State of Utah
Department of Commerce
Division of Public Utilities

FRANCINE GIANI
Executive Director

THAD LEVAR
Deputy Director

CHRIS PARKER
Director, Division of Public Utilities

GARY HERBERT.
Governor
GREG BELL
Lieutenant Governor

ACTION REQUEST RESPONSE

To: **Utah Public Service Commission**

From: Division of Public Utilities
Chris Parker, Director
Artie Powell, Manager, Energy Section
Marlin H. Barrow, Technical Consultant
Carolyn Roll, Utility Analyst

Date: August 25, 2011

Subject: Action Request Docket No. 11-057-06, QGC 2011-12 IRP Report.

RECOMMENDATION

The Division of Public Utilities ("DPU") recommends to the Public Service Commission of Utah ("PSC") that the IRP plan filed by Questar Gas Company ("QGC") 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]

HISTORY

Since the early 1990s, QGC, formerly known as Mountain Fuel Supply Company, has been filing Integrated Resource Plans ("IRP") 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

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

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 headquartered in Atlanta, Georgia. QGC used version 14.0.0 in the preparation of the IRP for the 2011-2014 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.

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.

[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, 2011 to May 31, 2012) p. 9-1.
[5] Docket 95-057-04, p. 1.

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 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

---

[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."

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

issued an order broadening the action request by inviting all interested parties to comment on the same matters.[11]

In a Clarification Order[12] 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 thereby 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 current IRP are descriptions of the clarification meetings that were held on June 2 and July 1, 2010.[14]

The Utah 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; 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.

[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.
[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 following is a brief discussion of the major components found in the current IRP for the plan year June 1, 2010 through May 31, 2011.

CUSTOMER & GAS DEMAND FORECASTS

For the calendar year of 2011, QGC is expecting system sales to increase to 109.2 million Dth from 2010's level of 106.9 million. Unlike last year's projection, this projection incorporates the temperature and elevation compensation that was ordered by the Commission in April of 2010. This increase is also due to a very modest growth in new customers, and an estimated higher usage per customer. Usage is estimated to be 107.5 Dth by the end of 2011 compared to 106.7 for the end of 2010; this increase is due to the temperature and elevation compensation. A decline in usage is forecasted as a result of more efficient gas appliances in the market, more energy efficient new homes, as well as conservation measures undertaken by customers and participation in QGC's energy efficiency programs.

SYSTEM CONSTRAINTS AND CAPABILITIES

With continuing customer growth anticipated on QGC's distribution system, system capacity is always a concern, as is the cost of gas supplies.

For planning and meeting supply requirements, QGC separates its distribution system into three distinctive areas. Those areas or systems are the Northern System, the Central System and the Southern System.

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 1,280,000 Dths for the projected 2011-2012 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 2011-2012: pre-engineering of Charleston Feeder Line, including route selection and phase-1 environmental work, and continue to monitor

the area for load growth: and Questar Gas is continuing its Feeder Line replacement program in 2011 with replacements planned on FL 12, FL 17, FL 18, and FL 25. Pursuant to the Settlement Stipulation and the Utah Commission's bench order approving the Settlement Stipulation, in Docket No. 09-057-16, the Company will file an infrastructure replacement plan each fall detailing the planned projects, the anticipated costs and other relevant information.

The Central System, which is relatively new, is served from KR; Questar Gas has been working on improving the capacity and functionality of the Hunter Park Gate station for 3 years. In 2011, Questar Gas will continue planning the facility improvements and order any long-lead time items. Currently Questar Gas has $800,000 budgeted for this year's work. Questar Gas anticipates construction of the improvements will occur in 2012. Questar Gas has estimated the 2012 costs at $2,700,000.

