

GARY HERBERT Governor GREG BELL Lieutenant Governor

State of Utah Department of Commerce Division of Public Utilities

FRANCINE GIANI Executive Director THOMAS BRADY Deputy Director CHRIS PARKER Director, Division of Public Utilities

ACTION REQUEST RESPONSE

- To: Utah Public Service Commission
- From: Division of Public Utilities Chris Parker, Director Artie Powell, Manager, Energy Section Doug Wheelwright, Technical Consultant Carolyn Roll, Technical Consultant

Date: August 13, 2015

Subject: Action Request Docket No. 15-057-07, Questar Gas Company 2015-16 Integrated Resource Plan (IRP) Report, Division's Recommendation - Acknowledgement.

RECOMMENDATION (Acknowledgement)

The Division of Public Utilities (DPU or Division) recommends to the Public Service Commission of Utah (PSC or Commission) that the Integrated Resource Plan (IRP) plan filed by Questar Gas Company (QGC or Company) be 'acknowledged' for reasons discussed in the IRP Process Comments section. 'Acknowledgement' of the Plan means the PSC deems the planning process and the Plan itself reasonable at the time the Plan is presented. "Acknowledgement of an acceptable Plan will not guarantee favorable ratemaking treatment of future resource acquisitions."¹

On June 8, 2015, the Company filed its IRP for the plan year June 1, 2015 to May 31, 2016. On June 10, 2015 the Commission issued a notice of scheduling conference to be held on June 24, 2015. The scheduling order was issued on June 25, 2015, which called for all parties to submit

¹ Final Standards and Guidelines for Integrated Resource Planning for Mountain Fuel Supply Docket No. 91-057-09.



their comments to the Commission by August 14, 2015. This memorandum is in response to the Commission's Scheduling Order.

HISTORY

Since the early 1990s, QGC, formerly known as Mountain Fuel Supply Company, has been filing Integrated Resource Plans with the PSC.

The purpose of the IRP filing is to provide regulators with an update of the "process in which known resources are evaluated on a uniform basis, such that customers are provided quality natural gas services at the lowest cost to QGC and its customers consistent with safe and reliable service."² For planning purposes, the time period of this process had been from May of the current year through April of the following year. QGC recommended that integrated resource planning activities reflect a planning year June 1st through May 31st, which the PSC accepted in its order issued March 31, 2009.³ The plan reviews the demand forecasts, gas supply resources, system delivery and storage capabilities, as well as any constraints that are foreseen within the next several years.

In order to make these projections, which require a multitude of interrelated variables and processes, QGC utilizes a computer model called SENDOUT, which has been designed specifically for local natural gas distribution systems. This computer model is marketed and maintained by Ventyx is owned by ABB, which is headquartered in Zurich, Switzerland. QGC used version 14.3 in the preparation of the IRP for the 2015-2016 year.⁴

Originally, QGC's IRP filing was on a biennial schedule with an annual update in the intervening years.⁵ In December 1997, Mountain Fuel Supply Co. (QGC) submitted, to the PSC, a petition to modify the Final Standards and Guidelines for Integrated Resource Planning.

² Proposed IRP Guidelines for Questar Gas Company, Docket No. 97-057-06, p. 1.

³ In the Matter of Revision of Questar Gas Company's Integrated Resource Planning Standards and Guidelines, Report and Order, Public Service Commission of Utah , Docket No. 08-057-02, Issued March 31, 2009, pp.4-6.

⁴ Questar Gas Company Integrated Resource Plan (For Plan Year: June 1, 2015 to May 31, 2016) p. 9-1.

⁵ Docket 95-057-04, p. 1.

Subsequent to that filing, QGC met with the staffs of the Office of Consumer Services (OCS) and the DPU and developed a new set of proposed guidelines. Under these new guidelines, QGC is to prepare and file annually a new IRP. In addition, QGC is required to prepare and file with the PSC, DPU and OCS confidential quarterly reports that update the differences between actual results and those projected in the IRP. Questar's final IRP report also considers comments from regulators and other parties obtained during meetings held with regulators to discuss assumptions and events that are taking place, or expected to take place, regarding natural gas markets, demand forecasts and system capabilities or constraints.

The PSC has been considering new IRP guidelines and the provisions of the Energy Independence and Security Act of 2007 (EISA) as they apply to utilities. On December 14, 2007, the PSC issued its Report and Order on Questar Gas Company's integrated resource plan for the plan year extending from May 1, 2007 to April 30, 2008.⁶ The PSC required QGC 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 QGC's 2008 IRP.⁷ On April 3, 2008, the PSC issued draft standards and guidelines governing IRPs for QGC with comments by interested parties due by May 30, 2008.⁸ Comments were submitted by interested parties including the DPU and discussion meetings were held. On March 31, 2009, the PSC issued its Report and Order on Standards and Guidelines for Questar Gas Company requiring QGC to file its 2009 IRP in accordance with the December 14, 2007, Report and Order.⁹ QGC was ordered to prepare and file future IRPs effective June 1, 2009, in compliance with new IRP standards and guidelines

⁶ 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.

⁷ Questar Gas Company Integrated Resource Plan (For Plan Year: May 1, 2008 to April 30, 2009), Submitted: May 1, 2008.

