

INTRODUCTION AND BACKGROUND

From a natural gas industry viewpoint, the events of the previous year were remarkable. The global financial markets, triggered by the declining value of sub-prime-mortgage-backed securities in the U.S., have undergone the most severe credit crisis since the 1930's. The Federal Reserve reduced the Federal Funds Rate on December 16, 2008 to the unprecedented level of between 0.00 and 0.25 percent. The market capitalization of major U.S. banks has plummeted to less than ten percent of its recent high value, as major legacy banks, that previously were common household terms, essentially disappeared, either through bankruptcy or acquisition. Major stock-market indices have dropped to levels considered unthinkable by most market experts less than one year ago. Even more unanticipated were colossal governmental bailout packages in the trillions of dollars.

Two major hurricanes made landfall in the U.S. during the previous year. Hurricane Gustav made landfall on the coast of Louisiana on September 1, 2008, triggering the largest evacuation in U.S. history. Hurricane Ike, the third most destructive hurricane in U.S. history, made landfall in Galveston, Texas, on September 13, 2008. Natural gas production facilities in the Gulf of Mexico received damage along with gas processing facilities along the gulf coast. Although there were major curtailments of natural gas flows for a number of months due to damaged infrastructure, the upstream segment of the natural gas industry was better able to weather hurricanes Gustav and Ike than it was the downturn in the economy.

Negative growth of more than six percent in the gross domestic product during the fourth quarter of 2008 was reflective of the weakening U.S. economy. As demand waned, energy prices for both oil and natural gas slid. The daily price for West Texas Intermediate oil which stood at \$147.27 per barrel on July 11, 2008, dropped to \$32.40 per barrel by December 19, 2008. Similarly, natural gas prices declined, driven primarily by demand-reduction in the industrial sector. In early July of 2008, the 18-month Henry Hub forward strip had prices ranging from just below thirteen dollars per decatherm to well above fourteen dollars per decatherm. More recently, the 18-month Henry Hub forward curve for natural gas has monthly prices from the mid-three-dollar range to the low-six-dollar range.

Predictably, the drop in natural gas prices and the constrained financial markets have caused a fundamental shift in the capital budgets of energy companies engaged in exploration and production. The natural gas rig count for the U.S. peaked in September of 2008 at 1,606.¹ By the spring of 2009, the natural gas rig count had declined from this peak by over 45 percent. Some industry analysts believe drilling activity in the lower-48 states will continue to decline through 2009.² Such declines in the rig count potentially set the stage for future price increases as the current surplus of natural gas diminishes.

¹ "Baker Hughes: US Oil, Gas Rig Count down 41 to 1,085 This Week," Dow Jones Newswire, March 20, 2009, CNNMoney.com.

² "US Gas Supply Forecast Response to Declining Drilling Activity," George Lippman, Lippman Consulting, International Association of Energy Economics, February 12, 2009. Also, "Impact of plummeting rig count not yet apparent," Platts Energy Trader, March 18, 2009, page 12.

The decline in natural gas prices and the credit squeeze also threaten the existence of some exploration and production (E&P) companies. Those most vulnerable are likely to be small and highly debt-leveraged companies with relatively high discovery and extraction costs. Analysts and auditors have identified a number of E&P companies matching this profile that are not likely to survive the recession as “going concerns.”

Against this backdrop, a new federal administration, led by President Obama, took office in January of 2009. The Obama-Biden energy policy is centered on the minimization of foreign energy imports largely through investment in domestic alternative and renewable energy. Included in this policy is the promotion of “responsible” domestic production of natural gas. The focus is not entirely on the supply side as the administration has set a goal to weatherize one million homes annually, among other energy-efficiency programs.

The new administration has also precipitated regulatory changes in the energy sector and will likely initiate more. Of note are recent changes at the Federal Energy Regulatory Commission (FERC). Administrative rules governing the five-member commission allow for up to three commissioners including the chairman to reflect the party of the sitting president. All commissioners are appointed by the president and must undergo a Senate confirmation process. Outgoing Chairman Kelliher was replaced by Chairman Wellinghoff, a Democrat from Nevada who has served as a commission member since 2006. Wellinghoff’s central focus appears to be compliance with, and enforcement of, all the statutes, orders, rules and regulations administered by the FERC. Additional goals include increased market transparency and greater use of renewable and demand-side resources.

