon Caps and determined that a Pipe Location Plan is not warranted because the company replaces these caps when they are found during maintenance or other activities. In addition, although Celcon Caps have caused leaks in the company's

³ Policy Statement at 11, ¶ 42

⁴ Policy Statement at 12-14, ¶¶ 45-56.

⁵ Attachment A - DIMP AA Action Overview - Service Tee Caps 8-28-13.

Oregon service area, no leaks have been reported in Washington due to the failure of these caps.

Northwest Natural's DIMP addresses the following facilities that pose an elevated risk of failure, and as shown below, the company has either replaced all elevated risk facilities (other than Celcon Caps), or has none of the following elevated risk facilities in Washington:

- Bare Steel: Northwest Natural replaced all bare steel in Washington by the end of 2015
- ABS Plastic Pipe: Northwest Natural replaced all ABS plastic pipe as of May 2013.
- Cast Iron: Northwest Natural has replaced all Cast Iron pipe.
- PVC: Northwest Natural is not aware of any PVC pipe facilities in Washington.
- Aldyl-A PE Services: Northwest Natural is not aware of any Aldyl-A service pipe in Washington. The company has found this type of pipe in its Oregon service area and recently conducted a study that showed no Aldyl-A facilities in Washington. Staff reviewed this study and the findings appear to be valid.
- Plexco Celcon Service Tee Caps: (Celcon Caps) These caps are present in NW Natural's service territory. Specific locations are unknown. These caps are prone to cracking due to over-tightening. Northwest Natural has evaluated the issue surrounding these caps and has implemented a program to replace these caps as they are found during normal operations and maintenance activities. As stated above, no leaks have been reported in Washington due to the failure of these facilities.

Staff has reviewed Northwest Natural's TIMP and DIMP. The classification in the company's Plan of facilities that pose an elevated risk of failure accurately reflects the analysis in the TIMP and DIMP. NW Natural has no known gas transmission facilities that pose an elevated risk of failure, and for this reason, staff has not incorporated the TIMP into this summary.

As noted above, the company has replaced the elevated risk facilities in its system, with the exception Celcon Caps.

Staff notes that generally, when a service tee cap experiences failure, such as Celcon Caps, the resulting leakage is usually small due to the types of defects experienced and the nature of the design of the caps. In addition, the caps are generally at the service to main tie-ins, which are located away from structures intended for human occupancy. Accordingly, this type of facility is less of a safety concern than a facility that is located closer to buildings or other structures. Consequently, the company's

procedure of replacing these caps when they are found is acceptable. Staff sees no need for the company to have a Pipe Location Plan to locate these facilities.

2. Pipe Location Plan

Northwest Natural's Plan does not contain a Pipe Location Plan because they have no known facilities that pose an elevated risk of failure other than Celcon Caps, and these facilities are being adequately addressed by the replacement of Celcon Caps when they are found.

3. Whether the Company's Plan is a Measured and Reasonable Response in Relation to the Elevated Risk

Based on staff's review, Northwest Natural'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 Northwest Natural's DIMP⁶ and found that it addresses all known threats and implements accelerated actions that adequately addresses those threats.

In accordance with paragraph 55 of the commission's policy statement, NW Natural has addressed the potential rate impact to its customers and is not asking for a cost recovery mechanism (DRM) at this time, nor filing a general rate case seeking recovery of costs.

III. Conclusion

Staff recommends approval of Northwest Natural's pipeline replacement plan filed on May 25, 2017. Northwest Natural has submitted a Plan addressing all known elevated risk facilities in Washington and is consistent with the commission's policy statement.

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⁶ Inspection number 2605, October 2012.