

Proactive Assessment on Vintage Pipelines

2013 OGA Technical Workshop

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Outline

- Background
- MAOP Verification
- DEO Remediation Plan
- Proposed changes to existing regulations

Dominion East Ohio (DEO)

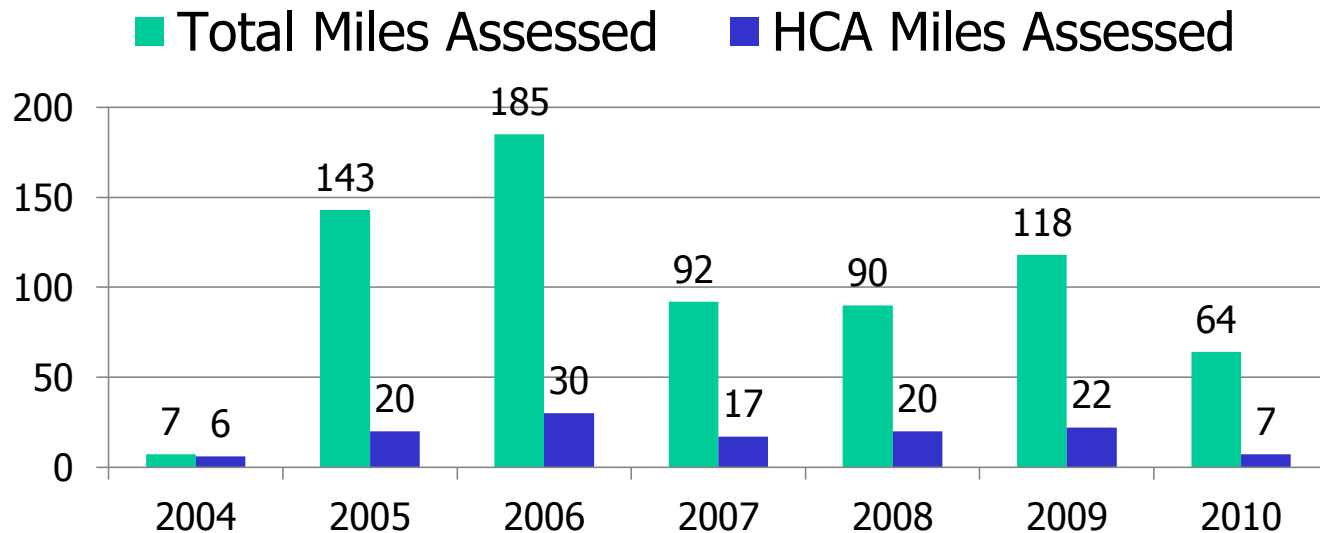


Dominion East Ohio

- 1,100 Miles of Intrastate Gas Transmission and Storage Pipelines
- 956 Miles of Regulated Gas Gathering Pipeline
- 19,600 Miles of Gas Distribution Mains
- 1.2 Million Customers

DEO Transmission Integrity Baseline Assessments

- In-line Inspection (~95% of total assessment miles)
- Pressure Test (~5% of total assessment miles)
 - Includes replacement of bare steel pipe in HCAs
- Direct Assessment (<1% of total assessment miles)



Pipeline Safety Reauthorization

SEC.23. MAXIMUM ALLOWABLE OPERATING PRESSURE

- Mandates DOT to require operators to conduct verification of records related to interstate and intrastate gas transmission lines in class 3 and class 4 locations and class 1 and class 2 HCAs to ensure that the records accurately reflect the physical and operational characteristics of the pipelines and confirm the established MAOP of the pipelines (July 3, 2013).
- Requires DOT to issue regulations, within 18 mos. of enactment, for conducting tests to confirm the material strength of previously untested gas transmission lines in HCAs that operate at a pressure $> 30\%$ SMYS (July 3, 2013).
- Requires DOT, in consultation with FERC and State regulators, to establish the timeframes for mandated testing that account for potential consequences to public safety and the environment and that minimize costs and service disruptions.

DOT ADB-2012-06

- Requires each owner or operator of a gas transmission pipeline and associated facilities to verify that their records confirm MAOP of their pipelines within Class 3 and Class 4 locations and in Class 1 and Class 2 locations in HCAs.
- Records must be verifiable, traceable and complete.
- PHMSA will issue more direction regarding how operators will be required to bring into compliance gas pipelines without verifiable records for the entire mileage of the pipeline. Further details will also be provided on the manner in which PHMSA intends to require operators to re-establish MAOP.

High Stress Pipelines $>20\%$ SMYS

- 1,100 Miles of Intrastate Gas Transmission and Storage Pipelines
 - 134 Miles in HCAs
 - 906 Miles installed prior to 1970
- 295 Miles of “Type A” ($\geq 20\%$ SMYS) Gathering Pipelines
 - 64 Miles installed prior to 1970

DEO Remediation Plan

- After records review, “pressure test or replace” pipelines ($\geq 20\%$ SMYS) where we couldn’t confirm MAOP as a result of:
 - Untested Pipe; or
 - Undocumented records
- Ongoing efforts are being made to locate test records and if found, some of this remediation may not be required
- Risk Factors:
 - Population Density
 - % SMYS

DEO Remediation Plan Prioritization Methodology

1. High Stress Pipe in HCAs $> 30\%$ SMYS
2. High Stress Pipe in HCAs 20 - 30% SMYS
3. High Stress Pipe outside HCAs $> 30\%$
SMYS
4. High Stress Pipe outside HCAs 20 - 30%
SMYS

DEO Remediation Plan for Untested or Undocumented Pipe

- HCA segments remediated in 2012
- Other segments
 - Continue records research
 - Remediate unsubstantiated segments
 - Target completion time frame 2014



DEO Plan

Proposed Future Actions

Feet of T&S Line Pipe outside HCAs > 30% SMYS:

- 61,474 Feet Pressure Tested
- 12,172 Feet Replaced

Time frame to complete 2014



DEO Plan

Proposed Future Actions

Feet of T&S Line Pipe outside HCAs 20 - 30% SMYS:

- 148,258 Feet Pressure Tested
- 6,673 Feet Replaced

Time frame to complete 2014

AGA's Proposed Changes to DOT 192.619

- (e) Transmission pipelines operating greater than 30% SMYS in HCAs:
 - (1) For transmission pipelines located in HCAs with a MAOP that produces a hoop stress of greater than 30% of SMYS and that have not been previously tested , the pipeline must be subjected to one of the following tests;
 - (i) a pressure test consistent with the requirements of section a(2),
 - (ii) an in-line inspection,
 - (iii) a reduction in pipeline MAOP by 20%, or
 - (iv) a procedure that has been approved by the Administrator.
 - (2) The operator shall within 6 months of this final rule, submit a plan (not to exceed *xxx* years in duration) to the authorities having jurisdiction to test the segment according to one of the methods in (e)(1) above. Post construction pressure tests will be conducted in accordance with Part 192, Subpart J.
 - (3) The tested pipe shall following the IM reqmts of Subpart O or B31.8s

AGA's Proposed Changes to DOT 192.619

- The language maintains the existing grandfathering for all distribution pipe and transmission pipe below 30% SMYS. It gives four options for pipe above 30% to comply with MAOP existing pressure tests, new subpart J pressure tests, in-line inspection that confirms the design MAOP.
- No deadline has been established for completing the tests because more information is needed from operator record reviews.



THE END

Thank you for your
attention!

Questions?