The environmental policies of the new administration will also likely have an impact on the natural gas industry. Natural gas is the cleanest of the fossil fuels, and Questar Gas believes that use of this resource in an efficient manner helps to remediate environmental impacts. Carbon dioxide emissions from natural gas combustion are slightly more than one half of those associated with coal. Carbon monoxide and nitrogen oxides are approximately 20 percent of that for coal. Sulfur dioxide and particulates are far less than one percent of that emitted by coal.³

While acknowledging the lack of scientific unanimity over how much global warming is caused naturally, the Obama Administration supports a reduction in carbon emissions. In accomplishing this objective, the Administration supports the implementation of an economy-wide cap-and-trade program to facilitate the reduction of greenhouse gas emissions 80 percent from 1990 levels by 2050 (see the “Global climate change/greenhouse gas” section of this report). While natural gas could displace fuels that are not as clean, a carbon cap-and-trade program, depending on how and where it is implemented, could increase natural gas costs at various junctures from the wellhead to the burner tip. Among the natural gas facilities most likely affected by a carbon tax would be natural-gas-fired power plants, transmission compressor stations, and natural-gas processing plants. Questar Gas concurs with the Administration that cost-effective energy efficiency is “the cheapest, cleanest, fastest energy source,” available (see the “Energy Efficiency” section of this report).⁴

³ “Natural Gas 1998: Issues and Trends,” Energy Information Administration’s Office of Oil and Gas, page 58.

⁴ See “www.whitehouse.gov/agenda/energy_and_environment/”

Questar Gas' customers benefit from low-cost production that the Company receives pursuant to the Wexpro Agreement (see the "Cost-of-Service Gas" section of this report). One of the major sources of this cost-of-service production is the Pinedale field, located in Western Wyoming. Questar Corporation was recently recognized by Wachovia Capital Markets, LLC, for its minimization of environmental impacts in this field. Focusing on efficiency and waste avoidance, Questar Corporation has compressed the time to drill a gas well from months to weeks which minimizes labor, fuel and per-day rig costs. The use of directional drilling from a single location minimizes rig movement and down time. The development of technology to separate drilling fluids from the gas stream eliminates the flaring of initial well production. And, Questar Corporation invested approximately \$60 million to build a pipeline network to remove water and condensates eliminating tens of thousands of truck trips annually and the concomitant dust and road maintenance. In summary, Wachovia stated, "Questar Corporation has distinguished itself as a responsible steward of capital, and its focus on efficiency benefits not only company shareholders, but its customers and the environment as well."⁵

Questar Corporation has also received an award for responsible energy development in the Pinedale Area from the Bureau of Land Management (BLM). Questar Corporation received the 2008 "Oil, Gas and Geothermal Development Environmental Best Management Practices Award." This award is given to the company that showcases the finest examples of responsible resource development of fluid minerals on BLM-managed public lands.

Policy initiatives on energy and the environment have been implemented at the state level. Utah's Governor Huntsman has become a vocal advocate for natural gas which, in his words, "emits almost no pollution, is more affordable and most importantly, is a domestic fuel found right here in our own backyard getting Utah, and the nation, one step closer to breaking our addiction to foreign oil."⁶ Huntsman has called for the designation of Interstate 15 from Idaho to Arizona as a natural gas corridor where compressed natural gas is readily available as a vehicle fuel. Natural-gas-fueled vehicles in Utah have grown, in recent years from just a few, to approximately 5,000 today. Questar Gas supports the governor's plan and expects to make facility improvements in the near future facilitating this initiative.

The credit crisis and the decline in energy prices have slowed down a number of natural gas pipeline projects that were on the drawing board. However, the Ruby Pipeline Project (Ruby) is still actively proceeding. This 42-inch 675-mile interstate pipeline, expected to cost some three billion dollars, would extend from Opal, Wyoming to Malin, Oregon crossing the service territory of Questar Gas in northern Utah. With a capacity of 1.5 million decatherms per day, this facility, if approved by the FERC, would exert upward pressure on Rocky Mountain natural gas prices. Because of its location, Questar Gas is considering an interconnection with Ruby. (For more on the Ruby Pipeline Project, see the Transportation Issues section of this report.)

Since January 12, 2008, the Rockies Express Pipeline (REX) West leg has been flowing. Although flows on the REX-West leg have exerted upward pressure on regional

⁵ "Investing in the Changing Face of Infrastructure," A publication of Wachovia Capital Markets, LLC, Integrated Research Team, November 2008, page 83.

⁶ "2009 State of the State," Governor Jon M. Huntsman, January 27, 2009.

prices, the over-supply situation in the Rockies has been such that a relatively large Henry-Hub-to-Rockies basis has continued. The REX-East leg extending from Audrain County, Missouri to Monroe County, Ohio was delayed by a few weeks. The in-service date to Lebanon, Ohio is spring of 2009. Full in-service to Clarington, Ohio is scheduled for the fall of 2009. With the completion of the REX-East leg, the entire REX system is expected over time to transport between 1.5 and 2.0 billion cubic feet of natural gas per day from Colorado and Wyoming to markets in the Midwest and Eastern United States.

