

## **COST-OF-SERVICE GAS**

### **Modeling Issues**

A relatively unique resource available to Questar Gas is cost-of-service natural-gas production supplied pursuant to the Wexpro Agreement. This relatively low-cost supply source has been a major contributing factor in keeping Questar Gas' rates among the lowest in the nation.

For over one-quarter of a century, this production has been provided to the Company at Wexpro's cost of service, which historically has been below prevailing market prices. Typically, annual Wexpro production provides approximately 40-50% of the Company's total supplies. Existing production and new development drilling under the Wexpro Agreement is limited to a finite set of properties. Nevertheless, improved drilling and production technologies have helped maintain what has proven to be a remarkably enduring supply source. Wexpro management believes there may yet be many years of continued production from these sources.

The total costs remitted by Questar Gas through the monthly Wexpro invoice declined by 4.6% for the calendar year 2007 from calendar year 2006 following several years of increases. Even though these supplies are provided at Wexpro's cost of service, they are not sheltered from the inflationary forces affecting the entire natural gas industry. Production taxes and royalties are based on market valuations. The current market generally determines how operating and maintenance costs are priced. Development drilling in particular is subject to inflation. Depending on the supply of, and the demand for, drilling rigs, crews and other essential field services, cost escalations can affect the level of capitalized costs that flow through the "Wexpro Operator Service Fee" to Questar Gas' customers. Capital cost escalation for new development drilling directly affects the levels of depreciation, return on investment, and taxes that are all part of the cost-of-service methodology utilized under the Wexpro Agreement. More information on Wexpro's planned development-drilling programs is contained in the Future Resources section of this report.

Among the most important results of the SENDOUT modeling process each year is a determination of the appropriate production profiles for cost-of-service gas. This year, Questar Gas has modeled 51 categories of cost-of-service production. These categories have been created to naturally group wells which have common attributes including factors such as geography, economics and operational constraints. A large amount of data must be compiled to provide the inputs to the SENDOUT modeling process. Questar Gas has relied on the expertise of Wexpro personnel in assembling the data elements needed to model each category. Some of those data elements are: reserve estimates, production decline parameters, depreciation and amortization rates, carrying costs, general and administrative costs, operating and maintenance costs, production taxes, royalties, income taxes, and oil revenue credits. The probability curves and median levels of production for cost-of-service gas resulting from the SENDOUT modeling process this year are contained in the Results section of this report.

## **Producer Imbalances**

In most of the wells where Questar Gas receives cost-of-service gas, there are multiple working interest partners. Each of these partners generally has the right to nominate its legal entitlements from a well subject to restrictions as defined in the operating agreement and/or balancing agreement governing that well. As the individual owners in a well each nominate supplies to meet their various marketing commitments, imbalances between the various owners are created. Imbalances are a natural occurrence in wells with multiple working interest owners. There are no fields or wells with multiple owners having individual marketing arrangements where there are no producer imbalances. No individual working interest owner can control, in the short term, the level of producer imbalances associated with a well because they do not have control over the volumes that their partners are nominating. Anytime allocated wellhead volumes differ from legal entitlements for any one party an imbalance is created for all the parties in the well. Further complicating matters is the fact that it is not uncommon for the market of a working interest owner to be lost unexpectedly, either in part or in full, for any of a variety of reasons. This can happen without the knowledge of the other parties for a significant period of time, and will contribute to an imbalance.

For some wells with multiple working interest partners, contract-based producer balancing provisions exist. These provisions generally allow for parties that are under-produced to nominate recoupment volumes from parties that are over-produced. Given the time lag in the accounting flow of imbalance information, delays of several months can occur. Also complicating the process is the fact that advance notice of several weeks is typically required before imbalance recoupment can begin to be nominated.

Questar Gas has been nominating recoupment from wells in several fields for several years, including the Ace Field. Exhibit 6.1 shows the monthly volumes nominated for recoupment during calendar year 2007 and for the first two months of 2008. The Company has also been recouping natural gas in several wells in the Trail Field. As wells have come back in balance, they are no longer eligible for recoupment. Exhibit 6.1 also shows aggregated recoupment volumes for the same time period for Trail Field.