⁸ 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.

⁹ 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."

attached to the Order. Consequently, QGC filed its 2009-2010 IRP during May of 2009 in conformity with the December 14, 2007 Order.

On May 6, 2009 the PSC issued an action request to the DPU requesting comments on the adequacy of the 2009 IRP, since the PSC acknowledged that there were "many changes and enhancements to the information provided" by Questar Gas in the 2009 IRP. The PSC also asked for comments on changes, if any that would be necessary for the 2009 IRP to meet the requirements of the 2009 IRP Standards as if they had been in effect.¹⁰ Subsequently, the PSC issued an order broadening the action request by inviting all interested parties to comment on the same matters.¹¹

In a Clarification Order¹² QGC was commended for its commitment to the IRP process and timely IRP filings. The PSC recognized that QGC's 2008 and 2009 IRP filings contents were improved as required by the PSC in its December 14, 2007 order.¹³ The PSC also made a number of findings clarifying the 2009 IRP Standards. For some issues, the comments from parties were so dissimilar that the PSC directed QGC to meet with interested parties in attempt to reach consensus on outstanding issues. Details of these meetings held prior to the filing of the 2010-2011 IRP were included in Section 2 of that filing. Included in the 2010-11 IRP are descriptions of the clarification meetings that were held on June 2 and July 1, 2010.¹⁴

The Commission required in the Clarification Order that the Company: 1) include in future IRPs a more detailed description of the models used to derive long-term forecasts of residential usage per customer and number of customers; 2) discuss the relationship between avoided gas costs and IRP modeling in a future IRP meeting; 3) include five years of historical information in the peak demand forecast graph; 4) engage in formal and informal training on stochastic modeling;

¹⁰ Action Request – Revised, From: Public Service Commission, Subject: Questar IRP; 09-057-07, May 6, 2009.

¹¹ In the Matter of Questar Gas Company's Integrated Resource Plan for Plan Year: May 1, 2009 to April 30, 2010, Request For Comments, Docket No. 09-057-07, Issued: May 11, 2009.

¹² In the Matter of Questar Gas Company's Integrated Resource Plan for Plan Year: May 1, 2009 to April 30, 2010, Report and Order, Docket No. 09-057-07, Issued: March 22, 2010.

¹³ Docket No. 07-057-01, pp.17-22.

¹⁴ Docket No. 11-057-06, pp.2-11 to 2-12.

5) address in a public meeting, the planned increase in Company-owned gas volumes given the costs of Company-owned gas relative to purchased gas; and 6) provide all relevant data to the Utah Commission given the change in the quarterly reporting schedule.¹⁵ Guidance and suggestions were discussed with QGC so that future IRPs could be improved and to be in compliance with the IRP guidelines. All Parties presumably recognize that integrated resource planning is a continually evolving process.

The following is a brief discussion of the major components found in the current IRP for the plan year June 1, 2015 through May 31, 2016.

CUSTOMER & GAS DEMAND FORECASTS

For the calendar year of 2015, QGC is expecting system sales to increase slightly to 113.1 million Dth from 2014's level of 112.2 million. This projection and last year's actual incorporates the temperature and elevation compensation that was ordered by the Commission in April of 2010. The rate of customer growth is expected to continue its upward momentum as a healthy economy and in-migration lead to increased housing demand. Average GS usage is expected to resume the long-term decline. Non-GS commercial and industrial consumption will continue to grow modestly, but electric generation increased substantially in 2014 with the completion of the Lake Side power plant expansion. The forecast projects a leveling off of electric generation demand at about 43 MMDth per year beginning in the 2014-2015 IRP year.

SYSTEM CONSTRAINTS AND CAPABILITIES

For planning and meeting supply requirements, QGC separates its distribution system into five distinctive areas. Those areas or systems are the Northern Region, the Eastern (North) Region, the Eastern (Northwest Pipeline) Region, the Southern (Main System) Region, and the Southern (Kern River Taps) Region.

¹⁵ In the Matter of Questar Gas Company's Integrated Resource Plan for Plan Year: June 1, 2010 to May 31, 2011, Report and Order, Docket No. 10-057-06, Issued: October 27, 2010.

The Northern System, which serves the Wasatch Front, receives gas from Questar Pipeline Company (QPC) and Kern River Transmission Company (KR) at six major city gates. The Northern System currently has enough capacity to meet peak day requirements of 1,306,000 Dths for the projected 2015-2016 IRP year. In order to ensure that peak day capacity requirements can be met, QGC is constantly looking at the condition of the physical distribution system and planning for system integrity upgrades or expansion. The following system expansion and replacement projects are scheduled for 2015-2016: Charleston Feeder Line (FL 99) construction began in April 2015. For this project Questar Gas plans to install approximately 8.5 miles of 12" HP pipeline beginning at the current termination of FL 99 near Francis, Utah along state road SR-32, and terminating with a tie-in to Questar Gas' FL 16 on SR-40: Belt Line Replacement Project will continue in Salt Lake City, Ogden and South Ogden: and Questar Gas is continuing its Feeder Line replacement program in 2015 with replacements planned on FL 6, FL 24, FL 26, and FL 34. Pursuant to the Settlement Stipulation and the Utah Commission's bench order approving the Settlement Stipulation, in Docket No. 13-057-05, the Company will file an infrastructure replacement plan each fall detailing the planned projects, the anticipated costs and other relevant information.

