



STATE OF WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

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CERTIFIED MAIL

September 28, 2016

Heather Rosentrater
Vice President, Energy Delivery
Avista Utilities Corporation
1411 E Mission
PO Box 3727
Spokane, WA 99220-3727

Dear Ms. Rosentrater:

Re: 2016 Documentation Follow-up Inspection - Kettle Falls Transmission Pipeline
(Insp. No. 5812)

On September 14, 2016, staff from the Washington Utilities and Transportation Commission (staff) conducted a follow-up inspection to review documentation related to the installation, repair and operation of your Kettle Falls Transmission Pipeline (KFTP) that experienced a seam failure on Oct. 10, 2013.

During our follow-up review staff verified that the pipeline, which was installed in 1967, was high frequency electric resistance welded (HFERW) pipe rather than low frequency electric resistance welded (LFERW) pipe which is more susceptible to seam failures. Staff also reviewed the specifications, the pressure test records and the past leak history of the pipeline which consisted of a seam failure in 1984 and the most recent seam failure which occurred in 2013. Both seam failures resulted in minor leakage which were repaired by a full encirclement sleeve (1984) and a bypass with cutout and replacement (2014). According to the documentation provided, including the original purchase orders for materials, the KFTP where the seam failure occurred, is an 8.625" diameter, 0.188" wall material manufactured to API Standard 5L grade X42 standards. It has a maximum allowable operating pressure of 500 psig with a maximum stress level of approximately 27% of the specified minimum yield strength. The calculated potential impact radius (PIR) is approximately 140'. There are no high consequence areas located within the PIR of this pipeline.

A lab analysis conducted after the 2014 repair indicated that the pipeline met the chemical composition and mechanical property requirements of API Standard 5L Grade X52 carbon steel, which is greater than the material rating of X42 specified in the purchase orders. The analysis also indicated that the seam failure and leakage were most likely caused by the lack of fusion in the

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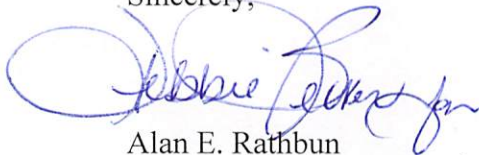
seam weld caused by insufficient heat input, which is often the result of some form of surface contamination at the mill. It is not anticipated that this type of contamination and seam defect would be widespread and records indicate that this pipeline has had a satisfactory operational history since 1967.

Since this pipeline operates in a rural area at low stress levels (under 30% SMYS), has a history of satisfactory maintenance and a minimal leak history, staff has no concerns regarding the operation of the pipeline at this time. Should circumstances change in the future, staff will review the best course of action for the continued safe operation of this pipeline.

Staff thanks Avista personnel for their cooperation and professionalism during this follow-up review of the Kettle Falls Transmission Pipeline documentation.

If you have any questions, or if we may be of any assistance, please contact Scott Rukke at (360) 664-1241. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,



Alan E. Rathbun
Pipeline Safety Director

cc: Mike Faulkenberry, Director of Natural Gas, Avista Utilities Corp.