National Energy Marketers Association

NEM Analysis of FERC's October 14, 2003, Public Conference on Natural Gas Markets

FERC held a conference on October 14, 2003, to discuss the natural gas markets. The conference focused on the findings and recommendations contained in the National Petroleum Council's (NPC) report: "Balancing Natural Gas Policy – Fueling the Demands of a Growing Economy". The conference featured three panel presentations by the NPC study team. Panel 1 addressed gas supply; Panel 2 addressed gas demand; and Panel 3 addressed infrastructure issues. The full text of NPC's Presentation is available on the NEM Website.

The NPC study team introduced the Report, which is the effort of a year long integrated effort of all industry sectors. Secretary Abraham requested the report last March to "examine the potential implications of new supply, new technologies, new perceptions of risk, and other evolving market conditions that may affect the potential for natural gas demand, supplies, and delivery through 2025." The basic conclusion of the report is that North America will not be self-reliant for its natural gas needs and that storage will play a critical role in the future.

A panelist from the NPC study team stated that there has been a fundamental shift in the gas markets since restructuring. He explained that while demand has grown, drilling activity has plateaued making it difficult to keep up with existing demand. This has created higher prices and more price volatility. The Report stated that the current policy direction, unaltered, will likely lead to difficult conditions in the natural gas market, but industries, government and consumers will react. Therefore, the study assumes actions beyond the status quo: Arctic pipelines built, substantial LNG imports, success in Lower-48 permitting, increased energy efficiency, and fully-compliant coal and renewable generation. The NPC analyzed two base scenarios beyond the status quo. In the "reactive path" scenario, public policies remain in conflict, encouraging consumption while inhibiting supply, resulting in higher prices and volatility. In the "balanced future" scenario public policies are aligned and alternate fuels and new natural gas supply sources compete to ensure lowest consumer costs. The Report made the following general recommendations to improve the natural gas market: (1) decrease the time involved in permitting processes and project reviews for new LNG terminals and pipeline connecting facilities; (2) improve infrastructure permitting and review processes; (3) encourage new tariffed service; (4) create more flexible storage facilities; and (5) increase regulatory certainty to facilitate infrastructure investment and the number of parties entering into long term contracts.

<u>Gas Supply</u>

Mark A. Sikkel, **(ExxonMobile)**, **Chair**, **Supply Task Group**, **NPC**, addressed the "Outlook for Gas Supply." **Sikkel** stated that growth will primarily come from Arctic gas and LNG. The study found that traditional North American producing areas will provide 75% of long-term U.S. gas needs, but will be unable to meet projected demand. The study also found that increased access to U.S. resources (excluding designated wilderness areas and national parks) could save consumers $300 billion in natural gas costs over the next 20 years. The Report stated that new, large scale resources such as LNG and Arctic gas are available and could meet 20%-25% of demand, but are higher-cost, have longer lead times, and face major barriers to development. **Sikkel** stated that the U.S. needs growth from the Rockies and the Gulf of Mexico for undiscovered non-conventional technical resources.

The study also addressed the impact new technologies will have on supply. According to the Report, gas production will be 14% higher in 2025 as a result of technology enhancements. The Report found that mature regions are experiencing declining production, and production growth will have to come from new offshore areas and non-conventional regions. The Report also found that conventional production is declining, but non-conventional production increases will maintain overall production level. The NPC recommends increasing access and reducing permitting costs/delays by 50% over the next 5 years. Specifically, the NPC recommends: improving government land use planning; streamlining and expediting permitting processes; and lifting the OCS moratorium by 2005.

John Hritcko, Jr., **(Shell) Leader**, **LNG Subgroup**, spoke about Liquefied Natural Gas (LNG). The objective of this part of the Report was to determine the import potential for LNG through 2025. To reach this objective, the Report assessed the costs of the LNG value chain, including supply, shipping, and the regasification process. According to the Report the LNG value chain involves: significant reserves; investment of $2 to $5 billion, and large volumes to accommodate the long-term market structure that LNG requires.

