- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

In the Matter of Questar Gas Company's Integrated Resource Plan for Plan Year: June 1, 2011 to May 31, 2012	)))))	DOCKET NO. 11-057-06 REPORT AND ORDER

ISSUED: December 16, 2011

SHORT TITLE

Questar Gas Company 2011 Integrated Resource Plan

SYNOPSIS

The Commission provides guidance on Questar Gas Company's 2011 Integrated Resource Plan.

PROCEDURAL HISTORY

On June 6, 2011, Questar Gas Company ("Questar" or "Company") filed its Integrated Resource Plan for the period of June 1, 2011, through May 31, 2012 ("2011 IRP" or "Plan"). The 2011 IRP was submitted in accordance with the 2009 Integrated Resource Planning Standards and Guidelines contained in the Commission's March 31, 2009, Report and Order on Standards and Guidelines for Questar Gas Company in Docket No. 08-057-02 ("2009 Standards and Guidelines").[1]

[1] Docket No. 08-057-02, "In the Matter of: the Revision of Questar Gas Company's Integrated Resource Planning Standards and Guidelines."

On June 21, 2011, the Commission issued an action request to the Utah Division of Public Utilities ("Division") to review the 2011 IRP and provide comments to the Commission by August 4, 2011. On July 20, 2011, the Division requested an extension of the comment deadline, until August 26, 2011, in order for the Division to complete its review. On August 2, 2011, the Commission granted an extension of the comment filing date to August 25, 2011. On August 25, 2011, the Division and the Utah Office of Consumer Services ("Office") filed comments on the 2011 IRP. On September 6, 2011, the Company filed a motion for an extension of time, until September 30, 2011, for responding to the memoranda filed by the Division and the Office, which the Commission granted on September 13, 2011. On September 30, 2011, the Company filed reply comments.

SUMMARY OF THE 2011 IRP

The 2011 IRP presents the Company's annual forecasts, system and gas modeling activities, and resource selection results. The 2011 Plan also includes a discussion of regulatory, resource, and operational challenges which the Company will or could face in the future. Forecasts include annual temperature-adjusted system sales, system firm peak design-day gas demand, annual system throughput, and system annual natural gas requirement. The Company uses its forecast information, along with other operational data, to evaluate gas supply needs and system infrastructure requirements. The Company also uses these forecasts to inform the development of its annual natural gas Request for Proposals ("RFP") for base load and peaking gas supplies.

Information on proposed gas-supply packages received from potential suppliers, along with the load forecasts and information on Company-owned gas supplies and other resources, is entered into a new version of the Ventyx SENDOUT gas portfolio optimization model, Version 14.0.0. This version has the capability of using a Monte Carlo method/ stochastic simulation algorithm for risk analysis and for defining logical pricing relationships within the model. SENDOUT limits the number of variables for which stochastic analysis can be applied to two, namely price and weather. The Company explains the number of heating-degree-days, usage-per-customer-per-degree-day, and the number of customers are used within SENDOUT to forecast demand.

In conformance with the 2009 Standards and Guidelines, the Company's 2011 IRP includes an executive summary, modeling results, a distribution infrastructure/facilities action plan, and general guidelines. These Plan components are supported by the following specific sections and associated exhibits within the 2011 IRP: IRP background, customer and demand forecasts, system constraints and capabilities, purchased gas, cost-of-service (Company-owned) gas, gathering/transportation/storage, and energy efficiency programs (demand side management activities).

The 2011 IRP indicates a 2010 annual average first of month index price for natural gas on Questar Pipeline of $3.83 per decatherm, an average first of month index price for the 2010-2011 heating season (November through March) of $3.66 per decatherm, and a forecast 2011-2012 heating season gas price of approximately $4.04 per decatherm. The Company identifies the following goals and objectives in the 2011 IRP: 1) to project future customer requirements; 2) to analyze alternatives for meeting customer requirements from the standpoints of the distribution system, upstream capacity, and gas-supply source taking into consideration the inter-day load profile of each source; 3) to develop a plan using stochastic data and methods and risk management programs that will provide customers with the most reasonable costs over the long term consistent with reliable service and stable prices within the constraints of the physical system and available gas supply resources; and 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, including those associated with cost-of-service gas, purchased gas, gathering, processing, upstream transportation, and storage.

