Low-Stress Pipelines

Panel Two – June 26th, 2006

energy API

AOPL

Low-Stress Pipelines

- For some large operators, management systems are currently in place.
  - Line Identification, Accident Reporting, Corrosion control, Assessment/IM, Leak Detection, Markers, Damage Prevention and Operator Qualification.
  - Potential incident liability drives minimum operating standards.
  - Many code requirements currently being met.
  - Cost/Benefit not a significant factor.

Low-Stress Pipelines

- For other operators:
  - Larger diameter, higher flow lines present greatest risk.
  - Proposed requirements will adequately address concerns regarding releases.
    - Identification: A necessary first step.
    - Accident Reporting: Communicates information.
    - Corrosion Control: Cathodic Protection, pigging and chemical treatment in order of ascending cost and decreasing benefit.

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- Other Operators – cont.
  - Proposed requirements – cont.
    - Assessment: In Line Inspection provides valuable information but at significant cost (trap extensions, tool cost, etc.). Pressure testing is less costly.
    - Leak Detection: Meter in – meter out, meter to tank, line patrol can provide operating information over varying time periods.
    - Markers: Critical for damage prevention at modest cost.
    - Damage Prevention: One-call and other liaison programs cost little for much benefit.

Low-Stress Pipelines

- Other Operators – cont.
  - Proposed requirements – cont.
    - Operator Qualification: Low-stress lines limited to Abnormal Operating Conditions only.
  - Cost/Benefits
    - Integrity assessments are largest concern due to significant cost.
    - Metering installations are capital intensive, especially for larger flow rates.
    - Cathodic Protection installations require modest capital outlay.
    - Benefit measured by avoided costs.