



Pipeline Class Location Methodology Workshop

A Public Perspective

4/16/14

Main Issues

- Should gas Transmission Integrity Management Program (“TIMP”) mileage be expanded?
- Should Class Location requirements be replaced by current TIMP 1.0 efforts?

Class Locations

- Widely required in existing 49CFR§192
 - At least 7 sections
- Safety driven by lowering design factor (% SMYS) for higher class
 - Lower stress focus (% SMYS) assures greater safety factor for all anomalies
- PHMSA has received wide range of feedback
 - From not enough class locations, to
 - TIMP should replace class locations

Class Location Transmission Mileage

Class	Miles	% Total
1	234,083	78.4
2	30,507	10.2
3	32,800	11.0
4	961	0.3
Total	298,431	100.0

2012 Onshore Gas Transmission Mileage from PHMSA data files

TIMP 1.0 Approach

- Now < 7 % or <20,000 miles of U.S. Gas Transmission Pipelines
 - HCA mileage going down since 2004
 - Was supposed to be going up over time, not down
- Highly dependent on pipeline operator's ability to properly:
 - Identify HCAs
 - Identified sites least survivable!
 - Recognize all threat anomalies,
 - Assess such threats
 - Integrate all data
 - Evaluate real risks and time to failure
- Hard to validate or have confidence in TIMP assessments
 - Especially if not citing % SMYS in public
- After a tragedy, the public does not want to hear about “lessons learned”
 - Comes across as “oops, whoops, we didn't know” when you should have known!

San Bruno Rupture

- System with second highest % of HCA mileage
 - 30-inch, relatively low pressure pipe
 - Ruptured at pressure below 400 psig MAOP
- Many very serious TIMP deficiencies
 - “Lost” important system data/records
 - No confidence in TIMP assessment methods or approach
 - PIR clearly not appropriate for larger diameter pipelines!
- Not industry’s nor state gas safety regulator’s finest hour

TIMP 1.0 Has Some Serious “Gaps”

- Misapplication of Risk Management approach
 - Space Shuttle Syndrome
 - Low risk is not no risk!
 - Denial approaches can drive low risk to failure
 - Risk ranking approaches appear seriously flawed
 - Are the facts driving a conclusion, or is a preordained conclusion distorting the facts?
 - More information on threats and repairs needs to be made public
 - PIR not sufficient for larger diameter pipelines
- TIMP needs serious improvement
 - Advise no changes in class location approach until TIMP 2.0 codified into regulation

Support PHMSA on TIMP 2.0

- Improve pipeline risk management approaches
- Quantify capabilities of various assessment methods
 - Crack ILI?
 - Hydrotest procedures (strength and spike test)
 - % SMYS is the key, not ratio to MAOP
 - Engineering Assessment approaches can be very incomplete
 - Experience levels dropping
 - Watch out for WAAs and WAGs
- Clarifying mandatory requirements on data integrity, integration, and record keeping
- Looking for increase of HCA mileage – not a decrease!
 - Population isn't decreasing in the U.S.

Conclusions to Congress

- Shifting Class Location Approach to TIMP 1.0
 - Would seriously decrease protections on public safety
- PHMSA's first priority should be on TIMP 2.0
 - Elimination of “grandfathering”
 - Pressure test records as a % SMYS (IVP)
 - Records validation and integration (traceable, verifiable & complete)
 - Looking for prudent regulatory action, not more studies!
- Want effective clear regulation
 - Not complex or unenforceable regs
 - Class location should remain as in current regulation
 - Open to public discussion on class location alternatives after TIMP 2.0 becomes regulation