Panel 3: Considerations for Natural Gas Pipeline Leak Detection Systems

Improving Pipeline Leak Detection System Effectiveness

High Level Agenda for Panel 3

- PHMSA National Perspective for Natural Gas (NG) Systems
- *Placeholder:* 2nd Regulatory Perspective
- Natural Gas Pipelines National Perspective
- Individual NG Transmission Operator Perspective
- Individual NG Transmission Operator Perspective
- Individual NG Distribution Operator Perspective

What Will Presentation Content Reflect?

<u>Regulatory Perspectives</u> – Will set the regulatory expectations based on the current requirements. Data will be presented illustrating the recent record of the industry and will identify areas where improvements can be made. The presentations will also identify the recent direction provided by Congress and how this event will assist in addressing a wide range of goals.

<u>National NG Industry Perspective</u> – The National Perspective will provide a broad overview of the industry's position for utilizing leak detection systems (LDS). This presentation will briefly discuss the issues identified in the considerations shown below.

- 1. What is the current state of LDS usage in natural gas pipelines? Try to categorize high level if you try to respond.
- 2. How can NG Transmission Pipeline Operators improve the operation/performance of conventional LDS?
- 3. How can you factor layers of redundancy into an overall leak detection strategy?
- 4. What are some of the challenges with LDS for existing vs. new pipelines? Technology Gaps?
- 5. How can shut in times be improved by utilizing leak detection technology along with valves, meters and computational pipeline monitoring (CPM)?

<u>Individual NG Transmission Operator Perspectives</u>: Should specifically address the presentation considerations shown below.

- 1. How can you factor layers of redundancy into an overall leak detection strategy?
- 2. How can shut in times be improved by utilizing leak detection technology along with valves, meters and CPM?
- 3. What are the CAPEX/OPEX costs with installing/maintaining systems on existing vs new pipelines?
- 4. How are false positives/negatives addressed with LDS?
- 5. How do human factor issues impact leak detection performance?

- 6. How do external/environmental and operating conditions (i.e. temperature, pressure differentials and time lag) impact technology or system performance?
- 7. Are you following, pilot testing new advances in technology or are you supporting any related research?

<u>Individual NG Distribution Industry Perspective</u> – Should specifically address the presentation considerations shown below.

- 1. How can NG Distribution Pipeline Operators improve the operation/performance of their LDS strategy?
- 2. Are there any distinguishable differences on how LDS is applied to distribution vs. transmission pipelines?
- 3. How can you factor layers of redundancy into an overall leak detection strategy?
- 4. What are some of the challenges with LDS for existing vs. new pipelines?