

Agenda Date: October 30, 2013
Item Number: A1

Docket: PG-131837
Company Name: Avista Utilities

Staff: Joe Subsits, Chief Pipeline Safety Engineer,
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Recommendation

Issue an Order approving Avista's pipeline replacement plan filed on May 31, 2013. Avista's plan is consistent with the Commission Policy and adequately addresses all known 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"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, Avista Utilities, (Avista) 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.

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.

I 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 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

II. Commission Staff Review of Avista's Plan

A. Overview

Avista's plan indicates that the following types of gas pipe with an elevated risk of failure are present within its Washington service area: Vintage Aldyl-A polyethylene mains,⁸ PE service piping where it transitions to rigid steel service tees, and isolated steel, which historically may or may not have had adequate cathodic protection (the uncertainty is because this pipe was not electrically conductive with Avista's cathodic protection system(s)).

Avista has set a 20-year replacement goal for its Aldyl-A mains. Avista believes this time frame best balances safety and economics.⁹ In 2011, Avista started actively replacing its highest priority Aldyl-A pipe facilities in the Washington towns of Odessa and Davenport. To date, Avista has replaced over 81,000 feet of Aldyl-A mains.

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 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.

⁸ Pre 1984 manufacture and pre 1987 installation. (susceptible to slow crack growth (SCG)).

⁹ Avista's plan, pages 30–32.

Initially, Avista intended to use the same construction crews for the Aldyl-A main replacements and the PE to steel transition replacements, but found this inefficient. Avista has since dedicated different crews for remediating pipe and transition points.

Avista instituted its isolated steel pipe replacement program after a Commission inspection in 2010 determined there were sections of steel within Avista's service territory that may not have adequate cathodic protection. In 2011, a Stipulated Agreement and Order¹⁰ (Agreement) between Avista and the Commission was entered that required Avista to locate and remediate all isolated segments of steel by the end of 2016.

Avista identifies one of the biggest hurdles for meeting the Company's pipe replacement goals as the availability and retention of skilled labor in a region that has a seasonal construction window due to harsh winter conditions. Avista is addressing this issue through various means, including contract negotiations with outside contractors. Avista anticipates it will meet its replacement goals within the time it has projected.

Avista's plan does not contain a Pipe Location Plan for the reasons detailed in Section B.2.

Avista has no known transmission facilities with an elevated risk of failure, and for this reason Avista did not incorporate its TIMP into its 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 Avista's plan, there are three types of facilities in its system having an elevated risk of failure that are targeted for replacement: Vintage Aldyl-A mains; Isolated Steel services and mains; and service piping where it transitions from PE to steel service tees. Avista initiated pipe replacement programs for each of these three types of pipe prior to filing its plan.

Avista's plan indicates that a Pipe Location Plan is not warranted because the Company knows where its elevated risk pipe is located. Because Avista classifies this pipe as higher risk pipe, this pipe is on a priority replacement schedule.

For isolated steel, Avista has had a location and remediation program since 2011, based on the Agreement. This program is scheduled to be completed in 2016.

¹⁰ Docket PG-100049, Order Accepting Agreement and Closing Investigation (2011).

Avista's DIMP addresses the following facilities that pose an elevated risk of failure, and as shown below, the Company has implemented replacement plans for these facilities prior to submission of their plan:

- **Pre 1987 Aldyl-A mains.** This pipe (manufactured prior to 1984 and installed prior to 1987) is susceptible to slow crack growth (SCG). As of the end of 2011, approximately 342 miles of this pipe remains in service in Washington.¹¹ Avista has started its 20 year replacement program for this pipe.
- **Pre 1987 Aldyl-A services.** Generally smaller diameter less than 1-1/4") services are more resistant to SCG, and are not considered a significant threat. By the end of 2011, approximately 14,152 pre 1987 Aldyl-A services remained in service in Washington. These services are not part of a replacement plan. Avista monitors this pipe for any trends suggesting an increase in the elevated risk potential. At this time, this pipe is considered stable and safe.
- **Service piping where it transitions from PE to steel service tees.** These transition points are susceptible to cracking due to external stresses at the interface between PE and steel service tees. Avista is actively excavating and replacing short sections of this service piping as part of its Aldyl-A replacement program.
- **Isolated steel mains and services, including risers.** Avista is locating and remediating these facilities under the Agreement. Isolated steel facilities are pipelines that, historically, have been isolated from Avista's cathodic protection system or monitoring points. This pipe may or may not have had adequate cathodic protection over time and for this reason, may be susceptible to external corrosion. Avista is making good progress in locating and replacing these facilities and this program is scheduled to be completed by late 2016.

Staff has reviewed Avista's TIMP and DIMP. The Company's classification of facilities that pose an elevated risk of failure accurately reflects the analysis in the TIMP and DIMP. Avista 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 currently has in place replacement and remediation programs for all known pipe facilities that pose an elevated risk of failure. These programs were implemented prior to the submission of Avista's plan to the Commission.

2. Pipe Location Plan

Avista's plan does not contain a Pipe Location Plan, because Avista has a very small (less than 1 percent) amount of unknown pipe in its system. This is mainly due to a lack of adequate records

¹¹ DIMP, Table 5.2-1: Summary of Material Types and Mileage.

kept by companies Avista acquired in the 1950's and 1960's. Avista treats all unknown materials as high priority/high risk pipe and replaces it on a priority schedule. In addition to unknown materials, Avista has unknown isolated steel facilities that are being located and remediated under the Agreement. As noted earlier, Avista has scheduled this program to be completed in late-2016.

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

Based on Staff's review, Avista'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 Avista's DIMP¹² and found that it addresses all known threats and implements accelerated actions that adequately addresses those threats.

Avista supplemented its filing to address the potential rate impact of its Pipeline Replacement Plan in compliance with paragraph 55 of the Commission's policy statement.

The 2013 and 2014 rate impacts have already been accounted for by Order in the Company's two-year rate plan in Docket UG-120437. The two-year rate plan included capital investments relating to the company's Pipeline Replacement Plan. In its supplemental filing, the Company provided a theoretical analysis of a potential rate impact for each year of its 20 year Pipeline Replacement Plan. The analysis is a best estimate using information known at the time it was prepared. The resulting analysis shows between 2015 and 2032 the average annual increase per residential customer ranged from a low of \$1.25 (0.16 percent) to a high of \$3.71 (0.50 percent). The numbers presented assume that the necessary filings are made to implement a rate change and were derived from estimates which will more than likely change once newer information is readily available.

Staff is satisfied that the analysis presented by the company complies with the requirements of paragraph 55 of the Commission's Policy Statement.

III. Conclusions

Issue an Order approving Avista's pipeline replacement plan filed on May 31, 2013. Avista's plan is consistent with the Commission Policy and adequately addresses all known elevated risk pipeline facilities in Washington.

¹² Inspection 2604 (June 2012).