The 2011 IRP contains the following results:[2] 1) an annual system sales forecast of 109.2 million decatherms in 2011 increasing to 123.0 million decatherms in 2021. For comparison, the 2010 IRP forecast ranged from 106.4 million decatherms in 2010 to 119.6 million decatherms in 2020, and the Company's actual 2010 weather-normalized natural gas sales were 106.9 million decatherms; 2) a firm customer peak natural gas demand projection of approximately 1.281 million decatherms at the city gates for the 2011-2012 heating season. For comparison, the 2010 IRP forecast was 1.272 million decatherms for the 2010-2011 heating season, and the Company's actual firm peak demand for the 2010-2011 heating season was 0.997 million decatherms; 3) a temperature-adjusted system throughput forecast of 170 million

[2] The projections contained in the 2011 IRP reflect the temperature and elevation compensation adjustments agreed to in a Settlement Stipulation and approved by the Commission on June 3, 2010, Report and Order in Docket No. 09-057-16, "In the Matter of the Application of Questar Gas Company to Increase Distribution Non-Gas Rate and Charges and Make Tariff Modifications."

decatherms in 2011 increasing to 223.6 million decatherms in 2021.[3] For comparison, the 2010 IRP forecast ranged from 168 million decatherms in 2010 increasing to 200.2 million decatherms in 2020, and the Company's actual 2010 temperature-adjusted throughput was 166.3 million decatherms; and 4) for the 2011-2012 period, a forecast total natural gas requirement of 115.3 million decatherms consisting of approximately 70.1 million decatherms of Company-owned natural gas (assuming completion of new development drilling projects) and 45.2 million decatherms of purchased natural gas. For comparison, 2010 IRP forecast was 117.2 million decatherms consisting of 67.7 million decatherms of Company-owned gas and 49.5 million decatherms of purchased gas.

The 2011 IRP indicates the actual temperature-adjusted residential usage per customer for the twelve months ending December 2010 was 80.8 decatherms, a decrease of 1.4 decatherms from year-end 2009. Adjusting for temperature and elevation compensation, residential usage per customers is expected to be 81.1 decatherms by the end of 2011, a decrease of 1.4 decatherms from the adjusted year-end usage for the 2010.

COMMENTS, RECOMMENDATIONS, AND COMMISSION GUIDANCE

The Division's comments include: 1) a summary of the results of the 2011 IRP; 2) historical information on the IRP process, the Company's demand-side management efforts and results, gas commodity and gathering rates, and gas transportation and storage issues; and 3) a discussion of the Company's hedging program, variance reports, and gas quality issues. The Division concludes the Company has provided the additional information and addressed specific

[3] The 2011 IRP's forecast system throughput reflects the addition of anticipated throughput for existing electric generation customers. See Plan, page 3-1.

issues as directed by the Commission in its December 14, 2007, Report and Order in Docket No. 07-057-01.[4] The Division believes the Company has made very reasonable attempts to satisfy the 2009 IRP Standards and Guidelines and has also committed, through continuing discussions with parties, to continue to improve on details of some aspects presented in this IRP. The Division recommends the Commission acknowledge the 2011 IRP.

The Office provides comments and recommendations on four specific areas addressed by the 2011 IRP namely, Wexpro production, the SENDOUT model, gathering and processing issues, and reliance on Questar Pipeline capacity. The Office's comments and the Company's reply are summarized below.

Wexpro Production: The Office asserts the amount of Wexpro's estimated production during the upcoming gas-supply year is not determined by, or reliant upon, the SENDOUT model. Rather, production decisions simply flow from Wexpro to the Company. The Office believes it is either disingenuous for Questar Gas to model something that they do not control or it is simply wasted effort. The Office recommends it would be more reasonable for the Company to state it receives the upcoming year's projected volume estimates from Wexpro and gas purchase decisions are based upon the difference between the Wexpro estimates and the Company's forecast gas supply requirements.

