

DRAFT

PHMSA Anomaly Assessment and Repair Workshop October 22, 2008

Agenda Supplement - Key Issues and Discussion Topics

(Note: A final version will be provided to meeting attendees at the workshop)

Implications of the Advantica Study

- 1) Do repair and evaluation strategies need to be changed for:
 - a) High strength steels (X60 and above)?
 - b) Anomaly depth $\geq 60\%$ through wall?
- 2) Is additional testing needed to determine the reliability of B31G, Mod B31G and RSTRENG for predicting failure pressure in high strength pipe with deep defects?

Panel Discussion Topic: ILI Tool Defect Sizing Accuracy

How should operators use tool tolerances to make repair/replacement decisions?

- 1) Panel to discuss prudent approaches to take sizing accuracy into account when making integrity-related decisions in response to ILI
 - a) Add tool accuracy spec to as-called defect size
 - b) Comparison w/ as-found (unity plots)
 - c) Statistical approaches such as probability of exceedance (poe)
 - d) Confirmation digs
 - e) Comparison with previous ili data
 - f) Other
- 2) Discuss effective techniques for considering sizing accuracy
- 3) Identify circumstances where sizing accuracy most critical
- 4) Discuss how to deal with over-called defect sizes and unnecessary digs

Panel Discussion Topic: Corrosion Growth Rate

Usage of Standards and Growth Rate Determination

- NACE, ASME B31.8S, and Other Standards
- Future growth rate of anomaly

- 1) Calculating projected (future) defect length, width & depth (i.e., predicted size of defect at next planned assessment or at future time of scheduled repair)
- 2) Selection of appropriate assumed corrosion growth rate when the actual corrosion growth rate is not known or cannot be reliably determined
- 3) Determine inspection intervals
- 4) Handling MIC and stray current / interference
- 5) Influence of corrosion rates on available safety margin
- 6) Handling time between as-found and repairs of CP systems (i.e., subtract time from inspection interval)

Panel Discussion Topic: Repair criteria

- In-Line Inspection Results – evaluation methods
 - High Consequence Areas (HCAs)
 - Outside HCAs: Class Locations – 1,2 ,3 and 4,
 - Pipe where Class Location changed
 - Excavated Pipe Evaluation Methods
 - High Consequence Areas (HCAs)
 - Outside HCAs: Class Locations – 1,2 ,3 and 4
 - Pipe where Class Location changed
 - Other – Areas where combined stresses may be considered:
 - What considerations are being used for the pipe loading effects of highways, heavy equipment work areas, terrain, and overpressures protection?
- 1) What safety factors should be used in evaluating ILI results?
 - a) HCA
 - b) Non-HCA
 - c) Pipe operated under special permit
 - 2) Discuss how the following considerations should be applied to provide adequate safety margins?
 - a) Tool tolerance
 - b) Corrosion growth rate
 - c) External stresses
 - d) Overpressure protection
 - 3) Discuss prudent and safety focused criteria for investigating anomalies and repairing defects in non-HCA areas (no special permit)