

Agenda Date: October 10, 2012
Item Number: A2

Docket: PG-131840
Company Name: Northwest Natural Gas Company, Inc.

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

Recommendation

Issue an Order approving Northwest Natural's pipeline replacement plan filed on May 31, 2013.

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"¹ (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 (PLAN).

The Commission contemplated that each company's PLAN would likely be tied to the company's Distribution Integrity Management Plan² (DIMP), its Transmission Integrity Management Plan³ (TIMP), if any, and certain other requirements found throughout the Washington Administrative Code⁴ pertaining to pipeline safety.

On May 31, 2013, Northwest Natural Gas Company, Inc., (Northwest Natural) filed its PLAN with the Commission. Below is Commission Staff's review of that PLAN. Staff finds that the Company's PLAN meets the requirements of the Policy Statement, with respect to pipeline safety.

II. PLAN Requirements

Under the Policy Statement, the first PLAN was to be filed by June 1, 2013,⁵ covering planned pipeline replacement through 2015. The PLAN has three parts: (1) a Master Plan for

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

² Title 49 CFR, Part 192, Subpart O.

³ Title 49 CFR, Part 192, Subpart P.

⁴ WAC 480-93.

⁵ 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

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.⁶

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.⁷

III. Commission Staff Review of Northwest Natural's PLAN

A. Overview

Northwest Natural is fortunate to have very limited amounts of gas pipeline facilities in Washington that could be considered to have an elevated risk of failure. Northwest Natural is well ahead of planned schedules outlined in its DIMP to replace pipelines with an elevated risk of failure. Northwest Natural's PLAN indicates that, with the exception of Bare Steel pipe, 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. In effect, Northwest Natural's Master Plan and Two-Year plan are the same, because Northwest Natural plans to replace all known Bare Steel pipe by the end of 2014.

Note: Northwest Natural's DIMP indicates Celcon Service Tee Caps (Celcon Caps) exist in Washington and that they pose an elevated risk of failure. Staff requested Northwest Natural to modify its PLAN to include Celcon Caps and the Company agreed to do so. Northwest Natural's DIMP requires that Celcon Caps be replaced when found. This remedial action is acceptable to Staff and the Company will include this in its modified PLAN.

On September 13, 2013 NWN submitted a modified PLAN including a program for the replacement of Celcon Caps when they are found.

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

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.

⁶ Policy Statement at 11, ¶ 42

⁷ Policy Statement at 12-14, ¶¶ 45-56.

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 Bare Steel and Celcon Caps. Northwest Natural is scheduled to replace all remaining Bare Steel pipe by the end of 2014. The Company has evaluated 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.⁸ In addition, although Celcon Caps have caused leaks in the Company's 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 Bare Steel and Celcon Caps), or has none of the following elevated risk facilities in Washington:

- Bare Steel: Northwest Natural has scheduled all bare steel in Washington to be replaced by the end of 2014. The Company has a combined total of 3.6 miles of both non-cathodically protected and cathodically protected bare steel pipe.
- 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: These caps are present in NWN'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

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

the analysis in the TIMP and DIMP. Northwest 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 of Bare Steel and 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 Bare Steel and Celcon Caps, and these facilities are being adequately addressed by the scheduled replacement of Bare Steel and 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 DIMP⁹ and found that it addresses all known threats and implements accelerated actions that adequately addresses those threats. As indicated earlier, Northwest Natural is scheduled to have all Bare Steel replaced by the end of 2014.

Also as noted earlier, Northwest Natural is well ahead of schedules contained in the DIMP for replacing higher risk facilities. Because the known threats for Northwest natural's system are lesser in number and in scope than other companies Staff has reviewed, Northwest Natural's PLAN is also limited.

In accordance with paragraph 55 of the Commission's policy statement, the Company addressed the potential rate impact its Pipe Replacement Plan will have on customers.

⁹ Inspection number 2605, October 2012.

Initially there is no rate impact to customers since the Company is not asking for a cost recovery mechanism (CRM) at this time, nor filing a general rate case seeking recovery of costs. However, if the Company were to file for a general rate case seeking recovery, the estimated revenue requirement would be approximately \$800,000 based on 2013 budgeted expenditures of approximately \$2.1 million for capital investments and \$500,000 for operations and maintenance (O&M). On a going forward basis the Company projects that capital spending on the pipeline replacement program would be approximately \$1.5 million per year through 2017. Staff estimates the potential rate impact assuming a general rate case or CRM was filed every year could range from \$200,000 to \$600,000 per year.

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 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 that pose an elevated risk of failure.

For Northwest Natural, it became evident that certain elevated risk facilities were located in Oregon, but not in Washington. For example, Northwest Natural has Aldyl-A PE pipe in Oregon but not in Washington.

One consequence is that the elevated risk facilities in Washington that are addressed in a PLAN may not always match the threats a company identifies in its TIMP and DIMP programs.

IV. Conclusion

Issue an Order approving Northwest Natural's pipeline replacement plan filed on May 31, 2013. Northwest Natural has submitted an amended PLAN addressing all known elevated risk facilities in Washington and is consistent with the Commission's Policy Statement.