

Remarks by Vice Admiral Thomas J. Barrett, (USCG Ret.) Administrator, DOT/PHMSA - Pipeline R&D Forum

1. **Why use an enterprise approach for pipeline safety research and development?**
 - a. We face changing challenges together
 - b. Dwindling resources leaves no room for duplication and lost time
 - i. Coordinate
 - ii. Collaborate
 - iii. Co-fund
 - c. Stakeholder participation and the enterprise approach is working
 - i. Improvements to existing technology
 - ii. New technology soon to materialize
 - iii. Consensus standards in revision
 - d. Thanks for participating in the PHMSA program to date
 - e. Your future participation is paramount for “our” continued success
 - i. R&D Forums & Workshops
 - ii. Pre-award review panels
 - iii. Peer Review panels
 - iv. Technology demonstrations
 - f. Significant efforts are necessary throughout the research cycle, not just in the beginning
2. **Many new challenges & drivers for a collaborative R&D focus**
 - a. Global warming – What about New Orleans?
 - i. Reducing emissions
 - b. Energy from frontier regions
 - i. Arctic (telluric currents among many threats)
 - ii. Offshore & deepwater
 - c. Existing Infrastructure: Maximizing throughput without compromising safety/environment
 - i. Operating at increased pressures (80% SMYS)
 - ii. Harmonizing cross boarder standards
 - d. PIPES Act 2006 – Damage prevention
 - e. Upcoming Distribution Integrity Management Regulations
 - f. Old threats revisited – Corrosion
 - i. Are we adequately addressing?
 - g. Implications of new fuels on the existing infrastructure
 - i. LNG
 - ii. A hydrogen economy
 - iii. E85 - Ethanol
3. **Much innovation needed!**
 - a. Technology
 - i. How can we prevent damage?
 - ii. How can we inspect unpiggable pipelines (gas and liquid)?
 - iii. How can we assess integrity of plastic pipes?
 - iv. Can we improve leak detection for liquid lines?
 - v. Can we safely deliver gas from LNG to consumers?
 - vi. Can existing pipelines safely transport ethanol and hydrogen?
 - b. Consensus Standards and Knowledge
 - i. We must manage corrosion better– systems approach
 - ii. Some pipelines will operate at higher pressures - 80% SMYS
 1. Reevaluating integrity management programs
 - iii. Are standards addressing high strength steels?