Questar responds confusion may exist with reference to Wexpro's responsibility for its drilling decisions versus production rates and that evaluation of resources, some of which

[4]Docket No. 07-057-01, "In the Matter of the Filing of Questar Gas Company's Integrated Resource Plan for Plan Year: May 1, 2007 to April 30, 2008." This Order requires the Company to provide additional information and address specific issues in future IRPs.

are long-term in nature, requires the use of sophisticated models. The Company maintains Wexpro provides information on the availability of gas resources and the SENDOUT model determines the amount of planned production which minimizes costs to customers. Through time, modeling results have included lower load factors for prior-Company cost-of- service gas during the summer months as well as the complete shut-in of certain resources when purchase prices are unusually low. The Company references it's paper entitled "Considerations Affecting Production Shut-Ins," contained in Questar's 2010 IRP filed on May 20, 2010 in Docket No. 10-057-06.[5]

We recognize the challenges faced by parties in understanding all of the intricacies of the SENDOUT modeling processes for acquisition of both short- and long-term resources. In general, we conclude a knowledge gap exists regarding how cost-of-service gas is incorporated into and evaluated by the model, both in the short and long run. We find the details associated with Questar's IRP modeling warrant clarification and further discussion. We encourage the parties to meet with the goal of enhancing understanding of the SENDOUT model, including its setup, logic, and constraints.

The Office is also concerned about the lack of Company or consumer input in the production decisions of Wexpro. The Office asserts, absent stronger oversight (including an ex ante drilling and production plan and budget review and an ex post budget-to-actual analysis and suggestions for improvement), ratepayers cannot be assured production decisions result in least-cost service and that Wexpro supplies "are being developed in a timely, thorough and least

[5] Docket No. 10-057-06, "In the Matter of the Questar Gas Company's Integrated Resource Plan for Plan Year: June 1, 2010 to May 31, 2011."

cost manner."[6] The Office indicates the Division, through its consultant (otherwise known as the "Hydrocarbon Monitor"), reports on whether the actual drilling and associated costs conform to Wexpro's pre-drilling plans and budgets – but not on whether the decisions were wise, prudent, or in the best interest of Questar customers. The Office recommends the Commission direct the Division to report on the reasonableness of Wexpro's proposed drilling plans and budgets prior to implementation of such plans. In addition, the Office recommends a technical conference be scheduled with the purpose of analyzing whether current funding specified in the Wexpro agreement is sufficient for increased regulatory oversight and, if not, identifying potential funding alternatives.

Questar responds the Wexpro Agreement ("Agreement") provides that Wexpro is responsible for decisions regarding drilling plans and its annual drilling budgets, which are reviewed by the Hydrocarbon Monitor. In addition, Questar frequently reports on Wexpro's general drilling plans and expected annual budgets in the Future Resources section of the annual IRP, and public technical conferences including Wexpro personnel and the Hydrocarbon Monitor have been scheduled on a regular basis. Given Wexpro has the responsibility for its budget decision, Questar asserts additional funding for the purpose of asking the monitors to review the Wexpro budget is not merited.

The Wexpro Stipulation ("Stipulation") and Agreement executed by the parties on October 14, 1981, and approved by the Commission on October 28, 1981, contain fairly explicit language pertaining to the Office's concern. We point to Section 2.2 of the Wexpro Stipulation

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[6] See Page 2 of the Office's August 25, 2011, comments.

entitled Objectives of the Parties. This section specifies “Wexpro should have sufficient legal and economic incentive that it, in its own self interest, will prudently and energetically exploit the Properties to their full potential for the benefit of the Company’s customers and its shareholders.” In addition, Section 8 of the Stipulation allows for *performance monitoring* of the Company and Wexpro but it does not address review of Wexpro’s proposed drilling plans and associated annual budgets prior to their implementation. Further, Section III-8 of the Agreement pertaining to Development Gas Drilling specifies “Wexpro will exercise prudent judgment, as if it were the owner of the production gas reservoirs, in determining the desirability and necessity of development gas drilling under this Article, as well as the timing and methods to be used in any such drilling.” Based upon the above, and given the fact that Wexpro, per se, is not regulated by the Commission, we decline to adopt the Office’s recommendation to have the Division report on the reasonableness of Wexpro’s proposed drilling plans and budgets prior to their implementation. Prudence of Wexpro decisions as reflected in the Company’s commodity cost recovery should be addressed in Account 191 pass through filing cases.