The national natural gas storage picture reflects the current reduction in demand. Working gas in underground storage for the lower 48 states is substantially higher this spring than it was a year ago by approximately 25 percent. The lower-48 storage inventory level is also substantially above the five-year average. Only during the spring of 2006 did the inventory level exceed the current level. In the western storage region, inventory levels are approximately 50 percent above last year's level.

As national and regional trends affecting the natural gas industry evolve, Questar Gas incorporates, to the extent possible, these factors into its forecasting and planning processes. These processes occur within the Company on a daily, monthly, annual and multi-year basis.

Wyoming IRP Process

On November 12, 2008, the Wyoming Public Service Commission (Wyoming Commission) hosted a technical conference to explore potential revisions or adoption of new rules to the Commission's Procedural Rules and Special Regulations to comply with the Energy Independence and Security Act of 2007 (EISA). EISA amends the Public Utility Regulatory Policies Act of 1978 (PURPA) and is designed to increase energy efficiency and the availability of renewable energy. Certain provisions of EISA apply to natural gas utilities and require the integration of energy efficiency resources into the plans and planning processes of those utilities. Natural gas utilities are also directed to adopt policies that establish energy efficiency as a priority resource from a planning standpoint.

EISA requires state regulatory authorities to consider, as a means of aligning utility incentives with cost effective energy efficiency, separating fixed-cost revenue recovery from the volume of transportation or sales service provided to customers. Regulatory authorities are also required to consider the provision of utility incentives for the successful management of energy efficiency programs.

Questar Gas participated in the November 12 technical conference which was attended by industrial users, consumer advocates, and representatives of electric and natural gas utilities. After receiving input from the participants, the Wyoming Commission indicated that they would issue further direction on how this matter should proceed.

On December 9, 2008, the Wyoming Association of Natural Gas Utilities (WANGU) submitted comments to the Wyoming Commission on behalf of its members including Questar Gas. WANGU requested that the process of considering the EISA provisions be bifurcated into separate electric and natural gas processes due to the unique aspects of each sector under the Act. WANGU also argued for EISA to be applied to natural gas utilities on

a case-by-case basis. Those comments were presented at a WPSC open meeting on December 10, 2008, where EISA provisions affecting natural gas and electric utilities were discussed again by interested stakeholders. The Wyoming Commission indicated that further deliberations would be scheduled.

On February 6, 2009, the Wyoming Commission issued a Notice of Intent to Adopt Rules and Regulations. Included in this notice was a proposed rule specifying the circumstances under which utilities providing service in Wyoming are required to file integrated resource plans with the Wyoming Commission. Also issued on February 6, 2009 were integrated-resource-planning guidelines which had been proposed by the WPSC. The guidelines were not part of the IRP rule.

Utah IRP Process

The Utah Public Service Commission (Utah Commission) has also been considering new IRP guidelines and the provisions of EISA as they apply to utilities. On December 14, 2007, the Utah Commission issued its Report and Order on Questar Gas Company's integrated resource plan for plan year extending from May 1, 2007 to April 30, 2008.⁷ The Utah Commission required Questar Gas to "continue with its current IRP approach and time lines," requested the inclusion of some additional information, and also requested that specific issues be addressed in the 2008 IRP. Those issues were addressed in Questar Gas's 2008 IRP.⁸ On April 3, 2008, the Utah Commission issued draft standards and guidelines governing IRPs for Questar Gas with comments by interested parties due by May 30, 2008.⁹ Comments were submitted by interested parties including Questar Gas and discussion meetings were held. On March 31, 2008, the Utah Commission issued its Report and Order on Standards and Guidelines for Questar Gas Company requiring Questar Gas to file its 2009 IRP in accordance with the December 14, 2007, Report and Order.¹⁰ Questar Gas was ordered to prepare and file future IRPs effective June 1, 2009, in compliance with new IRP standards and guidelines attached to the Order. Consequently, Questar Gas is filing its IRP this year during May of 2009 in conformity with the December 14, 2007 Order.

The December 14, 2007, Order required that the Company address eleven specific issues. Most of these issues each addressed multiple topics. Exhibit 2.1 consists of a chart showing the issue number from the Order along with a description of each topic followed by references in this IRP document where that topic has been addressed.

⁷ In the Matter of the Filing of Questar Gas Company's Integrated Resource Plan for Plan Year: May 1, 2007 to April 30, 2008, Report and Order, Public Service Commission of Utah, Docket No. 07-057-01, Issued: December 14, 2007.

⁸ Questar Gas Company Integrated Resource Plan (For Plan Year: May 1, 2008 to April 30, 2009), Submitted: May 1, 2008.

⁹ "In the Matter of the Revision of Questar Gas Company's Integrated Resource Planning Standards and Guidelines, Request for Comments on Draft Standards and Guidelines, Docket No. 08-057-02, Issued: April 3, 2008.

