

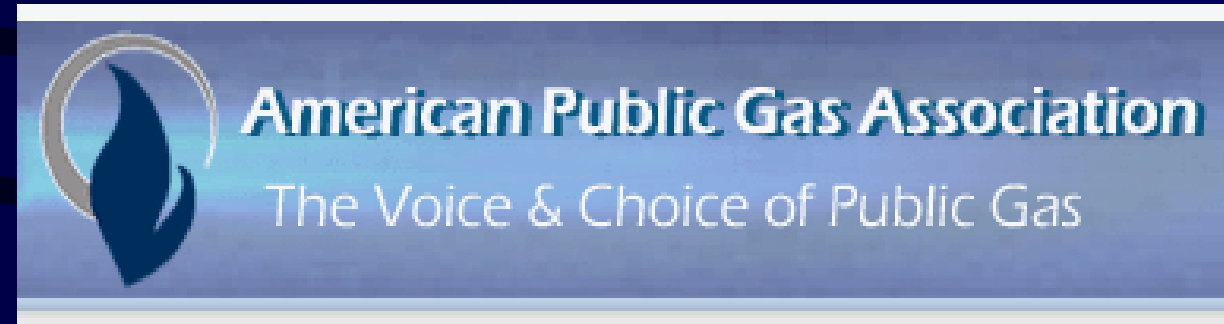
Key Challenges Facing the Natural Gas Distribution Industry

Pete Terranova

Vice President - Operations
UGI Utilities, Inc



This Presentation is Brought to You by



We're Here to Discuss -

- The challenges natural gas distribution companies are facing
- Our research priorities to help meet those challenges
- Our call to action

Challenges Facing Distributors

- High and volatile gas prices
- Population growth/challenges of building new infrastructure to meet that growth
- Aging workforce
- Aging infrastructure

Challenges Facing Distributors

- Environmental need for more efficient use of natural resources
- Limited research funding and almost no funding for mid-long term research
- Increasing environmental challenges

Operational Challenges

- New/upcoming regulations (DIMP, EFVs, OQ)
- Interference with underground pipelines
- Locating underground pipes and leaks
- Excavation and site restoration
- Determining the integrity of mains/services
- Gas quality and interchangeability issues

Research Priorities to Help Address These Challenges

Technologies that will -

- Help companies adapt to aging workforce
- Proactively monitor underground pipe conditions, including potential interference and damage
- Better pinpoint underground infrastructure and leaks

Research Priorities to Help Address These Challenges

- New materials, components and construction technologies to allow companies to efficiently expand capacity to serve growing population centers
- Improved pipe repair & replacement technologies to safely and reliably extend the life of existing infrastructure

Research Priorities to Help Address These Challenges

Technologies and methods that will

- Reduce the excavation footprint
- Allow companies to assess integrity in challenging situations, such as cased road crossings
- Enable blending of methane from various alternative sources, with natural gas

Research Priorities to Help Address These Challenges

Technologies and methods that will

- Provide better joining and fitting capabilities
- Enable greater direct use of natural gas by consumers

Benefits of this Research

- Improved reliability/integrity/deliverability
- Enhanced ability to detect and assess pipeline anomalies
- Improved use of company resources
- A reduction in incidents
- Better materials, components & processes
- Improved gas quality and BTU control

Our Call to Action

- Research is critical if we are to advance this industry and adapt to the changing needs of customers and employees
- We must work together to make the most of available resources
- If you are not part of a natural gas research consortium, join if you have the resources

Thank You!