SENDOUT Model: Similar to its 2009 IRP comments,[7] the Office recommends the Commission order the Company to engage an outside expert to periodically review the SENDOUT model and file the results of the review with the Commission. The Office references the April 24, 2008, letter from Ventyx (“Ventyx Letter”) to the Company included as Appendix 9.1 of the Company’s 2008 IRP filed on May 1, 2008, in Docket No. 08-057-12.[8] The

[7]See the Office’s comments dated July 13, 2009, in Docket No. 09-057-07,” In the Matter of Questar Gas Company’s Integrated Resource Plan for Plan Year: May 1, 2009 to April 30, 2010.”

[8]Docket No. 08-057-12, “In the Matter of Questar Gas Company’s Integrated Resource Plan for Plan Year

Office maintains Ventyx's comments pertaining to the complexity of Questar's system being modeled are not a review of proper modeling. The Office asserts an independent, in-depth examination of the effectiveness of Questar's gas supply modeling should be undertaken to determine if its constraints and results accurately reflect the realities faced by Questar.

Questar responds by referencing the Ventyx Letter concluding the Company is using the SENDOUT model reasonably and the Company's SENDOUT model configuration is not unduly constrained. The Company indicates its staff regularly consults with Ventyx and references an informal meeting in which the model and modeling concepts were discussed. If the Commission determines additional in-depth modeling review by an independent expert is appropriate, the Company would welcome such examination. Further, the Company offers another invitation to allow interested parties to view the operation of the SENDOUT model.

At the present time we find greater value in ensuring parties have a solid understanding of the SENDOUT model logic and decision rules rather than directing the Company to hire an outside expert to perform an examination of the model. Any of the Office's concerns regarding the effectiveness of the model can be discussed during the model training previously addressed in this order.

Gathering and Processing Issues: The Office refers to Section 7-1 of the 2011 IRP which indicates the current increases in the monthly reservation and commodity charges associated with the System-Wide Gathering Agreement ("SWGA") are 11 and 14 percent, respectively. In addition, the Office points out during the last ten years the monthly reservation

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May 1, 2008 to April 30, 2009."

charge has increased from $361,552 to $1,060,315, and the commodity charge has increased from $0.10510 to $0.20764 per decatherm. The Office maintains it is not clear whether the SWGA rate increases are reflective of industry trends, whether other cost-effective methods exist to manage the Company's needs, and whether the SWGA remains to be in the public interest. The Office also references data requests to the Company, and associated responses from the Company, and asserts that the Company's statement that rates in the SWGA are cost based does not demonstrate the costs are just and reasonable.

The Office recommends Questar and regulators should conduct a rigorous examination of the SWGA and present the results to the Commission. The Office recommends the Commission require the Company to include a more detailed analysis and substantial supporting evidence (including competing bids from other providers) demonstrating the SWGA remains the best option for serving its customers.

The Company responds the SWGA is based on the cost-of-service methodology approved by the Commission, and gas purchased or produced pursuant to the Wexpro Agreement is dedicated to the SWGA for the life of the Wexpro Agreement. The Company references several outside consultants, including McFadden Consulting Group, Inc., Williams Consulting, Inc., and Thomas J. Norris, who have been retained by Utah regulatory agencies to review the SWGA and its costs. The Company indicated it provided information requested by the consultants and it will continue to review the rates that are appropriate under the SWGA.

The Office questions whether the rates contained in the SWGA continue to be in the public interest, believes an evaluation is appropriate, and demonstrates the difficulty in obtaining information to conduct its own analysis of the SWGA. We observe "The Questar Wide Area Gathering Agreement Review Final Report" ("Report"), prepared by Williams Consulting, Inc provides a review of the SWGA. The Report was filed with the Division's July 19, 2010, comments in Docket No, 10-057-06, and is referenced by the Division in its comments in this docket. The Company also references the Williams' SWGA review in its comments summarized above. Among many things, the Report explains QGM operates and prices its gathering services under a three priority system[9] and, even though not explicitly called out in the SWGA, it appears that the Company is being charged the Priority #1 rate under the SWGA. The Report includes a recommendation that a review of the SWGA be considered to determine whether rates contained in the SWGA represent the best available option for Utah ratepayers[10] and indicates the cost formula used to connect new wells is not being used.