The Southern System receives its gas supply from QPC at Indianola and from KR at the WECCO and Central taps. The Southern System is reaching capacity. Questar Gas evaluated and analyzed a variety of alternatives for providing reinforcement to its Southern region, serving St. George. The preferred option consists of pressure testing and inspecting FL 81 and then adding compression at the Central Station in order to increase the operating pressure of FL 81 from 700 psig to 1000 psig. This increased inlet pressure would allow significantly more flow to pass through the line. Questar Gas refers to this as the "Compression Alternative." The Compression Alternative provides flexibility in planning for future growth by preserving both the option to construct a new 24" diameter HP pipeline that would extend approximately 10 miles from a new KRGT gate station near Jackson Springs and an opportunity to loop FL 81 for providing additional capacity in the future. The Compression Alternative provides a long term advantage (after looping) of maintaining a higher pressure source closer to the load center in St. George. The pipeline will allow for the absorption of load swings. Questar Gas plans to spend roughly $350,000 during this IRP reporting year and anticipates constructing the reinforcement in 2013.

The federal government continues to take an aggressive stance toward increasing pipeline safety for natural gas pipelines. The United States Congress and the U.S. Department of Transportation

both continued to have a broad national agenda for increasing natural gas pipeline safety. 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. To comply with the federal requirements, operating and capital expenditures for QGC will increase. Increases in operating and capital expense will result from aspects of this aggressive federal agenda on pipeline safety, particularly as new distribution integrity management regulations are implemented. QGC is forecasting costs for transmission and distribution integrity management will be approximately $6,000,000 per year for 2011-2013. Details on the anticipated costs associated with transmission and distribution integrity management are found on pages 4-29 through 4-33. The DPU will monitor these initiatives as required.

PURCHASED GAS AND COMPANY PRODUCTION

As shown in the table below, during the past few years, natural gas prices have seen dramatic volatility, spiking at $10.21/Dth in November 2005, mainly due to weather-related issues interrupting the natural gas distribution infrastructure in parts of the country. Since that November 2005 peak, prices did moderate, with the low being in October 2007. Since that time prices increased, moderated during the 2008-2009 heating season and then increased 38% during the 2009-2010 heating season. Markets then experienced a downward pressure on the price for natural gas. Questar Pipeline during the 2009-2010 heating season (November-March) averaged $4.69 per Dth compared to an average price of $3.66 per Dth during the 2010-2011 heating

season, a decrease of $1.04 or 22%. The current forecast shows prices increasing 14% to an average of $4.04/Dth for the coming heating season.[16]

(Bold Italic numbers are projections)

Winter Season

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
October	$9.48	$2.42	$1.36	$3.36	$3.40	$3.28	***$4.01***
November	$10.21	$5.80	$3.53	$2.61	$4.28	$2.98	***$4.07***
December	$8.46	$5.54	$5.85	$4.83	$4.10	$3.90	***$4.19***
January	$8.78	$3.71	$5.89	$4.21	$5.55	$3.77	***$4.19***
February	$6.39	$6.00	$7.89	$2.87	$5.06	$4.09	***$4.09***
March	$5.81	$5.79	$7.72	$2.43	$4.47	$3.54	***$3.84***

Summer Season

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
April	$5.32	$3.10	$7.75	$2.28	$3.56	$3.98	***$3.88***
May	$5.39	$4.34	$8.87	$2.46	$3.62	$3.99	***$3.94***
June	$4.53	$2.82	$8.91	$2.40	$3.50	$3.93	
July	$4.75	$3.05	$8.45	$2.61	$3.91	$3.88	
August	$5.50	$2.78	$6.51	$2.85	$3.60	$4.04	
September	$4.12	$2.00	$1.77	$2.39	$2.57	***$3.88***	

Due to the price volatility in natural gas markets, QGC has embarked on 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. The Company plans to continue its hedging program for the 2011 – 2012 winter heating season.

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

[16] Per forward price curve provided in Docket No. 11-057-02 Pass-Through Application of Questar Gas Company for an Adjustment in rates and Charges for Natural Gas Service in Utah".

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 2010-11 IRP, three of the quarterly reports have been filed with the Commission.