The Eastern (North and Northwest Pipeline) Region includes distribution systems that Questar Gas acquired from Utah Gas in 2001. After several years of operation, the Company determined that the systems in Monticello, Moab and Vernal were in need of replacement. In 2009, Questar Gas began a replacement program. Replacements in Monticello have been completed. Work in Moab and Vernal is underway. In 2015, Questar Gas will complete Moab and Vernal Replacements. In Moab, the Company will replace approximately 53,000 linear feet of main and 225 services. A majority of the main (42,000 linear feet) will be 2-inch plastic and the remainder 4-inch plastic. The total estimated project cost for 2015 is \$2,000,000 and a first-year revenue requirement of approximately \$300,000. In Vernal, the Company will replace approximately 57,000 linear feet of main and 375 services. Of the 57,000 feet of main, about 27,000 linear feet will be replaced with 2-inch plastic pipe and about 30,000 linear feet will be replaced with 4-inch plastic pipe. The total estimated project cost for 2015 is \$2,750,000 and a first-year revenue requirement of about \$400,000. There are no other viable alternatives for replacement.

The Southern (Main System and Kern River Taps) Region receives its gas supply from QPC at Indianola and from KR at the WECCO and Central taps. All segments in this area have adequate pressures and do not require any improvement to meet the existing demand. The WG0003 Regulator Station project is intended to improve IHP system pressures in St. George, Utah. This station will be approximately three miles southeast of downtown St. George and will tap into FL 71. The Company's growth projections indicate that this project will be required prior to the 2017 heating season, with construction of project in 2016.

Questar Gas continues to implement integrity activities for transmission lines as originally mandated by the "Pipeline Safety Improvement Act of 2002" and later codified in the Federal Regulations (49 CFR Part 192 Subpart O). The enactment of the "Pipeline Safety Improvement Act of 2002" and the "Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006," resulted in rule changes and other related regulatory and non-regulatory initiatives. On December 4, 2009, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued the final rule titled: "Integrity Management Program for Gas Distribution Pipelines." This final rule became effective on February 12, 2010, with implementation required by August 2, 2011. The distribution integrity management rule requires operators to develop, write, and implement a distribution integrity management program. Questar Gas must also comply with requirements set forth in legislation and regulations that have been created in response to recent major pipeline accidents. The Pipeline Safety, Regulatory Certainty and Jobs Creation Act of 2011 included 42 congressional mandates and 32 National Transportation Safety Board (NTSB) recommendations, all of which increase regulatory requirements to ensure pipeline safety and system integrity. QGC is forecasting costs for transmission and distribution integrity management will be approximately \$6.7 million for 2015; \$6.3 million for 2016; and \$6.6 million for 2017. Details on the anticipated costs associated with transmission and distribution integrity management are found on pages 4-25 through 4-30. The DPU will monitor these initiatives as required.

PURCHASED GAS AND COMPANY PRODUCTION

Monthly index prices for natural gas delivered into Questar Pipeline's system during the 2014 calendar year averaged \$4.25 per Dth. This was higher than the 2013 average price of \$3.50 per Dth, an increase of \$0.75 per Dth or 21 percent. The price for natural gas on Questar Pipeline during the 2013-2014 heating season (November-March) averaged \$4.32 per Dth compared to an average price of \$3.21 per Dth during the 2014-2015 heating season, a decrease of \$1.15 or 26 percent. The current forecast shows prices decreasing 12% to an average of \$2.82/Dth for the coming heating season.

QGC implements a hedging program for the portion of its winter gas supply purchases that cannot be met from Company-owned production. This program consists of three basic strategies. The first strategy consists of buying approximately one-third of the estimated winter requirement at physical swap prices. The second strategy uses financial hedges, if priced prudently, for an additional one-third in order to place an upside cap on the prices. The last strategy lets the other third of the purchase requirement float with the market, which is based on the first of month price as quoted in Inside FERC's Gas Market Report. This three-pronged approach was developed in 2000-01 through consultation with regulatory officials. Regular update meetings have been held with regulatory authorities where input has been sought by QGC on the strategies being employed. Given the forecast for Company-owned production of approximately 65% of the gas requirements, the Company does not plan to enter into any such fixed-price agreements during the IRP year, but it may do so in the future.

The IRP gas purchase plan is based on a set of assumptions derived from the best available data at the time the IRP was put together. Throughout the plan year, actual results will vary from the plan due to circumstances that are different than the plan's assumptions. These variances have been tracked and reported on a quarterly basis. For the 2014-2015 IRP, three of the quarterly reports have been filed with the Commission.

For the first quarter of the 2014-15 plan-year (June-Aug, 2014) Clay Basin injection was 2.7 million Dth ahead of estimates due to higher than forecasted cost-of-service production. June and August cost-of-service production exceeded IRP projections due to less production being shut in

than anticipated. July cost-of-service production was below projections due to Questar Pipeline maintenance on Mainline 22, so delivery was unavailable to Questar Gas. Gas purchases were slightly above IRP projections due to cost-of-service gas projected at 100% of gas consumed for the quarter. The actual purchases for each month were above the IRP projections, since no purchases were projected for the quarter. The cost for purchased gas during the quarter \$93,000.