Based upon the Office's comments, the length of time the Agreement has been in place, the Report's reference to other pricing options offered by QGM to other customers, and the inference in the Report that some parts of the SWGA are not being followed,[11] we direct the Company to conduct an analysis of the SWGA and to include the results in the 2012 IRP.

Reliance on Questar Pipeline Capacity: The Office observes the 2011 IRP specifies the Company collaborates with Questar Pipeline "to identify model inputs to ensure Questar Pipeline is able to provide both upstream capacity and access to supplies to meet the

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[9] Report, Page 10. Priority #1 refers to firm service with a demand charge as well as a commodity charge, Priority #2 refers to firm service with no demand charge, just a commodity charge, and Priority #3 refers to interruptible service.

[10] Report, Page 9.

Company's gas supply needs." The Office asserts this type of collaboration should be occurring with each of the four pipelines passing through the Company's service territory to ensure competitive rates. The Company responds that it coordinates with all its interconnecting pipelines "to identify model inputs" and to optimize available resources.

Further, the Office is concerned about the subjectivity in the decisions affecting gas supply and purchasing. The Office references wording in Section 5-4 of the 2011 IRP which specifies "that packages are not unrealistically distributed between KRGT and Questar Pipeline." The Office maintains it is unclear how "unrealistically distributed" is defined and from whose perspective it is being measured. The Office restates its belief Company decisions should be based on the lowest price which maintains adequate reliability, supply and capacity and evidence supporting these decisions should be clearly demonstrated to the Commission. The Office recommends, in order to demonstrate the Company's pipeline decisions are the most cost effective, the Company be required to provide more information on its pipeline approach including pipeline price comparisons, capacity availability, upstream supplies, and constraints. The Company responds it coordinates with all interconnecting pipelines to optimize available resources.

We find these topics are appropriate for further discussion and direct the Company to include them on the agenda at the next IRP public or confidential meeting, whichever is appropriate, but no later than March 1, 2012.

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[11]Report, Pages 16 and 17.

Additional Commission Guidance: We provide the following additional guidance to be incorporated in future IRPs. The Commission's October 27, 2010, Report and Order approving Questar's 2010 IRP, directed the Company to provide in future IRPs "a more detailed description of the model(s) used to derive long-term forecasts of residential usage per customer and number of customers, in accordance with the requirements of Section VII of the IRP Standards and Guidelines." The 2011 IRP, while providing a general description of the model(s) referenced above, does not include the model version number and a description of material changes to the model as specified in Section VII of the 2009 Standard and Guidelines. We again direct the Company to include this information in future IRPs.

In previous IRP meetings it has been requested that the Company provide in its quarterly variance report the actual cost of gas obtained through the Wexpro Agreement and Stipulation ("Company-owned gas") in dollars per decatherm. The Company has indicated providing this number on a quarterly basis may not accurately reflect the actual cost of Company-owned gas. We suggest this topic be addressed during a future IRP meeting.

CONCLUSIONS

The Company is to be commended for its continued efforts in improving the integrated resource planning process and enhancing the information contained in the IRP. The 2011 IRP provides valuable information on the Company's plans for, and challenges in, meeting its responsibilities as a public utility. The Division's comments provide a helpful summary of many of the important issues contained in the 2012 IRP. The Office's comments and the Company's responsive comments reinforce the complexity of the IRP modeling process, the shortcomings of and challenges in analyzing the significant quantity of data contained in the IRP, and the importance of ensuring gas supplies and associated services are the most cost-effective option for serving customers.

The 2009 Standards and Guidelines no longer include an IRP acknowledgment process, but rather specifies " . . . Based upon the comments received, the Commission may provide guidance to the Company or request corrections or updates regarding the current and/or future Planning Process and/or IRP." Based upon our review, we agree with the Division's comments and determine the Company's 2011 IRP generally satisfies the requirements of the Standards and Guidelines.

ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED, that

1. The Company shall follow the guidance provided herein.

DATED at Salt Lake City, Utah, this 16th day of December, 2011.

/s/ Ted Boyer, Chairman

/s/ Ric Campbell, Commissioner

/s/ Ron Allen, Commissioner

Attest:

/s/ Julie Orchard
Commission Secretary
D#212307