Pressure Testing Pipe in HCAs

OPS Public Meeting on Pipeline Integrity Management in HCAs

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Proposed Regulations in Notice of Proposed Rulemaking

- Goal is to address potential Material & Manufacturing Defect threat
- One of the primary inspection techniques for both baseline and reassessment periods
- Gives 10 yr baseline in HCA ,13 years for MRA
- Gives 7 year reassessment interval, can do CDA to get longer interval depending on SMYS level
- Operators have to provide written justification as to why it isn't possible or economically feasible to PT a segment
- Must perform a pressure test at least once in the life of the segment unless the operator demonstrates why pressure test is not necessary to address this threat
- Conduct in accordance with Subpart J

ASME B31.8S Standards

- Appropriate for addressing the time dependent and manufacturing and construction defect threats
- Also used when raising the MAOP of a pipeline or when raising the operating pressure above the historical operating pressure
- Test to at least 1.25 times MAOP
- B31.8S contains details on the minimal data sets, risk assessment, response and mitigation, assessment intervals, and performance metrics

Pressure Testing Issues

- Raises significant safety and service reliability issues due to difficulties in dewatering pipe, winter freeze-offs, and introducing internal corrosion causing bacteria
- Definition of “significant cyclic stress” that will require pressure testing throughout the life of the pipeline
- Basis for operating condition changes
- Proposed Rule takes a “coarse” approach to the issues and is not founded on data

Pressure Testing Issues (cont.)

- Limited/no technical justification to have to pressure test any low stress pipe due to material and manufacturing defects other than those with historical operating problems
- Significant gas transportation capacity outage issue
- LDC and grid-like interstate systems will have numerous annual customer outage and customer safety issues

Applying Research

- Battelle report on vintage pipe
- P-PIC consultants report
  - summary-practical guide of the Battelle report for operators
- Keefner report
  - Study on the cyclic pressure effect on pipe

Summary

- Complete the research reports on time for timely use in the rule making
- Both parties need to work together close the issue based on science to ensure this threat is effectively and efficiently addressed in a timely manner
- Final Rule needs to incorporate the finding, recommendations and practices of the on going research to better align with B31.8S
- Need to focus our efforts where there is real risk as opposed to blindly testing everything