¹⁰ In the Matter of the Revision of Questar Gas Company's Integrated Resource Planning Standards and Guidelines, Report and Order on Standards and Guidelines for Questar Gas Company, Docket No. 08-057-02, March 31, 2009. It is assumed that the order referenced on page 20 as the "December 17, 2007, Report and Order" is in fact the "December 14, 2007, Report and Order."

Over the preceding year, Questar Gas held a number of planning and reporting meetings on a variety of IRP-related topics in Utah. Meetings were held to provide gas purchase updates and to discuss hedging/price-stabilization issues.

On February 3, 2009, the Utah Commission held a technical conference to discuss the following topics:

- Dates of upcoming key IRP events
- Clarification of IRP guidelines to be utilized this year
- IRP topics to be addressed in the report
- SENDOUT modeling (stochastic and deterministic inputs)
- Historical gas price profiles
- Comparison of current gas price forecasts
- 2008-09 hedging summary
- Timing of purchased gas request for proposal (RFP)
- 191 Account and pass-through rate case issues

Questar Gas sent out its annual RFP for natural gas purchases on February 4th, 2009. Responses were due on February 27th, 2009.

On April 2, 2009, the Utah Commission held a technical conference to discuss:

- SENDOUT modeling update
- Natural gas price review
- Purchased-gas RFP responses
- Purchased-gas modeling results and recommendations
- Price stability history and plans

On May 12, 2009, a technical conference has been scheduled to discuss this IRP and the final IRP modeling results with Utah regulatory agencies and interested stakeholders. That meeting has been scheduled from 10:30 a.m. to 11:30 a.m. in the Heber M. Wells Building in Salt Lake City, Utah.

During the course of the IRP process Questar Gas has maintained four main goals and objectives:

1. To project future customer requirements.
2. To analyze alternatives for meeting customer requirements from a system capacity and gas-supply source standpoint.
3. To develop a plan that will provide customers with the most reasonable costs over the long term that are consistent with reliable service, stable prices, and are within the constraints of the physical system and available gas supply resources.

4. To use the guidelines derived from the IRP process as a basis for creating a flexible framework for guiding day-to-day, as well as longer-term gas supply decisions.

Questar Gas has utilized, for many years, a computer-based linear-programming modeling tool to evaluate both supply-side and demand-side resources. This software product, marketed under the name of “SENDOUT” is maintained by Ventyx.¹¹ The SENDOUT model is used by more than 100 energy companies for gas supply planning and portfolio optimization.

Questar Gas is utilizing the most recent release of the SENDOUT model which is Version 12.5.5, received by Questar Gas in March of 2009.¹² Like the version used for modeling last year, Version 12.5.5 has the capability of performing Monte Carlo simulations. (See the Results section of this report for more information on linear programming, the Monte Carlo method, constraints and the SENDOUT model configuration.)

An annual IRP process dovetails well with the natural seasonal cycles of the gas industry. The need for end-of-calendar-year data, some of which is not finalized until mid-March, creates a tight timeframe, but ensures that Questar Gas is utilizing the most current and relevant information in its IRP. The tens of thousands of required data input assumptions and numerous SENDOUT modeling output reports are voluminous. Nevertheless, the intent of this report is to summarize, in a readable fashion, the planning processes engaged in by the Company.

This report has been organized into the following sections: 1) Questar Gas’s customer and gas demand forecast; 2) the capabilities and constraints of Questar Gas’s distribution system; 3) the local market for natural gas, the purchased gas RFP, associated modeling issues, and price stabilization topics; 4) cost-of-service gas including modeling issues, producer imbalances and future development prospects; 5) gathering, transportation and storage; 6) energy-efficiency resources; 7) the final modeling results; and 8) the general planning guidelines to be used in the implementation of the IRP from May of 2009 through April of 2010.¹³

¹¹ Ventyx is a business solutions provider to global energy, utility, communications and other organizations with approximately 1,200 employees in more than 20 locations worldwide.

¹² The first delivery of SENDOUT Version 12.5.5 to a Ventyx client was made on February 10, 2009.

¹³ Throughout this report, “Dth” refers to decatherms, “MDth” refers to thousands of decatherms, “Dth/D” refers to decatherms per day, “MDth/D” refers to thousands of decatherms per day, “Btu” refers to British thermal units, “MMBtu” refers to millions of British thermal units, “cf” refers to cubic feet, “Mcf” refers to thousands of cubic feet, “MMcf” refers to millions of cubic feet, “Bcf” refers to billions of cubic feet, “Tcf” refers to trillions of cubic feet, “Mcf/D” refers to thousands of cubic feet per day, “MMcf/D” refers to millions of cubic feet per day, “psi” refers to pounds per square inch, “psig” refers to pounds per square inch gauge, and “lf” refers to linear feet.