For the first quarter of the 2010-11 plan-year (June-Aug, 2010) purchase volumes in June were far less than projected in the IRP and in July and August Questar purchased more than projected in the IRP in part to take advantage of lower gas prices and to maximize injection opportunities into Clay Basin. Though the actual purchases for each month varied from IRP projections, the average of the variances for the quarter was within 2 percentage points. The cost for purchased gas during the quarter was $4.7 million below the IRP plan.

During the second quarter of the 2010-11 plan-year (Sep-Nov, 2010), purchase volumes were well above IRP projections, while Company-owned production was down 22.1 percent during the quarter. This was due in part to wildlife restrictions and a shortage of third-party contractors, which delayed pad completions. The cost for purchased gas during the quarter was $27.1 million above the IRP plan. For the six months ending November 2009, firm sales were less than 1 percent below the cumulative IRP estimate.

December, 2010 was a warmer month than normal, while January, 2011 was colder than normal. February, 2011 temperatures were normal. Purchase volumes during the third quarter were above plan by 6.2% while Company production was 6.2% below plan levels. Gas purchase prices averaged 3.7% above plan for the quarter resulting in purchase costs that were $20.3 million higher than plan amounts. Firm sales exceeded plan levels during the third quarter resulting in cumulative sales that were just slightly above plan for the year.

The 2010-11 IRP reflects Company-owned production of 70.1 MDth and gas purchase volumes of 45.2 MDth, resulting in an average total system cost of $5.51/Dth, compared to $5.61/Dth in the last IRP. For current plan, the price of natural gas peaks during January 2012 at $4.19/Dth. Currently, the Company is anticipating that for the upcoming year, a mixture of purchase gas supply will be hedged with fixed price swaps and first-of-month spot price purchases. The exact

amounts of each will depend on the trends in the spot market as compared to forecasts. The current FOM price for August, 2011 of $4.04/Dth is $.18/Dth higher than anticipated in the current IRP.

The DPU recognizes the price volatility that still exists in the natural gas markets 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 2011-12 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 Questar Gas Management. 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. The billing determinant for the commodity rate is based on the previous calendar-year gathering-system throughput. The total cost of service increased from the previous year resulting in a higher monthly reservation charge. The usage charge increased due to a decline in the billing determinant of approximately 3 percent.

System Wide Gathering Agreement Rates
1993 - 2010

Effective Date	One-Part Rate ($/Dth)	Monthly Reservation Charge ($)	Commodity 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

The DPU hired Williams Consulting, Inc. (WCI) to review the costs included in System Wide Gathering agreement (Agreement) after the gathering rate increased 41% in September, 2007. A copy of their final report was included with the 2010 memo. In their investigation WCI found that the costs charged to QGC under the Agreement are following the terms of the contract and voiced no major concerns with the agreement or the pricing under the agreement. However, WCI did have several recommendations that are found on pages 90-91 of the report. The Agreement has a Priority #1 designation which signifies firm service with a demand charge and a commodity charge. Only firm service is specified in the agreement, which corresponds also to Priority #2. WCI suggests that service designation in the agreement be changed to correspond to Priority #1, since the two-part rate is being charged. The DPU has no position on this recommendation since the charges are all Cost of Service based and this has not been an issue. In two of the recommendations, WCI discusses the process of production reduction and field utilization decisions. These areas are currently reviewed by the DPU's hydrocarbon monitor. WCI also recommended that QGC adopt techniques to evaluate produce-vs.-purchase decisions. QGC has filed that report with the PSC. All cost areas are currently reviewed for prudence in the annual audit of the 191 account.

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.[17] These gas quality provisions established cricondentherm-hydrocarbon-dew-point ("CHDP") zones with CHDP limits for each zone effective January 1, 2008.[18] Questar Gas believes that the implementation of these CHDP zones and limits has worked well over the last three years as no major gas quality issues have arisen. These CHDP provisions appear to be one effective means to equitably address gas quality matters.