During the second quarter of the 2014-15 plan-year (Sep-Nov, 2014), firm sales were 16% below the forecast for the quarter, actual of 18.5 million decatherms versus projection of 21.9 million decatherms. This resulted from actual temperatures for the quarter being warmer than anticipated and heating degree days being 20% below the 30-year normal. Clay Basin inventory remains ahead of the IRP estimates, as the weather was warmer than projected; injections were increased to avoid shutting in production; and Ryckman storage is not available for injections at this time. The Clay Basin inventory at November 2014 was 10,492 MDth, which is above the projected level of 8,874 MDth.

December 2014 through February 2015 was much warmer than normal resulting in sales that were 8.3 million Dth below forecast, which is 15% below forecast. The IRP variance reports have shown the ratio of gas supplied from both Company and Purchased supplies. During the February 9, 2015 IRP workshop meeting, the comparability of Company-produced volumes as they are measured and reported was discussed. The Company is analyzing this issue, gathering data, and working with the Division toward a resolution. This volume issue also causes challenges in comparing Wexpro prices with Purchased gas prices. Currently Exhibits 10.1 and 10.2 have not been included in the variance reports, pending resolution of the issue.

At the May 18, 2015 Pass-Through Technical Conference, it was requested that the Company update the purchased gas and cost-of-service price comparison using an estimated 3.8% adjustment to the wellhead volume to more accurately compare the cost-of-service price to the purchase gas price. The Company will include this comparison in the next quarterly IRP Variance Report.

The 2015-2016 IRP reflects Company-owned production of 66.2 million Dth and gas purchase volumes of 57.6 million Dth. For the current plan, the price of natural gas for 2015-2016 heating season is forecasted to be \$2.82/Dth. There is not a need for any additional price stabilization, but the Company will review this issue on an annual basis to determine whether such measures are appropriate in the future.

The DPU recognizes that variances will exist between the forecasted and actual natural gas prices and the complexity of the interaction between the variables used in preparing an IRP. As actual events unfold, it is a given that actual results will vary from the planned IRP. QGC will continue meetings to keep regulators informed about the magnitude and the reasons for any variance that will occur from the base plan of this 2015-16 IRP.

GATHERING, TRANSPORTATION & STORAGE

Most of the Company-owned gas produced by WEXPRO is gathered under the System Wide Gathering agreement (SWGA) between QGC and QEP Field Services (QEPFS). QEPFS was formerly Questar Gas Management Company, an affiliate of Questar Gas. Effective June 30, 2010, Questar Corporation spun off QEP Resources. On December 2, 2013, QEP Resources announced its decision to pursue a separation of its midstream (gathering and processing) business including QEPFS.¹⁶ On October 19, 2014, QEP Resources announced that it had entered into an agreement to sell its midstream business to Tesoro Logistics LP (Tesoro).¹⁷ On December 2, 2014, Tesoro announced that the deal had closed. This agreement is based on cost-of-service and was approved by the Commission in Docket No's. 95-057-30, 96-057-12 and 97-057-11. The rates change each year on September 1st. The table below summarizes the history of the one-part cost-of-service rate broken out between the monthly reservation charge and the commodity charge, as billed by QEPFS. The billing determinant for the commodity rate is based on the previous calendar-year gathering-system throughput.

¹⁶ "QEP Resources Announces Decision to Pursue a Separation of its Midstream Business," QEP Resources News Release, Denver, Colorado, Business Wire, December 2, 2013.

¹⁷ "QEP Resources Announces Sale of its Midstream Business to Tesoro Logistics LP for \$2.5 Billion," QEP Resources News Release, QEP Resources Investor Relations, October, 19, 2014.

1993 - 2014			
	One-Part	Monthly	Commodity
Effective	Rate	Reservation	Charge
Date	(\$/Dth)	Charge (\$)	(\$/Dth)
9/1/1993	0.55682	844,610	0.22273
9/1/1994	0.55682	844,610	0.22273
9/1/1995	0.48295	761,644	0.19318
9/1/1996	0.48295	761,644	0.19318
9/1/1997	0.34956	432,668	0.13982
9/1/1998	0.33282	394,284	0.13313
9/1/1999	0.28656	379,372	0.11463
9/1/2000	0.26276	361,552	0.10510
9/1/2001	0.24863	376,435	0.09945
9/1/2002	0.28413	390,229	0.11365
9/1/2003	0.27273	473,384	0.10909
9/1/2004	0.28067	496,173	0.11227
9/1/2005	0.30718	541,336	0.12287
9/1/2006	0.34424	628,108	0.13770
9/1/2007	0.48664	888,053	0.19148
9/1/2008	0.46694	852,099	0.22616
9/1/2009	0.45127	955,513	0.18160
9/1/2010	0.50090	1,060,315	0.20764
9/1/2011	0.41750	1,008,209	0.19530
9/1/2012 9/1/2013	0.42693 0.42226	988,803	0.17077 0.16890
9/1/2013	0.42226	1,000,624 1,144,282	0.19165
3/1/2014	0.4/312	1,144,202	0.19105

