

1411 E. Mission, PO Box 3727
Spokane, WA 99220-3727

Submitted to Joe Leckie via electronic mail at joe.leckie@puc.idaho.gov

July 17, 2017

Mr. Joe Leckie
Executive Director/Program Manager
Idaho Public Utilities Commission
PO Box 83720
Boise, ID 83720-0074

Re: Response to IPUC letter dated May 15, 2017

Dear Mr. Leckie:

In your letter of May 15, 2017, you documented two probable violations discovered through Avista's self-reporting of the shortcomings in a teleconference with the IPUC on December 12, 2016. Please find herein a restatement of the probable violations / findings and Avista's response.

Probable Violations:

- 1. 49 CFR 192.723(b)(1) Distribution Systems: Leakage Surveys**
A leakage survey with leak detector equipment must be conducted in business districts, including...at intervals not exceeding 15 months, but at least once each calendar year.
- 2. 49 CFR 192.723(b)(2) Distribution Systems: Leakage Surveys**
A leakage survey with leak detector equipment must be conducted outside business districts as frequently as necessary, but at least once every 5 calendar years at intervals not exceeding 63 months.

Findings:

It was revealed during the teleconference that the leak surveys in the Silver Valley on Northern Idaho were only one-third complete and it was believed that they were not going to be completed by years end. The previous leak survey for this portion of the distribution system was completed in September 2011. To be in compliance, the leak survey must have been completed by December of 2016. The survey was ultimately suspended (due to low survey quality and safety issues) in December with the onset of winter. The subsequently caused some of the annual leak surveys to exceed 15 months. At the time of the teleconference it was relayed that 58 leaks had been discovered during the survey (by survey's end a total of 89 leaks were discovered).

The leak survey manager informed us that come spring of 2017 the entire Silver Valley would be completely re-surveyed.

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Avista Response to the above NOPVs:

Avista concurs that the company did not complete the distribution leakage surveys in their entirety within the time periods required by federal code in both business and non-business districts in its Kellogg District. Avista regrets, however, that IPUC Safety Staff's findings did not acknowledge, the reasons Avista represented to Staff for missing the required dates. The following detail describes company planning, unprecedented weather conditions, and efforts to complete leak survey associated with the aforementioned leakage surveys.

The 5-year leak survey for Avista's Kellogg District was scheduled to begin on October 19, 2016 and be completed by November 4, 2016. The leak surveys in several districts including the Kellogg District were delayed in starting because of record-setting precipitation (see enclosed article by Mike Prager, Spokesman Review, dated October 31, 2016).

As early as October 2016, Avista realized that missing compliance was a possibility without initiating changes to surveyor staffing and work schedules. Avista took steps to reinforce survey efforts including shifting leak survey technicians from Oregon to Washington/Idaho and began working Saturdays. With the quick onset of winter weather, Avista consulted with the leak survey contractor, Southern Cross, and implemented a cold weather leak survey process. This included concentrating survey efforts in business districts and Aldyl-A piping areas where snow was cleared, slowing the survey speed, and expanding the typical 10-foot buffer for surveying venting locations to a 25-foot buffer on all visible venting locations (i.e. pavement joints, cracks, valve boxes etc.) However, these efforts were not able to make up for the lost survey days due to the slowing of the survey from snow/ice on the ground and associated access limitations. Ultimately, Avista elected to suspend further survey after December 19, 2016.

The decision to suspend further leak survey until appropriate weather was made for the following reasons:

1. Leak Survey Protocols Regarding Inclement Weather –

- a. During times of inclement weather it is the responsibility of the leak survey technician, in consultation with contractor management and Avista, to evaluate if continued survey is appropriate. Under marginal weather conditions (i.e. precipitation, ground saturation and or wind) the leak survey technician is required to detect two known leaks using standard survey protocols.
- b. If the known leaks cannot be detected then low survey quality is expected (as described below) and survey is not appropriate until conditions improve. To check ground saturation a leak survey technician may also commonly perform a bar hole evaluation. In several cases in late 2016 and early 2017 after extraction of the bar, the hole would fill up with groundwater indicating saturated ground conditions.