QPC has also remedied CHDP issues at its Clay Basin storage facility. On August 23, 2007, QPC filed, with the FERC, revisions to its tariff. QPC also filed the "Stipulation and Agreement" negotiated with all of the Clay Basin storage customers. Included with the filing was the "Joint Petition of Questar Pipeline Company and Firm Customers for Approval of Stipulation and Agreement and Request for Expeditious Action."[19] The FERC accepted the revised tariff sheets on November 7, 2007, to be effective on January 1, 2008 and also approved the Stipulation and Petition.[20] As a result of these FERC actions, the Kastler Processing Plant was refunctionalized as a Clay Basin storage asset (previously it was a transmission asset) and additional processing facilities were installed, thus ensuring a total delivery capability of 320,000 decatherms per day to either Northwest Pipeline or Questar Pipeline. This project was completed in December of 2008 at a cost of approximately $12 million. The costs associated with conditioning storage gas, including the installation and operation of these new facilities, are expected to be recovered from the sale of natural gas liquids over a 20-year time period. The refunctionalization of the Kastler Plant and the installation of new processing facilities have, at this point in time, effectively resolved the liquids issues at Clay Basin.

On October 27, 2009, QGC amended its Main Line 104 contract, subject to completion of the ML 104 Extension Project, by extending the primary term of the agreement to November 1, 2021. The amendment also moved the primary receipt point farther east on the Southern System

[17] Questar Pipeline Company, Docket No. RP07-457-000, FERC Gas Tariff Filing, May 18, 2007.
[18] Federal Energy Regulatory Commission, Questar Pipeline Company, Docket No. RP07-457-000, "Order Accepting Tariff Sheets," Issued August 6, 2007.
[19] Questar Pipeline Company, Docket No. RP07-606-000, FERC Gas Tariff Filing, August 22, 2007; and Questar Pipeline Company, Docket No. RP07-606-001, Amended FERC Gas Tariff Filing, August 30, 2007.
[20] Federal Energy Regulatory Commission, Questar Pipeline Company, Docket Nos. RP07-606-000 and RP07-606-001, Letter Order Accepting Tariff Sheets dated November 7, 2007, "Reference: Stipulation, Petition, and Revised Tariff Sheets."

to Clay Basin and changed the maximum daily quantity to 30,000 decatherms per day. This transportation agreement on QPL is currently for 50,000 per day from the CO_2 plant to Goshen. The reservation and usage charges for this capacity to Questar Gas' city gates remains the maximum system-wide tariff rates for QPC. The current reservation charge is $5.28804 per decatherm per month and the current usage charge is $0.00457 per decatherm (including ACA).[21]

On November 10, 2010, Questar Pipeline filed a FERC application requesting a certificate of public convenience and necessity authorizing the ML 104 Extension. A final order was received on May 2, 2011, facilitating the commencement of construction in June of 2011. The in-service date of the ML 104 Extension Project is scheduled for November 1, 2011.

DEMAND-SIDE RESOURCES

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

[21] ACA refers to the Annual Charge Adjustment assessed and collected by the Federal Energy Regulatory Commission.

[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.

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 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 eight 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 and in Docket No. 10-057-15. During 2010, QGC reported a deemed savings of 795,714 Dth from DSM programs and a total net benefit cost ratio for all programs of 1.1. The second quarter year-to-date DSM results for 2011 show a projected Dth savings of 239,974 and a total net benefit cost ratio for all programs of 1.1. These programs are reviewed quarterly by the DPU and reported to the PSC on a semi-annual basis.

Also ordered in Docket No. 05-057-T01 was a Phase II evaluation. The Phase II evaluation focused on the impact that the energy-efficiency programs have had on customer usage. In order

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

to perform the analysis of the impact of the programs on usage, Cadmus (the program evaluator) collected weather normalized gas usage of ThermWise® participants and compared the pre and post-participation usage against each other. In addition, the analysis includes a comparison of ThermWise® participant usage versus the usage of the non-participant GS population. The Phase II draft report was delivered to the Company on June 30, 2010 and a copy was made available to the DSM advisory group. The DPU met with QGC on July 27, 2010 to review the 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.

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
3	SENDOUT Model Configuration
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
6	Wexpro Production Levels
	Gas Hedging and Gas Price Risk
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

[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.

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 are continuing 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.