System Wide Gathering Agreement Rates

During the fall of 2010, Questar Gas requested an audit of the calculation of the gathering rates and charges. Based on the information provided by QEPFS, Questar Gas disputed the rates and charges. Disagreements over the interpretation of the contract were not able to be resolved over the ensuing months. On May 1, 2012, Questar Gas filed a lawsuit against QEPFS. Questar Gas continues to dispute the monthly invoices, but makes payment based upon its own calculation of

gathering costs under the SWGA. These payments are subject to adjustment pending the outcome of the litigation. In conformity with the Utah Commission's IRP Order dated December 16, 2011, Questar Gas has been engaged in an analysis of the SWGA.¹⁸ An update of that analysis was provided in a Utah IRP technical conference on April 18, 2012. The Commission ordered the Company to provide a quarterly update of the proceedings associated with the SWGA.¹⁹ The Company has done so in its quarterly variance reports. In the IRP variance report dated May 29, 2015 the Company reported that the parties (with QEP now being owned by Tesoro Logistics LLP) entered into a standstill agreement under which they agreed to hold the proceedings in the lawsuit in abeyance until September 1, 2015 while they attempt to settle their disputes.. Questar Gas will continue to provide regular updates and when final results of proceedings are available, they will be provided to regulatory agencies. All cost areas are currently reviewed for prudence in the annual audit of the 191 account.

Questar Gas holds firm transportation contracts on Questar Pipeline, KRGT and Northwest Pipeline. Questar Gas continues to review capacity requirements to determine the amount of transportation required. As part of the five-year planning process, Questar Gas continually evaluates its existing transportation contracts. Questar Pipeline has been experiencing limited available supply at some of the receipt points on Contract No. 241, Questar Pipeline announced an upcoming open season during its winter customer meeting. Questar Gas plans to participate in this open season in order to facilitate changes in receipt point changes to the most desirable locations. Contract No. 139525 with Northwest Pipeline Company is used to serve the towns of Moab, Monticello and Dutch John. This contract is segmented in order to provide additional capacity for use to serve these towns. The capacity is released to two contracts (139527 and 139528) which both expire on April 30, 2017. The Company is currently working to extend these release contracts. The Company will continue to look for ways to optimize the use of these contracts and evaluate

¹⁸ In the Matter of Questar Gas Company's Integrated Resource Plan for Plan Year: June 1, 2011 to May 31, 2012, Report and Order, Docket No. 11-057-06, Issued: December 16, 2011, Page 12.

¹⁹ In the Matter of Questar Gas Company's Integrated Resource Plan (IRP) for Plan Year: June 1, 2012 to May 31, 2013, Report and Order, Docket No. 12-057-07, Issued: August 6, 2012, Page 8.

options for their renewal or expiration. All options will be evaluated based on criteria to provide safe, reliable and cost-effective service to customers.

As discussed in more detail in previous IRPs, the Federal Energy Regulatory Commission (FERC) issued an order on August 6th 2007, accepting tariff sheets proposed by QPC to modify its gas quality provisions.²⁰ These gas quality provisions established cricondentherm-hydrocarbon-dew-point (CHDP) zones with CHDP limits for each zone effective January 1, 2008.²¹ Questar Gas believes that the implementation of these CHDP zones and limits has worked well in recent years as no major gas quality issues have arisen. These CHDP provisions appear to be one effective means to equitably address gas quality matters.

Questar Gas has been working with its Transportation (TS) customers and/or their agents to improve the nominations process on Questar Pipeline. The Company made a number of process improvements in 2014 in order to better manage nominations and scheduling for Transportation Customers. In order to do so, Questar Gas worked with nominating parties and Questar Pipeline to establish a more efficient confirmation process for nominations at the Questar Gas interconnects with Questar Pipeline. As a result of these discussions, Questar Pipeline implemented entity-level nominations at all Questar Gas interconnects, allowing for automated confirmations which are critical for the management of TS customer supplies. Questar Gas also completed an evaluation of the Transportation Customers' continued use of the Company's NNT, transportation and storage services to manage their supply throughout the day. This analysis showed that Transportation Service (TS) customers routinely utilized these services but did not pay for them. On December 18, 2014, Questar Gas filed Docket No. 14-057-31, seeking to include a Transportation Imbalance Charge as a supplier non-gas (SNG) charge in the FT-1, TS, and MT rates. The methodology used to determine this charge was based on feedback from the Transportation Customers and/or their agents and an historical analysis of the needs of Transportation Customers. This docket is currently ongoing.

²⁰ Questar Pipeline Company, Docket No. RP07-457-000, FERC Gas Tariff Filing, May 18, 2007.

²¹ Federal Energy Regulatory Commission, Questar Pipeline Company, Docket No. RP07-457-000, "Order Accepting Tariff Sheets," Issued August 6, 2007.

ENERGY-EFFICIENCY PROGRAMS

Since the inception of formal integrated resource planning processes in the states of Utah and Wyoming, QGC has periodically investigated the potential of demand-side resources. The first such assessment took place in 1991. The current initiative has its roots in a general rate case filed by QGC on May 3, 2002. On December 30, 2002, the PSC issued an Order stating that the DSM Stipulation was in the "public interest."²² The Order established a collaborative study group, known as the Natural Gas DSM Advisory Group (Advisory Group), and was ordered by the PSC to report on the possible cost-effective DSM measures in Utah.

