

Agenda Date: August 4, 2016  
Item Number: A1

**Docket:** PG-160754  
Company Name: Northwest Natural Gas Company

Staff: Joe Subsits, Chief Pipeline Safety Engineer  
Scott Rukke, Pipeline Safety Engineer

### **Recommendation**

Issue an Order approving Northwest Natural Gas Company's (NW Natural or company) modified Pipeline Replacement Plan (Plan) filed on June 16, 2016.

### **Discussion**

#### **I. Background and Summary**

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 Plan for replacing pipe that represents an elevated risk of failure.

The commission contemplated that each company's Plan would likely be tied to the company's Distribution Integrity Management Plan<sup>2</sup> (DIMP), its Transmission Integrity Management Plan<sup>3</sup> (TIMP), if any, and certain other requirements found throughout the Washington Administrative Code<sup>4</sup> pertaining to pipeline safety.

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. This Plan was filed late due to the fact that NW Natural assumed that since they have no known facilities presenting an a risk that they did not need to file a Plan.

Staff reviewed NW Natural's Plan and agrees that they currently have no known pipeline facilities with an accelerated risk of failure. Staff noted however, that NW Natural does have certain facilities known as Celcon Service Tee Caps (Celcon Caps) in its system that are known to leak when installed improperly. For this reason, staff requested that NW Natural

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

<sup>2</sup> Title 49 CFR, Part 192, Subpart O.

<sup>3</sup> Title 49 CFR, Part 192, Subpart P.

<sup>4</sup> WAC 480-93.

add these facilities to its Plan and that they be replaced when found during the course of routine operations and maintenance activities.

NW Natural agreed and filed a modified Two Year Plan on June 16, 2016, which contained a provision to replace Celcon Caps when found during routine operations and maintenance activities.

## II. Plan Requirements

Under the Policy Statement, the second Two Year Plan was to be filed by June 1, 2015,<sup>5</sup> covering planned pipeline replacement through 2017. 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 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>6</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>7</sup>

## III. Commission Staff Review of NW Natural's Plan

### A. Overview

NW Natural is fortunate to have no known pipeline facilities in Washington State that could be considered to have an elevated risk of failure. NW Natural completed the replacement of all known bare steel pipe in 2015 in Washington State. NW Natural's Plan indicates that the company is not aware of the existence of any other infrastructure that might pose an elevated risk; therefore the Plan does not contain a Pipe Location Plan.

**Note:** NW Natural's DIMP indicates that Celcon Caps exist in Washington and that they pose a slight elevated risk of failure due to over-tightening. NW Natural's DIMP

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<sup>5</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.

<sup>6</sup> Policy Statement at 11, ¶ 42

<sup>7</sup> Policy Statement at 12-14, ¶¶ 45-56.

requires that Celcon Caps be replaced when found, so staff requested that NW Natural also include this in its Plan and they agreed to do so.

On June 16, 2016, NW Natural submitted a modified Plan including a program for the replacement of Celcon Caps when they are found.

NW Natural will modify its Plan in the future if other additional facilities are found which may present an elevated risk of failure.

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

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

According to NW Natural's Plan, NW Natural has evaluated Celcon Caps and determined that a Pipe Location Plan is not warranted because they replace these caps when they are found during maintenance or other activities.<sup>8</sup> In addition, although Celcon Caps have caused leaks in their Oregon service area, no leaks have been reported in Washington State due to the failure of these caps.

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

- Bare Steel: All bare steel in Washington State has been replaced.
- ABS Plastic Pipe: All ABS in Washington State has been replaced.
- Cast Iron: All cast iron in Washington State has been replaced.
- PVC: NW Natural is not aware of any PVC pipe facilities in Washington State.
- Aldyl-A PE Services: NW Natural is not aware of any Aldyl-A service pipe in Washington State. NW Natural has found this type of pipe in its Oregon service area and conducted a study that showed no Aldyl-A facilities in Washington State. Staff reviewed this study and the findings appear to be valid.
- Plexco Celcon Service Tee 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. NW 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 State due to the failure of these facilities.

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<sup>8</sup> Attachment A - DIMP AA Action Overview - Service Tee Caps 8-28-13.

Staff has reviewed NW Natural's TIMP and DIMP and agree that NWN has no known facilities that pose an elevated risk of failure in Washington State.

As noted above, the company has replaced the elevated risk facilities in its system in Washington State and will continue to replace Celcon Caps when found.

Staff notes that generally, when a service tee cap such as a Celcon Cap, experiences failure, 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, NW Natural's procedure of replacing these caps when they are found is acceptable. Staff sees no need for NW Natural to have a Pipe Location Plan to locate these facilities.

## **2. Pipe Location Plan**

NW Natural's Plan does not contain a Pipe Location Plan because they have no known facilities that pose an elevated risk of failure in Washington State.

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

Based on Staff's review, NW Natural's Plan is a measured and reasonable response in relation to the elevated risk. The Plan adequately addresses known facilities with an elevated risk of failure. Staff has audited NW Natural's DIMP<sup>9</sup> 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 (CRM) at this time, nor filing a general rate case seeking recovery of costs.

## **4. Other Considerations**

Staff would also like to note the difficulties a multi-state company presents when staff evaluates various programs such as DIMP, TIMP and the Plan for consistency with the Policy Statement. Difficulties arise because TIMP and DIMP programs are not

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<sup>9</sup> Inspection number 2605, October 2012.

state specific. Typically, TIMP and DIMP programs evaluate the company's system as a whole, across all states in which the company operates. Different states may have different pipeline safety rules, and companies may employ different construction practices or deploy different materials in different states. Other factors may also create differences between the nature of the facilities in each state. This can make it difficult for staff, because a Plan needs to focus solely on facilities located in Washington State that pose an elevated risk of failure.

For NW Natural, it became evident that certain elevated risk facilities were located in Oregon, but not in Washington State. As an example, NW Natural has Aldyl-A PE pipe in Oregon but not in Washington State. In NW Natural's case, the threats identified in its TIMP and DIMP plans may not be present in Washington State and may not be addressed in its Pipeline Replacement Plan.

#### **IV. Conclusion**

Issue an Order approving NW Natural's modified pipeline replacement plan filed on June 16, 2016. NW Natural has submitted an amended Plan addressing all known elevated risk facilities in Washington and this Plan is consistent with the Commission's Policy Statement.