The Report found that the long term global supply outlook for LNG is quite robust. NPC found that factors that will impact the pace of development are the limited number of onshore regasification import terminals and permitting issues. The Report found that the current permitting process is lengthy and not coordinated between the Federal and State governments. NPC found that another key issue is pipeline interconnections, which involves LNG interchangeability issues.

NPC recommends that LNG project permit applications for onshore terminals be processed within one year. For this goal to be achieved, NPC recommends coordination and streamlining of multiple reviews and that natural gas interchangeability standards be updated. NPC sees FERC's role in LNG as either the lead agency on this issue or at least a key agency in reviewing LNG supplies.

Gas Demand

David J. Manning, **(KeySpan)**, **Chair**, **Demand Task Group**, **NPC**, explained that demand was evaluated in three sectors: (1) residential/commercial; (2) industrial; and (3) power. NPC found the following in terms of natural gas demand: (1) greater energy efficiency and conservation are vital near-term and long-term mechanisms for moderating price levels and reducing volatility; (2) power generators and industrial consumers are more dependant on gas-fired equipment and less able to respond to higher gas prices by using alternate sources of energy; and (3) gas consumption will grow, but such growth will be moderated as the most price-sensitive industries become less competitive, causing some industries and associated jobs to relocate outside North America.

The panel next discussed "Power Generation Demand." The Report found that electricity demand growth is strongly correlated to GDP growth. The Report also found that natural gas demand will grow, but coal will still play a major role for generating electricity. In conducting this study, NPC determined that the natural gas and power markets are connected and that in the future power markets are going to become even more dependent on natural gas.

NPC recommends the following to improve demand flexibility and efficiency: (1) encourage increased energy efficiency and conservation through market-oriented initiatives and consumer education; (2) provide market signals to consumers to facilitate efficient gas use; (3) provide industrial cogeneration facilities with access to markets; (4) increase industrial and power generation ability to utilize alternate fuels; and (5) take action at the state level to allow fuel flexibility.

Natural Gas Infrastructure

The Report made several findings and recommendations in terms of natural gas transmission issues. NPC found that pipeline and distribution investments will average $8 billion/year, with an increasing share required to sustain the reliability of existing infrastructure. NPC recommends that Federal and State regulators should provide regulatory certainty by maintaining a consistent cost recovery and contracting environment. The study also found that regulatory barriers to long-term contracts for transportation and storage impair infrastructure investment As a remedy, NPC stated that regulatory policies should address the barriers to long-term, firm contracts for entities providing service to human needs customers. The Report also submitted that FERC should allow operators to configure transportation and storage infrastructure and related tariff services to meet changing market demand profiles. Finally, the Report recommended that local, state, and federal permit reviews of major infrastructure projects should occur within a one-year period utilizing a "Joint Agency Review Process."

The Report also made the following recommendations in terms of distribution issues: (1) regulators should encourage collaborative research into more efficient and less expensive infrastructure options; and (2) regulatory policies should address the barriers to long-term firm contracts for entities providing service to human needs customers.

In terms of storage, the Report stated that demand profiles are changing, requiring greater flexibility in physical capabilities of storage facilities and in the services they provide. The study found that demand for seasonal storage capacity will continue to grow and that the greatest risk to the adequacy of the system continues to be cold winter weather. NPC stated that FERC should allow operators to configure transportation and storage infrastructure and related tariff services to meet changing market demand profiles.

The NPC Report concluded that price volatility is a natural and healthy phenomenon of a dynamic market. This high volatility tends to increase uncertainty and decrease investor confidence. The NPC report stated that government policies should: (1) promote free market solutions; (2) support transparency in market transactions; (3) provide safeguards against non-competitive behavior and market manipulation; and (4) foster timely and accurate supply, demand and storage information.