The DSM Stipulation specified that a jointly funded study of achievable, cost-effective DSM measures in Utah be undertaken. GDS Associates Inc. was the successful bidder for the Utah Natural Gas DSM study. The final GDS Report concluded that ". . . there is significant savings potential in Utah for implementation of additional and long-lasting gas energy-efficiency measures."²³

The Advisory Group determined that the GDS Report was a "credible indicator" of the potential for cost-effective demand-side management and also identified several barriers to natural gas DSM implementation. The report specifically identified as an example QGC's "economic sensitivity to the loss of gas load that increased DSM would foster."²⁴

On December 16, 2005, QGC, the DPU, and Utah Clean Energy filed a joint application requesting the approval of a pilot program that would put into effect the Conservation Enabling

²² In the Matter of the Application of Questar Gas Company for a General Increase in Rates and Charges, Report and Order, Utah Public Service Commission, Docket No. 02-057-02, December 30, 2002.

²³ "The Maximum Achievable Cost Effective Potential for Gas DSM in Utah for the Questar Gas Company Service Area," Final Report, Prepared for the Utah Natural Gas DSM Advisory Group, June 2004, GDS Associates, Inc. Engineers and Consultants, Marietta, GA, Page 1.

²⁴ Ibid

Tariff Adjustment Option (CET).²⁵ On January 16, 2007, the PSC issued an order approving a three year pilot program of DSM initiatives undertaken by QGC. As part of that order, the DPU was to prepare a first year evaluation report and file it with the PSC. This report was filed with the PSC on July 25, 2007 in Docket No. 05-057-T01.

Based on work with the DSM Advisory Group, Utah-based trade allies, program administrators and other energy-efficiency stakeholders, QGC proposed and the PSC approved the continuation of the energy-efficiency programs and the ThermWise[®] Market Transformation initiative for 2008 in Docket No. 07-057-05, in Docket No. 08-057-22 for 2009, in Docket No. 09-057-15 for 2010, in Docket No. 10-057-15 for 2011, in Docket No. 11-057-12 for 2012, in Docket No. 12-057-14 for 2013, Docket No. 13-057-14 for 2014, and in Docket No. 14-057-25 for 2015. During 2014, QGC reported a deemed savings of 600,190 Dth from DSM programs and a total net benefit cost ratio for all programs of 1.0. Results of 2014 DSM programs were filed with the Commission in Docket No. 15-057-03. These programs are reviewed quarterly by the DPU and reported to the PSC on an annual basis.

In Docket No. 14-057-15 the Commission ordered the Company to "...continue its discussion on peak day issues in the DSM Advisory Group and in a public input meeting associated with the 2015 IRP." (Report and Order dated October 8, 2014, Docket No. 14-057-15.) The Company continued the discussion of the effects of energy-efficiency on peak day at the Advisory Group meeting held March 24, 2015 and again at the IRP meeting held on March 25, 2015. The Company expanded on the 2014 discussions of this topic by explaining that some rebate-eligible equipment has little impact on peak-*hour* usage (either by reducing or increasing), but over the entire peak *day*, usage should be reduced by installing energy-efficient equipment. The Company further agreed in both 2015 meetings to continue study of this topic in the future.

The Company will move the Energy Comparison Report from the Market Transformation Initiative and launch it as a stand-alone program in 2015. The ThermWise[®] Energy Comparison Report allows customers to compare their natural gas usage with neighboring homes which are

²⁵ "Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy", Docket No. 05-057-T01, December 16, 2005.

similarly sized and situated. Additionally, the Comparison Report encourages customers to employ energy efficiency measures and behaviors. The Company developed the Comparison Report and first offered it to customers as part of the Market Transformation Initiative in November 2011. The Company initially sent the report to a small group of customers (Group A – 8,000 customers) as a pilot program. The Company has since launched larger pilot groups in 2012 (Group B – 25,000 customers), 2013 (Group C – 100,000 customers), and 2014 (Group D – 100,000 customers). In 2015 the Company will send the report, via U.S. and electronic mail, to more than 230,000 of its customers. The Company will maintain an additional group of nearly 50,000 customers in order to determine natural gas savings achieved from delivery of the Comparison Report. With the exception of the control group, all customers will be able to generate and view a copy of their Comparison Report through their online account. The Company proposed and the Commission approved the continuation of the seven energyefficiency programs from 2014 as well as the ThermWise[®] Market Transformation initiative and the ThermWise[®] Energy Comparison Report.

IRP PROCESS COMMENTS

On June 4, 2007, the PSC issued a Request for Comments giving parties until July 2, 2007 to file comments not only on the IRP itself but also regarding the approved IRP process (Docket No. 07-057-01) and invited parties to make recommendations regarding whether changes should be made to the process. Based on the review of the Company's 2007 Integrated Resource Plan in Docket 07-057-01, "In the Matter of the Filing of Questar Gas Company's Integrated Resource Plan for the Plan Year: May 1, 2007 to April 31, 2008," the PSC determined it was appropriate to re-evaluate and revise the September 26, 1994, IRP Standards and Guidelines.