2. Low Survey Quality –

- a. During wet weather, ground conditions become saturated (i.e. interstitial spaces between the soil particles become occupied by groundwater). This creates a relatively low-permeability condition reducing potential for natural gas to migrate upward where it may be detected with leak survey equipment. A similar condition is created when ice and snow cover the ground surface causing a "capping" situation. During these times leak survey effectiveness is significantly reduced.
- b. Wet weather also reduces the effectiveness of the Flame Ionization (FI) unit. FI units operate by burning a mixture of nitrogen and hydrogen gases. Moisture in the air, on the ground and cold temperatures can cause the unit to fault and not function properly.

3. **Safety of Leak Survey Technicians** – As noted above, efforts were implemented for cold weather survey. However, leak survey technicians were being exposed to potentially hazardous winter conditions including slips, trips, falls and surveying close to vehicles that were driving on icy roads.
4. **Access Limitations** – Due to ice and snow accumulations, leak survey technicians were not able to access some service pipelines and meters behind gated fences. In addition, many rural areas that were not plowed, such as long driveways and/or on steeper streets, could not be accessed even by vehicle.

Completion of the 2016 5-year Leak Survey

In its decision to suspend the remaining Kellogg District survey in 2016, Avista made known that the entire 5-year survey (including annual survey areas) for the district would be completed off-cycle in early 2017, as soon as weather permitted. In addition the scheduled annual survey would be recompleted in 2017 to maintain the compliance schedule into the future.

Avista scheduled the resurvey of the Kellogg District 5-year to begin in spring 2017 and it was completed in mid-June 2017. The following leaks were discovered from this survey:

Leak Type	Number of Leaks
Grade 1 Aboveground	0
Grade 2 Aboveground	11
Grade 3 Aboveground	78
Total Aboveground Leaks	89
Grade 1 Belowground	1
Grade 2 Belowground	5
Grade 3 Belowground	3
Total Belowground Leaks	9

Avista Responses to IPUC Staff Questions from June 29, 2017 Meeting in Spokane, WA.

On Thursday, June 29, 2017, Mike Faulkenberry and Karen Cash of Avista met with Joe Leckie and Darrin Ulmer to discuss this issue. Following are Avista’s responses to the two questions raised by Joe.

Why not add more leak survey technicians to complete the survey sooner?

Leak Survey is conducted on regular schedule to complete annual surveys in 12 months not to exceed 15 months and 5-year survey in 60 months not to exceed 63 months. Schedules are developed at the beginning of each season to allow necessary time, with a contingency, to complete the surveys in the required timeframes. In the case of Kellogg District in 2016, the contingencies were depleted prior to arrival in Kellogg due to record-setting precipitation.

The challenges in adding a large number of leak survey technicians to an operational area are as follows:

- Overwhelms operational resources needed to repair leaks.
- Requires several weeks to train additional leak survey technicians to increase crew sizes to cover more territory.



Why not complete the survey earlier in the year?

Avista schedules the required Leak Survey at the beginning of each season. Several parameters must be considered when developing and executing the schedule including:

1. The overall footage of pipeline and its geographic location

To maintain our annual and 5-year compliance requirements, Avista must schedule to complete approximately 26 million feet of pipeline and associated meter sets every year distributed across Washington, Idaho, and Oregon. It requires the entire season (early March through late October) to complete this effort.

2. Previous Compliance Dates

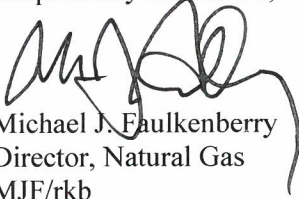
The schedule is configured to meet existing compliance (based on previous years) and also to the extent possible to start in lower elevation (warmer) areas and working through the larger operations areas and ending in the smaller areas.

3. Sensitivity regarding 15-month and 63-month requirements from the prior leak survey

The subject year's leak survey is directed by the previous survey to meet the 12 to 15 and 60 to 63 month requirements. Leak surveys that start too early or too late and/or surveys conducted too slow or too quickly can create unrealistic timeline requirements for future surveys.

In conclusion, Avista acknowledges the violation of 49 CFR 192.623(a) and (b) in calendar year 2016 in the Kellogg District. The violations were not due to negligence but a result of our decision to maintain the quality of our leak survey process and for public and employee safety.

Respectfully Submitted,


Michael J. Faulkenberry
Director, Natural Gas
MJF/rkb

Enclosure

Cc: Karen Cash, Compliance Manager
Jodie Lamb, Leak Survey Program Manager
IPUC Correspondence File

