



Natural Gas Technologies II Ingenuity and Innovation



Session 10 – Gas Industry Forum

Background

The natural gas industry is undergoing dramatic change and a new paradigm is expected for the U.S. The domestic resource base is being questioned and re-evaluated, production is declining at an ever-increasing rate, and restricted access to resources underlying public lands significantly impact the exploration and production (E&P) sector. At the same time, demand for electricity continues to rise; recent capacity additions have been almost exclusively gas-fired. The Energy Information Administration, in its Annual Energy Outlook 2004, projects that rising natural gas prices will improve the cost competitiveness of coal-fired technologies by 2025, especially in the out years. What will the gas industry look like in five years - in ten years, in terms of supply adequacy, price stability, demand requirements, regulation, technology deployment, and concentration of ownership? How significant a role will LNG play in the supply picture? How will projects be financed and executed? To shed light on these and other key natural gas related issues, a group of industry leaders has been convened to share their knowledge and insights, including thoughtful solutions to the *crisis*.

Panel Discussion: Perspectives on Natural Gas Supply

Theme

North American natural gas resources are substantial – more than 1,000 trillion cubic feet. Resources however, do not necessarily translate to affordable, timely supplies. Multiple impediments limit resource development, including location and access, permitting, regulation, litigation, and equipment and personnel. For our discussion of upstream issues, we have assembled a group of knowledgeable individuals to share their diverse views on upstream challenges facing the Nation and to suggest actions that will lead to sustainable supplies of natural gas.

Discussion Issues

- ▶ Federal lands access
- ▶ Environmental protection / regional water issues
- ▶ Permitting
- ▶ Market access-pipelines
- ▶ Capital formation
- ▶ Role of R&D – government interface with private sector/academia/not-for-profit
- ▶ Productive capacity
- ▶ International gas markets – imports including LNG
- ▶ Non-traditional resources

Session Moderators

Brad J. Tomer, Natural Gas Supply Technology Manager, National Energy Technology Laboratory

Kent Perry, Director, E&P Research, Gas Technology Institute

Panel Discussion: Perspectives on Natural Gas Supply

Session Speakers

- Federal Land Manager – **Kermit Witherbee**, Group Manager, Fluid Minerals, Bureau of Land Management, U.S. Department of the Interior (*Confirmed*)
- Investment Banking Community – **J. Marshall Adkins**, Director of Energy Research, Raymond James and Associates (*Confirmed*)
- Environmental Community – TBD
- Independent Operator – **Randy Couch**, General Manager, E&P Technology and Planning, Anadarko Petroleum Corp. (*Confirmed*)
- International Supplier – **Dr. David Hughes**, Leader, National Coal Resource Inventory, Natural Resources Canada (*Confirmed*)
- Senior Department of Energy Official – **James A. Slutz**, Deputy Assistant Secretary for Natural Gas and Petroleum Technology, U.S. Department of Energy (*Confirmed*)

8:40 **Welcome/Introductions/Objectives**

Moderators

9:00 Speakers 1-3

10:00 **Questions & Answers**

10:20 **Break**

10:50 Speakers 4-6

11:50 **Questions & Answers**

12:15 **Adjourn / Luncheon**

Panel Discussion: Perspectives on Natural Gas Demand

Theme

U.S. natural gas prices continue to rise and are expected to remain high and volatile for the foreseeable future. Many downstream factors will influence natural gas pricing, including its increased use for power generation, storage inventory variability, more stringent environmental regulation, and the increasing role of distributed generation. This panel consists of a select group of experts from key market sectors and trade organizations who will discuss their views on these natural gas demand-side challenges and also suggest actions to ensure the availability of affordable energy and feedstocks, which are essential for a healthy economy.

Discussion Issues

- ▶ Natural gas price impact on electricity generation, industrial productivity, residential consumers, and the economy
- ▶ Increased use of natural gas for power generation
- ▶ Role of distributed generation
- ▶ Market access – pipelines
- ▶ Storage inventories

Panel Discussion: Perspectives on Natural Gas Demand

Discussion Issues (continued)

- ▶ Trends in new electric generating capacity
- ▶ Access to capital
- ▶ Environmental regulation
- ▶ Regional water issues
- ▶ Role of R&D-government interface with private sector/academia/not-for-profit

Session Moderators

John R. Duda, Senior Analyst, National Energy Technology Laboratory

Melanie Kenderdine, Vice President, Washington Operations Office, Gas Technology Institute

Session Speakers

- Investment Community – **Christopher Ellinghaus**, Principal and Senior Equity Analyst, Power and Natural Gas, Williams Capital Group (*Confirmed*)
- Diversified Energy Company – **Michael Katz**, Vice President, California Gas Transmission, Pacific Gas and Electric Company (*Confirmed*)
- Industrial Sector Representative – TBD
- Gas Industry Association – **David Shin**, Chief Economist and Director of Statistics, American Gas Association (*Confirmed*)
- Environmental/Energy Efficiency Community – **Mark Hopkins**, Vice President, Alliance to Save Energy (*Confirmed*)

2:10 **Welcome/Introductions/Objectives**
Moderators

2:30* **Speakers** (20 minutes each)

4:10 **Questions & Answers**

4:20 **Adjourn**



* (afternoon refreshments available in-room)

Panel Discussion: Natural Gas Technology Policy – A Look Forward

Theme

Technology and policy have synergistic roles in ensuring that natural gas continues to be a viable component of America's energy portfolio. Organizations such as DOE and GTI are actively engaged in natural gas technology and policy issues because of the strong and open working relationship that exists between the U.S. private sector and the U.S. government, both of which supply funds for research as well as conduct their own research across the entire natural gas value chain. Such relationships exist in a number of other countries around the world. This session will offer some insights on the technology and policy issues that GTI and DOE have garnered from various conference sessions, convey the direction that R&D is taking, and provide a forum for further dialogue.

Discussion Issues

- ▶ Technology/Policy/Economy interfaces
- ▶ The role of technology
- ▶ The value of government/industry/academia collaborative efforts
- ▶ Natural gas and the U.S. economy
- ▶ Energy security

Session Moderators

Dr. William F. Lawson, Associate Director, National Energy Technology Laboratory

Dr. Robert A. Stokes, Vice President, Research & Deployment, Gas Technology Institute

Session Speakers

- **Rita A. Bajura**, Director, National Energy Technology Laboratory (*Confirmed*)
- **John F. Riordan**, President and CEO, Gas Technology Institute (*Confirmed*)

4:20 **Welcome/Introductions/Objectives**
Moderators

4:40 Speakers (25 minutes each)

5:30 **Questions & Answers**

5:55 **Adjourn**