PHMSA Proposed Rulemaking
Safety of Gas Transmission & Gathering Lines Rule

October 2016
Safety of Gas Transmission & Gathering Lines Rule

• Significant Rule
• ANPRM published: 8/25/2011
• NPRM: 4/8/2016
• NPRM Comments Submitted: 7/7/2016
• PHMSA Gas Pipeline Advisory Committee to meet 3 times on this rule:
  – December 2016, January 2017, & February 2017
  – Estimated Final Rule Publication Date: Q4 2017

Industry Reaction

• Overwhelming volume of changes
• Goes beyond Congressional mandates
• Prescriptive and contradictory requirements
• Cost analysis severely understated
## Anticipated Path to Final Rule

<table>
<thead>
<tr>
<th>Safety of Gas Transmission &amp; Gathering Lines Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHMSA Reviews NPRM Comments</td>
</tr>
<tr>
<td>PHMSA Presents Path Forward to GPAC (3 Meetings)</td>
</tr>
<tr>
<td>PHMSA Makes Necessary Modification</td>
</tr>
<tr>
<td>Office of the Secretary of Transportation Reviews &amp; Approves Final Rule</td>
</tr>
<tr>
<td>Office of Management and Budget Reviews &amp; Approves Final Rule</td>
</tr>
<tr>
<td>Final Rule Publication</td>
</tr>
<tr>
<td>Effective Date of Final Rule</td>
</tr>
</tbody>
</table>
Areas of Significant Concern

- **Material Verification**
  - Retroactive requirement to have detailed material records that were never required by pipeline safety regulations is contrary to PHMSA’s historical regulations and their authority.
  - Prescriptive requirements do not reflect current technologies and do not allow for the use of future technologies. These requirements need to be performance based.

- **MAOP Verification**
  - Over prescription has led to confusing requirements.

- **General Recordkeeping Requirements & Definition for “Traceable, Verifiable, & Complete”**
  - PHMSA overstates their authority to retroactively require operators to “make and retain” records on materials, construction, MAOP, etc.
  - Defining TVC will allow for regulatory certainty.

- **Definition for “Able to Accommodate Inspection by Means of an Instrumented In-Line Inspection Device”**
  - The introduction of this qualifier for MAOP Verification & Pipeline Assessments drives the need for a codified definition.
Record Retention Requirements

• PHMSA introduced new “general requirements”
• Requires operators to have records that were never required
• No discussion on how to implement these retroactive requirements
• PHMSA has applied RTVC to all records and to all pipelines (gas transmission, distribution, & gathering).
• No consideration for the costs associated with achieving new requirements
• PHMSA utilizes the terms “reliable, traceable, verifiable, and complete” 11 times in the NPRM when referring to records.
  – The term “reliable” does not add substance
  – Define “traceable, verifiable & complete” for regulatory certainty
  – Utilize the PHMSA Advisory Bulletin as the basis.
## MAOP Verification

<table>
<thead>
<tr>
<th>Applicability: Pipelines in HCAs, Class 3 or 4 Locations &amp; MCAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pipeline segment has experienced a reportable</td>
</tr>
<tr>
<td>2. No record of a pressure test</td>
</tr>
<tr>
<td>3. MAOP is established using the grandfather clause</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Completion Dates: Actions must meet the following timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create a plan in 1 year</td>
</tr>
<tr>
<td>2. 50% of mileage in 8 years</td>
</tr>
<tr>
<td>3. 100% of mileage in 15 years</td>
</tr>
<tr>
<td>4. If there are constraints that limit the operator from meeting the deadline, the operator must file a petition for extension of 1 year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAOP Determination: Six methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pressure test</td>
</tr>
<tr>
<td>2. Pressure reduction</td>
</tr>
<tr>
<td>3. Engineering critical assessment</td>
</tr>
<tr>
<td>4. Pipe replacement</td>
</tr>
<tr>
<td>5. Pressure reduction for segments with small PIR and diameter</td>
</tr>
<tr>
<td>6. Alternative technology</td>
</tr>
</tbody>
</table>
Material Verification

• Transmission Pipelines that do not have reliable, traceable, verifiable and complete (RTVC) material records for all pipe & components

• Requires a “Material Documentation Plan”
  – Address missing material records: Develop and implement procedures for conducting PHMSA prescribed non-destructive or destructive tests, examinations, and assessments

• Retroactively requiring material records for pipelines installed prior to Federal pipeline safety regulations.
TIMP Assessment Methods

• Increased scrutiny on the sole use of Direct Assessment
  – “Use of direct assessment is allowed only if the line is not capable of inspection by internal inspection tools and is not practical to assess (due to low operating pressures and flows, lack of inspection technology, and critical delivery areas such as hospitals and nursing homes) using the [other] methods …”

• Free-swimming ILI tools are not always feasible for intrastate gas transmission pipelines that are embedded within gas distribution systems.
  – PHMSA needs to adequately account for the cost to utilize robotic or tethered tools if that is what they are recommending.

• Direct Assessment can be a very powerful tool and more effective than ILI in providing operators with a better understanding of critical conditions, such as CP and coating condition issues. It also helps to identify trends that can be addressed through P&M measures.
  – Prescriptive requirements for DA methodology is contrary to the principles of integrity management.
TIMP Risk Management

Risk Modeling

• Broadening of mandatory requirements for risk models:
• Driving towards quantitative risk modeling
• Gather, Verify, Validate, & Integrate” 48 data sets into TIMP Risk Models
  – Dilutes risk model and weakens integrity management
• Identify and Analyze spatial relationships among anomalous information

Preventive & Mitigative Measures

• Currently identify preventive and mitigative measures to address known, perceived and potential threats
• Proposed rule requires 13 different actions on the entire pipeline
Affected Transmission System

LEGEND
- Transmission Main < 20% SMYS
- Transmission Main ≥ 20% SMYS
- Transmission Main > 30% SMYS
- Con Edison Astoria LNG Facility
- Gate Station
- Bi-Directional Meter (National Grid interconnect)
Impacts to Con Edison

• Pre-1970 Construction (1948 – 1950)
  – Proposed requirements for MAOP verification and material verification
    • Hydro testing not always feasible
    • Material verification of pipe components may not feasible
  – One viable option is pipe replacement
    • 15 Year replacement time frame challenging:
      – Dense urban operating environment
      – Service disruptions to electric and steam generators

• Burdensome Administrative Requirements
  – Retroactive documentation requirements
  – Very prescriptive
  – Expands requirements to distribution system
    • Management of change
  – New record keeping requirements
    • Reliable, traceable, verifiable and complete
Next Steps

• Outreach: continue to communicate with regulators and public officials

• Develop a strategy to implement a plan to comply with the rule
  – Required: 15 year timeframe
  – Proposed: 20 to 25 year timeframe

• Coordinate with distribution replacement programs