

Government / Industry
Pipeline Research and Development Forum
March 22nd 2005
Houston, Texas

Presentation by the
Industry / Government Steering Committee
on
Energy Pipeline Infrastructure and Research

Ladies and Gentlemen:

I'm pleased to be here along with a number of my colleagues from industry and government who are working on an important initiative.

But first, before I speak to that initiative, I would like to stop and reflect on why we're gathered here today ...

I'd propose to you that we are really here to talk about the future ...

.... a future that we know will require new pipeline technologies

.... a future that will only be possible through research and development

.... and a future that will depend on our collective ability ...

... to forecast and prioritize our greatest research needs.

These are not small challenges. The pipeline industry will be affected by the decisions that result from your deliberations.

But let me assure you that others also share these challenges. I am here to tell you about the work of a joint industry and government committee that has been considering many of these same issues.

This morning, I'll tell you a bit about the committee and the work we've done in examining the nation's infrastructure; issues associated with supply and demand; the challenges we've observed;

the role that research must play; and our intent to apply your work to this initiative.

I'll begin by describing the committee. It is a unique group that has a demonstrated ability to transform our industry.

Together, its members represent 400,000 miles of operating gas and liquids transmission lines; they transport 95% of America's natural gas; they make energy deliveries to 56 million homes; they regulate two thirds of the nation's energy requirements transported by pipelines; and they are charged with ensuring the reliable and safe operation of national energy infrastructure.

I am referring to a group that includes:

- from government
 - the Office of Pipeline Safety ... Department of Transport
 - the Office of Energy Assurance ... Department of Energy

- from industry
 - the American Gas Association
 - the Association of Oil Pipelines
 - the American Petroleum Institute
 - the Interstate Natural Gas Association of America
 - the Northeast Gas Association and NYSearch
 - and Pipeline Research Council International.

Now this is no ordinary gathering of bodies. This is the industry equivalent of a planetary alignment and we know that industry alignments do not occur unless there is good reason.

For that reason, I would direct you to the report to the President by the National Energy Policy Group. Chapter one, paragraph one states:

“America's current energy challenges can be met with rapidly improving technology, dedicated leadership and a comprehensive approach to our energy needs. Our challenge is clear – we must use technology to reduce our demand for energy, repair and maintain our infrastructure, and increase our energy supply.”

The challenges in that report resonate with every member of the Committee on Energy Pipeline Infrastructure and Research. They also reflect much of the purpose for this initiative.

That purpose, as it relates to this audience, is to assess our challenges and the role that research and development must play. It is our intention to develop a report that we will share with senior decision makers.

We've examined four areas to date, which I'll describe in brief:

First, we reviewed the role of energy pipelines. Now you likely know that pipelines transport two thirds of America's oil and petroleum product consumption and virtually all natural gas.

These facts build a strong foundation on which we can declare that pipelines are truly a national asset. Pipelines provide the means on which our economies are built and, although pipelines may be out of sight, they must remain top of mind.

Second, we reviewed our energy pipeline infrastructure.

While impressive, it is not enough to say that there are several million miles of liquids and gas pipelines in the United States. Nor should we limit our description to the tens of millions of homes that are served through distribution pipelines.

We should instead, rightfully, describe our pipeline infrastructure as the largest energy delivery system on the planet. A system that is broadly distributed, that is structurally diverse and that requires careful management and oversight if we are to use it effectively and safely.

Third, we reviewed supply and demand. As many know, the gap between consumption and domestic supply continues to grow. This will place increased demands on pipelines associated with imported petroleum, refined products and natural gas.

We noted that supply sources are shifting. This is resulting in a reconfiguration of the continental energy grid with forecast

expenditures in excess of \$60 Billion for new pipelines to meet US demand.

Demand patterns are also changing both geographically and in terms of commercial requirements. Our pipeline networks, existing or newly constructed, must meet these many challenges if we are to be successful in acting as the primary conduit for energy transportation.

Fourth, we discussed our challenges. To say there are many would be an understatement. However, the committee has focused on the following as representative of our greatest challenges.

We see our challenges as being to:

1. assure the reliability of the Nation's pipeline assets;
2. continue to reduce the risks by, and to, pipelines and communities;
3. understand changing supply, demand and end use impacts;
4. anticipate changes and adapt or build new infrastructure;
5. improve pipeline performance;
6. ensure effective regulation and oversight;
7. review conflicting public policies and regulation; and
8. create an environment in which pipelines can fulfill their role.

These challenges can be summarized, in part, by considering the oversight of pipelines, which can be thought of in terms of concentric circles representing different groups.

At the outside of the circles are those to whom industry or governments must answer. These can include the public, consumers, shareholders, landowners and special interest groups.

The inner rings reflect the various roles of government, at State of Federal levels. Their responsibilities are many and it requires considerable skill to manage the internal and external relationships while balancing public policy and decision making.

At the inside is the pipeline operator who must meet a variety of needs in order to receive or maintain the privilege to operate.

But with all that said, expectations are often straightforward: pipelines must be safe, they must meet environmental standards, they must be reliable and they must reflect good business and regulatory practices.

Each of those challenges needs to be met in order to receive the privilege to operate.

At this point, our committee would turn to each of you. Our work to date, in considering the role of pipelines, in surveying our infrastructure and in considering supply and demand has led us to identify a number of challenges.

However, challenges require solutions and we know that a number of those solutions can only be found through research. We need to look at your work to understand where research solutions may be possible.

When we look at areas where research can address a challenge, we often begin by identifying a common threat or opportunity.

But that, in itself is not sufficient. We need to look at the underlying data to ensure that we are focusing our efforts on the right thing. We must also prioritize research so that we are applying funds and resources where the need is greatest.

Let's also not forget that some challenges can be resolved through knowledge based solutions. Robots that crawl inside of pipes are interesting but the development of strain based criteria may be just as important for other issues. Solutions can be found in both technology and knowledge.

Finally, when the research phase draws to an end, we must see the results through to implementation. That technology transfer must occur if we hope to realize the benefits of research. We'll never make a touchdown unless we've learned how to complete the pass.

However, when we can implement the results of research successfully ... we have the ability to change the world.

Research is the great engine that has the power to enable our future ... that transforms ideas into reality and, in doing so, changes our industry for the better.

That is the real benefit of research and the role for research that we must seek.

In closing, I would leave you with another statement from the report to the President by the National Energy Policy Group.

“America’s energy challenge begins with our expanding economy, growing population, and rising standard of living. Our prosperity and way of life are sustained by energy use”

The need for pipeline research and technology to support an expanding economy has never been greater.

We know that the people in this room reflect the best in the nation in our industry.

We know that you are up to the challenge and that, over the next few days, you will chart our course for the future.

We look forward to seeing the results of your efforts.

Thank you on behalf of our committee.

Art Meyer Speaking as Chair of the
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on
Energy Pipeline Infrastructure and Research

American Gas Association
Association of Oil Pipelines
American Petroleum Institute
Interstate Natural Gas Association of America
Northeast Gas Association and NYSearch
Office of Energy Assurance, DOE
Office of Pipeline Safety, PHMSA, DOT
Pipeline Research Council International