Feedback to PHMSA proposed Gas Integrity Verification flowchart from liquid pipeline industry perspective
Agenda

• In general four comments to flowchart;
  – Positive comments
  – Scope and process questions
  – Missing key details
  – Technical issues
Positive Comments

• Three choices to establish / verify MAOP
  – Hydrotest with spike test
  – Derate with life fatigue analysis
  – Engineering Critical Assessment

• Recognizes the fact the hydrotesting is not the only method to assess pipelines

• Documentation focuses on x42 and higher pipe.
• Allows flexibility and an engineering approach
Scope and Process Questions

• Is this just to establish MAOP in absence of records verification?

• Does PHMSA want to apply this to broader Integrity Management issues? Would IMP 2.0 include this?

• Will this be a regulatory requirement? If so, what is the intended rulemaking process?

• Does PHMSA want to apply a similar process to liquid pipelines? Through what process?
• Key technical details missing;
  – Document verification requirements
  – Hydrotest requirements
  – Spike test requirements
  – Derating; what level of deration? Based on what operating history?
  – Engineering Assessment requirements
**Technical Comments**

**Clarification of Terms**

*FROM PHMSA PRESENTATION*

- **Legacy Pipe** means LFERW, SSAW, Flash Weld (AO Smith), or pipe w/ joint factor < 1 (e.g., lap welded pipe)
- **Modern Pipe** means post-code pipe not manufactured with any techniques listed under Legacy Pipe
- **Legacy Problematic Construction Techniques** means wrinkle bends, miter > 3 degrees, Dresser Couplings, non-standard fittings, arc welds, oxyacetylene welds, bell spigots, puddle weld repairs, etc.

- We need clear definitions of these terms
- What is legacy Problematic pipe?
Technical Comments

- Why emphasis on low stress (<20% SMYS)
- Current code exemptions for low stress lines are different.
- Manufacturing threats are stress dependent.
Technical Comments

• What is definition of Validated Traceable Material Documentation? Longhorn?
• Why cut out and test requirement in all scenarios?
• May be other less destructive methods to gather same data. (ILI or in-the-ditch testing methods)
• If hydrotest or deration method is chosen, is step 14 even relevant?

Diagram:
- 13: Validated Traceable Mat'l Documentation
  - NO: See Note 1
  - YES: Cut out and test pipe samples to establish material properties See Note 2.
Technical Comments

• Subpart J test overly burdensome, other hydrotest methods adequate;
• Use “spike” test only where warranted or appropriate.
• Ensure compliance timeline reflects adequate time for project execution and minimizes service disruption for all assessment methods.
• How are systems expected to operate during documentation and testing periods?
Thank you