The December 14, 2007, Report and Order in Docket 07-057-01 specified a new docket will be opened to address modification to the Standards and Guidelines. Pursuant to this Report and Order, Docket 08-057-02, "In the Matter of the Revision of Questar Gas Company's Integrated Resource Planning Standards and Guidelines" was established. After due notice, on February 13, 2008, a technical conference was held to obtain input, ideas, and feedback regarding

modifications to the September 26, 1994, IRP Standards and Guidelines. Based upon the discussion of specific topics during the technical conference, Draft Standards and Guidelines 2008 were developed. On April 3, 2008 the PSC issued Draft Questar Gas Company Integrated Resource Planning Standards and Guidelines 2008 ("Draft Standards and Guidelines 2008") and invited comments from interested parties. The DPU submitted comments to the PSC on May 30, 2008.

In its Report and Order in Docket 07-057-01, the PSC required that, in the interim, QGC continue with its current IRP approach and time lines, but outlined eleven items that were to be included in the 2008 and future IRPs. ²⁶ In its review of the 2009 IRP, the DPU concluded that QGC included the information as directed in the order. The table below itemizes the IRP issues the PSC directed QGC to include in future IRPs.

²⁶ In the Matter of the Filing of Questar Gas Company's Integrated Resource Plan for Plan Year: May 1, 2007 to April 30, 2008, Docket No. 07-057-01, December 14, 2007, pp.18-20.

Questar G	Questar Gas Company			
IRP Issues				
Issue No.	Specific Topic			
1	Documentation of Long-Term Sales Forecast Drivers			
	Explanation of Throughput Forecast			
Economic and Demographic Information Reference				
	Reliability of Economic and Demographic Information			
	Use of Information in Forecasting			
2	Need for No-Notice Transportation			
2	Management of Kern-Only Systems			
2	Management of Kern Only Oystems			
3	SENDOUT Model Configuration			
	<u> </u>			
4	Project-Specific Cost Estimates			
	Revenue-Requirement Impacts of Expansion Projects			
	Long-Term Gas Quality Issues			
	Storage Management			
	Modeling of Clay Basin Contract			
	Other Long-Term Contracts Under Consideration			
5	Producer Imbalance Recoupment			
5				
6	Wexpro Production Levels			
	Gas Hedging and Gas Price Risk			
	5 5			
7	Identification and Discussion of Regulatory Drivers			
8	DSM Modeling in SENDOUT Base Case			
9	Contingency Plans for an Uncertain Future			
10	Utah Gas Assets			
11	Rationale for Modeling Constraints			
	Constraint Removal			

QGC submitted this planning document, for the operating year extending from June 1, 2010 to May 31, 2011, to the Utah Commission on May 20, 2010 in accordance with the following: 1) the Report and Order issued March 31, 2009 in Docket No. 08-057-02, and 2) the Report and Order issued March 22, 2010 in Docket No. 09-057-07. The first Utah order established new integrated resource planning guidelines and the second Utah order clarified certain planning requirements. QGC agrees with the PSC that this IRP process is "ongoing" and "is expected to evolve over time." Interested parties continue to meet, as directed in the March 22, 2010 Order, to "discuss their positions with the goal of reaching a consensus to the extent possible."

Meetings were held with interested parties and PSC staff on June 17, 2010 and July 1, 2010 to discuss areas of the IRP that needed additional information in subsequent years. The discussion

items are outlined in Section IX Specific IRP Components (pp. 29-33) of Docket No. 08-057-02. The DPU acknowledged that the QGC's 2010-2011 IRP contained expanded in-depth narrative of the areas listed in the order.

On October 22, 2013, the Commission issued its Report and Order on the 2013 IRP.²⁷ The Commission recognized the Company's efforts in preparing the 2013 IRP, managing the IRP process, and addressing Commission guidance from previous orders. The Commission also acknowledged that integrated resource planning is an ongoing process and should be adjusted to reflect changing circumstances. In that Order the Commission directed the Company to provide supplemental information on the increase in Lost and Unaccounted For Gas in the 2013 IRP, the Company submitted that information on November 13, 2013. The Commission concluded the 2013 IRP substantially complied with the 2009 IRP Standards.

The Commission in its comments provided guidance for future IRPs. The Commission directed the Company to address the following issues: 1) increasing production levels of cost-of-service gas, 2) the relationship between the need for new capacity and specific projects in the distribution-non-gas (DNG) action plan, 3) the impact of energy efficiency (EE) programs on peak demand, and 4) changes in the amounts of lost-and-unaccounted-for gas.

Over the past year, Questar Gas has scheduled technical conferences and meetings to respond to specific issues as ordered by the Commission, to receive input for the IRP process, and to report on the progress of the Company's planning effort. The details of the 2015 IRP meetings are included on pages 2-13 and 2-14 of the IRP.

SUMMARY AND CONCLUSIONS

²⁷ In the Matter of Questar Gas Company's Integrated Resource Plan for Plan Year: June 1, 2013 to May 31, 2014, The Public Service Commission of Utah, Report and Order, Docket No. 13-057-04, Issued: October 22, 2013.