There were several items that the Utah Commission required that the Company 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, the narrative is on pages 3-2 and 3-3. Discuss the relationship between avoided gas costs and IRP modeling, this topic was discussed at the April 14, 2011 meeting. The peak demand forecast graph now includes five years of historical information (Exhibit 3.9). Commission staff and Division staff met with Questar gas on July 14, 2011 to review the Monte Carlo method used to evaluate both supply-side and demand-side resources. A public meeting, devoted to a review of Wexpro operations was held in Utah on September 21, 2010. One of the items discussed was planned increase in Company-owned gas volumes given the costs of Company-owned gas relative to purchased gas.

SUMMARY AND CONCLUSIONS

In summary the Division recommends the PSC acknowledge the QGC 2011-12 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 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 9.89. 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 9-3 and shown in Exhibits 9.37 through 9.50.

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 3-7 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 6-5, annual market gas contracts, seasonal market gas contracts, spot market purchases on pages 5-1 through 5-5, the utilization of and modeling of demand-side management resources on pages 8-1 through 8-12 and Exhibit 8.1 of the filing.

   b. Transportation and storage service options are discussed on pages 7-1 through 7-12 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 7-12.

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 7-7.

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 6-2 through 6-4.

5. Page 7-2 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 page 3-8 and an explanation of the Company's efforts at reducing lost and unaccounted for gas and reducing natural gas emissions in pipeline construction and operations activities is touched on in page 4-35. Also of note, it was anticipated that with the approval of the temperature and elevation billing adjustments, per the Stipulation in Docket No. 09-057-16, the reported level of lost and unaccounted for gas would decrease. The lost and unaccounted for gas in the 2011-2012 IRP is 1.645%, which is a decrease from 2010-2011 IRP level of 2.030%.

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 and 4-23 through 4-36 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. A technical conference was held on June 22, 2010 which discussed, in more

detail, the IHP and HP distribution systems of the Company.

b. A discussion among the IRP parties decided a summary of the analyses of alternatives evaluated for each project, including costs, benefits, and risks associated with the alternatives, and the reason for their rejection was not applicable to gas distribution systems.

c. Also a comparison of each selected project with the next best alternative including a discussion of cost and benefit, an evaluation of risk, and an analysis of tradeoffs between such things as service quality, reliability, customer impact and the acquisition of the lowest cost resource was not applicable to decisions required of a natural gas distribution company.

2. The parties also held discussions of how changes or risks in the natural gas industry and/or the regulatory environment may affect resource options available to the Company and their potential impacts on resource options and costs was not really applicable because the only resource available is natural gas. The decisions that are required are how much company owned production is utilized versus how much is purchased in order to pass-through the lowest possible cost to the retail customer.

3. The partied decided that the requirement to determine a range, rather than attempts at precise quantification, of estimated external costs, in order to show how explicit consideration of costs might affect the selection of resources was not applicable to the gas distribution resource decisions.

4. 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 4-23 through 4-26.

5. A DNG Action Plan is presented on pages 4-14 through 4-23 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 page 2-14, for load growth forecasts refer exhibits 3.3, 3.4, and 3.8., weather conditions are discussed on page 9-3 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 OCS requested additional discussion on gas quality. QGC has expanded the narrative to include any anticipated changes in gas quality and sources of gas brought on to the system. On March 9, 2011, Questar Pipeline personnel presented, in a public Utah IRP meeting, a "Gas Quality Update for Questar Gas and Pipeline," where more comprehensive information was presented on this topic.

In the section dealing with DNG issues, Item C. 4 requires "a range, rather than attempts at precise quantification, of estimated external costs, in order to show how explicit consideration of costs might affect the selection of resources." It was agreed by PSC staff, the DPU and Office of Consumer Services that this requirement is not applicable in a Gas IRP. The parties agreed that the other items in this section were fulfilled in the 2010-2011 IRP with the expanded narrative that QGS provided.

The Division believes the Company has made very 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 acknowledges the 2011-12 IRP as filed in Docket No. 11-057-06.