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Subject: Jackson, MS (PLD24FR003) - NTSB Info Request - Context for Omitted DRAM Factors
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Elena,

I wanted to provide you with additional information and context regarding factors that are marked as "omitted" in certain documentation relating to Atmos' DRAM model.

The implementation of the DNV DRAM includes the configuration of how leak rates and the probability of failure are determined.

One method to establish leak rates and the probability of failure is by using a DNV-developed statistical model. This model is based on an analysis of 5 years of leak data from Gas Distribution Operator Annual Reports from 2004 to 2008 as well as leak data submitted by and system parameters reflective of the companies participating in the original GTI and GL Noble Denton (now DNV) Distribution Integrity Risk Model project from 2011. Some of DNV's documentation includes a boiler-plate list of factors associated with this approach.

Another method is to establish leak rates and the probability of failure by using an operator specific model. Atmos elected to use this operator-specific method in place of the generalized DNV-developed statistical model. The Atmos leak rate model is based on an analysis of the most recent 10 years of its own leak data and system parameters reflective of its own assets and operating environment as the basis for establishing leak rates and the probability of failure. This approach is reflected in documentation provided to and has been described in discussions with the NTSB.

There are factors in the generalized DNV-developed statistical model that were either not applicable to, or were superseded by, factors used in Atmos' operator-specific method for establishing leak rates and probability of failure. The factors that were superseded or were determined to be not applicable were noted as "omitted" in applicable documentation.

The footnote in the Integrity Management Factual Report stating that there were "18 factors available but not used (marked 'omitted')" is incomplete and misleading, and we recommend that it be deleted. However, if you think it is necessary to include a statement about these factors, then we ask that you provide additional explanation. A statement like the following would be more complete: "Atmos indicated that 18 factors noted as "omitted" in their documentation related to factors that were either not applicable to, or were superseded by, other factors used in Atmos' operator-specific configuration of the DRAM."

Please let me know if you have any questions.

Thank you,

Jennifer