In summary the Division recommends the PSC acknowledge the QGC 2015-16 IRP Report due to the following 2009 IRP guidelines having been met in this filing as outlined below:

General Information Requirements:

- 1. The Company provides a description of IRP objectives and goals for both gas supply and DNG functions as shown on page 2-14 and 2-15 of the IRP.
- 2. In the Filing, the Company provides a range of load growth forecasts broken out by GS residential in Exhibit 3.3 and small commercial in Exhibit 3.4. The non-GS category is broken out by commercial, industrial, and electric generation in Exhibit 3.8. The load growth forecasts for firm customer peak-day requirements are shown in Exhibit 3.9 with winter-season requirements and annual requirements shown in Exhibit 9.90. The average usage per customer is shown in Exhibit 3.2.
- 3. How a range of weather conditions is utilized in the SENDOUT model is discussed on page 9-4 and shown in Exhibits 9.37 through 9.49.
- 4. An analysis of how various economic and demographic factors, including the prices of natural gas and alternative energy sources, will affect natural gas consumption, and how changes in the number, type and efficiency of end-uses will affect future loads is discussed to some extent in pages 3-1 through 3-11 of the filing.

191 Account Issues:

- 1. The Company discusses an economic assessment of all viable delivery, gas supply, load management and demand-side resource options consisting of:
 - a. Company production (Wexpro) on pages 6-1 through 6-7, annual market gas contracts, seasonal market gas contracts, spot market purchases on pages 5-1 through 5-4, the utilization of and modeling of demand-side management resources on pages 8-1 through 8-10 and Exhibit 8.1 of the filing.
 - b. Transportation and storage service options are discussed on pages 7-1 through 7-15 as required.
 - c. For demand-side resources, the Company provides the total resource cost test, the ratepayer impact test, the utility cost test and the participant cost test as approved by the Commission on page 8-8.
- 2. The Results section of the IRP depicts the Company's proposed gas supply portfolio and operational strategy and demonstrates in numerous graphs, the impact of changes in demand and gas prices in the modeling simulation. In Exhibits 9.89 and 9.90 of the IRP,

a summary of the IRP for the gas supply/demand is broken out by residential, commercial and non-General Service ("GS") categories. Company use, and lost and unaccounted for gas; and gas supply is broken out by purchased gas, cost-of-service gas, and storage (both injection and withdrawals).

A discussion and analysis of the availability and use of storage reservoirs by the Company and an explanation of storage reservoir management practices is also provided on pages 7-8 through 7-14.

- 3. A discussion and analysis of gathering and transportation-related issues, including pertinent recently negotiated contracts and other relevant contracts is presented in pages 7-1 through 7-6.
- 4. A discussion of producer imbalances including terms, time-periods, volumes, and fields where recoupment nominations have occurred and/or may occur is found on pages 6-4 through 6-5.
- 5. Pages 7-7 through 7-8 has a discussion and evaluation of reasonably predicted, anticipated, or known gas quality issues during the planning horizon.
- 6. The current level of expected lost and unaccounted for gas is discussed on pages 3-10 through 3-11.
- 7. A planning horizon of 21 years is utilized, which is of sufficient length to effectively model Company production as well as economically viable energy efficiency measures.
- 8. Pages 3-7 through 3-10 and 4-19 through 4-34 discuss how changes or risks in the natural gas industry, the regulatory environment, and/or industry standards may affect resource options available to the Company and potential impacts on resource options and attendant costs.
- 9. A set of general guidelines is found on page 10-1, which identifies the specific resource decisions necessary to implement the results of the Planning Process and associated IRP in a manner consistent with the strategic business plan.

DNG Issues

- 1. An overview of the distribution system and an identification of system capabilities and constraints, which includes:
 - a. Identification of substantial projects including feeder line, large diameter main, small diameter main, and measurement and

regulation station equipment projects, their associated capital budgets and long-range plan estimates, and a forecast of the revenue requirement impacts for those projects over the three-year time-frame addressed in the IRP is presented in Section 4 of the IRP.

- 2. A detailed explanation of, and underlying basis for, the Company's integrity management plan activities and associated costs for the three-year time frame are discussed on pages 4-19 through 4-23 and 4-30 respectively.
- 3. A DNG Action Plan is presented on pages 4-11 through 4-18 which outlines specific resource decisions and steps necessary to implement the IRP consistent with the Company's budget and/or business plan.

The DPU agrees that the General Information Requirements have been met. IRP objectives are found on pages 2-14 and 2-15, for load growth forecasts refer exhibits 3.3, 3.4, and 3.8., weather conditions are discussed on page 9-4 and economic and demographic factors are discussed in Section 3. In general the requirements for the 191 Account were met. Gas supply was discussed in Sections 5 and 6 and transportation options and storage were discussed in Section 7.

The Division believes the Company has made reasonable attempts to satisfy the 2009 IRP guidelines and has also committed, through continuing discussions with parties, to continue to improve on details of some aspects presented in this IRP. Therefore the DPU recommends the PSC acknowledge the 2015-2016 IRP as filed in Docket No. 15-057-07.

CC: Michele Beck, OCS Barrie McKay, QGC IRP Service List