In its IRP filed May 1, 2006, Questar Gas indicated that two other fields were under consideration for nomination of recoupment volumes. They are the Canyon Creek Unit and the Hiawatha Deep Unit.

Starting on November 1, 2007, recoupment from wells in the Canyon Creek Field have been nominated to reduce an under-produced position that had been increasing with the shut-in of much of Questar Gas' production during the summer and fall of 2007. This shut in occurred due to a decline in the market price of natural gas driven by a regional surfeit of supplies. Some of those supplies were developed in anticipation of the in-service date of the western segment of the Rockies Express Pipeline. Monthly nominated recoupment volumes for the Canyon Creek wells are shown in Exhibit 6.1 through February of 2008.

On January 1, 2008, Questar Gas began nominating recoupment in the Hiawatha Deep Well No. 3 where it was under-produced. The Hiawatha Deep wells had been shut in on June 15, 2007, due to the low price of market gas and were brought back on December 1, 2007. Predictably, the working-interest partner of Questar Gas countered by nominating recoupment in the Hiawatha Deep Well No. 1 where Questar Gas is over-produced. The net effect is that imbalance levels in both wells will be lessened and the volumes will offset to some extent. Exhibit 6.1 shows monthly recoupment volumes for both Hiawatha Deep wells.

Questar Gas has been over-produced in the Mesa/Pinedale and Dry Piney fields along with certain wells in the Moxa Arch field. Other parties nominated imbalance recoupment in these fields as can be seen in Exhibit 6.1.

On December 31, 2006, Questar Gas had a total net producer imbalance level of 0.15 Bcf. This unusually small imbalance level was the result of offsetting field imbalances (negative with positive), some of which, in absolute terms, were individually larger than the total summation. As of December 31, 2007, the net producer imbalance total was a negative 0.19 Bcf. When compared with the total annual production for the year, this level is also unusually small, and, as was the case the previous year, is a result of offsetting field imbalances.

The Wexpro “Hydrocarbon Monitor,” established by the Wexpro Agreement, reviews producer imbalances as part of its responsibilities. In a recent audit report, the Hydrocarbon Monitor concluded that total producer imbalance levels had been reasonable.<sup>1</sup>

## **Future Resources**

As previously discussed in the Cost-of-Service Gas/Modeling-Issues subsection of this report, inflationary pressures continue to impact drilling costs. Wexpro’s preliminary 2008 drilling plan calls for 39 net wells at a cost of approximately \$130 million. Over the next five years, between 33 and 76 net wells are planned to be drilled each year with Wexpro budget amounts ranging from approximately \$136 million to \$157 million per year. Drilling activity is expected to be focused primarily in the following areas: Mesa/Pinedale, Bruff/Moxa Arch, Church Buttes, Powder Wash, Birch Creek and Island.

Plans, forecasts, and budgets for drilling development wells under the Wexpro Agreement are always subject to change. Many factors including economic conditions, ongoing success rates, partner approval, availability of resources (rigs, crews and services), access issues associated with environmentally sensitive areas, re-completion requirements, drainage issues and demand letters all have an impact on drilling and capital budget projections.

Of particular importance this year, with respect to access issues, is the Revised Draft Supplemental Environmental Impact Statement (RDSEIS) for the Pinedale Anticline Project Area (PAPA) in Sublette County, Wyoming, currently under consideration by the Bureau of

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<sup>1</sup> Wexpro Hydrocarbon Auditor Review, Evans Consulting Company, April 22, 2007.

Land Management (BLM). Questar Gas is the recipient of cost-of-service gas from this area. Partners in the PAPA have proposed to the BLM that with appropriate environmental mitigation actions and operational safeguards, year-round access to develop these much needed resources would be in the public interest. The Pinedale Anticline, according to the BLM, has been estimated to contain 21 Tcf of natural gas reserves which would make it one of the largest gas fields in the United States. Year-round access to the PAPA would benefit Questar Gas's customers by making available more cost-of-service gas, plus, greater supplies in the region would exert downward pressure on regional natural gas prices in general. The BLM is expected to make a decision with regard to the RDSEIS by the third quarter of this year.