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## To: Utah Public Service Commission

From: Division of Public Utilities  
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Date: September 4, 2007

Subject: QGC IRP Guideline Comments and QGC 2007-08 IRP Report, Docket No. 07-057-01.

### RECOMMENDS ACKNOWLEDGEMENT

The Division recommends to the Utah Public Service Commission (“PSC”) that the IRP plan filed by Questar Gas Company (“QGC”) be ‘acknowledged’ for reasons discussed in the IRP Process Comments section with some suggestions for improvements that should be incorporated in the next IRP filed by QGC. ‘Acknowledgement’ of the Plan means the Commission 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.”<sup>1</sup>

### HISTORY

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

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



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 Questar Gas (“QGC”) and its customers consistent with safe and reliable service.”<sup>2</sup> For planning purposes, the time period of this process runs from May of the current year through April of the following year. The plan reviews the demand forecasts, gas supply resources, system delivery and storage capabilities, as well as any constraints which 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 powerful computer model called SENDOUT which has been designed specifically for local natural gas distribution systems. This computer model is marketed and maintained by New Energy Associates out of Atlanta, Georgia.<sup>3</sup>

In the beginning, QGC’s IRP filing was on a biennial schedule with an annual update in the intervening years.<sup>4</sup> 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 members of the Committee of Consumer Services (“CCS”) and the Division of Public Utilities (“DPU”) and developed a new set of proposed guidelines. These new guidelines were filed with the Commission on April 18, 1998. 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 CCS confidential quarterly reports which 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 which are taking place, or expected to take place, regarding natural gas markets, demand forecasts and system capabilities or constraints.

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

<sup>3</sup> Questar Gas Company Integrated Resource Plan (For Plan Year: May 1, 2007 to April 30, 2008) pp. 2-4.

<sup>4</sup> Docket 95-057-04, p 1.

This IRP was prepared in accordance with the Proposed IRP Guidelines filed in Docket No. 97-057-06.<sup>5</sup>

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 and invited parties to make recommendations regarding whether changes should be made to the process. The Division requested an extension to August 3, 2007 to allow for more time to obtain information and perform analysis of the filed IRP. This extension was granted for all parties regarding the comments on the IRP and the IRP process on June 28, 2007. Subsequent to the Division request, the Company requested an additional extension of the IRP comment response deadline to September 4, 2007. The Commission granted that request on July 31, 2007.

### **QGC IRP GUIDELINES COMMENTS**

The differences between the Order and the Stipulation can fall into three categories: (1) reducing the requirements for holding meetings and communicating with interested parties; (2) reducing the scope of the IRA (and concurrently the workload imposed on the Company) by eliminating language requiring analyses of externalities, reducing the scope of outside comments, reducing or eliminating action plans or strategies for dealing with alternative futures, reducing or eliminating language regarding analysis of demand-side resources and related avoided costs, and eliminating the requirement for coordination with other states; and (3) cost effectiveness tests are not described in the stipulation whereas the Order has specific standards and an authoritative source for those tests, rather it appears that the Company is left to its own devices to define its models and its tests.

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<sup>5</sup> Questar Gas Company Integrated Resource Plan (For Plan Year: May 1, 2007 to April 30, 2008) pp. 1-1

The following table compares the Commission’s Order with the Stipulation dated April 17, 1998.

Item Number	Commission Order	Stipulation
1.	“Standards and Guidelines are intended to insure that the Company’s present and future customers are provided natural gas...at the lowest cost consistent with safe and reliable service, the fiscal requirements of a financially healthy utility, and the long-run public interest.” p.2.	“[The IRP] is a 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 Questar Gas (QG) and its customers consistent safe and reliable service. The IRP should also be consistent with the long-run public interest and the financial requirements of a healthy utility.” p.1.
2.	“The Commission envisions an informal collaborative IRP process that allows a free exchange of information among all interested parties during the planning process.” p.5.	“The IRP process will incorporate an informal exchange of information in a manner that promotes efficient communication and an atmosphere of cooperation and understanding.” p.1.
3.	“Prudence reviews of resource acquisitions will occur during ratemaking proceedings.” p.7.	The <i>general guidelines</i> (see #4. p.2.)...may be used by regulators in their evaluation of cost recovery. The Commission’s evaluation of prudence will be based on the reasonableness of the Company’s decision making process....” #5. p.2.
4.	“[T]he Company will file with the Commission quarterly reports which describe its actual purchases and compare them with planned purchases.” p.8.	“QG will...file confidential quarterly reports to the [PSC], [the Division], and the Committee....” p.1.
5.	“The IRP process will be open to the public in all of its stages of development.” p.8.	“[IRP] will be developed in consultation with the Commission, its Staff, the Division, the Committee, appropriate Utah State Agencies and other interested parties that obtain Commission approval to participate.” P.1
6.	“The IRP process will not allow marketers and competitors to obtain information that compromises the Company’s bargaining position....The Commission will address the issue of ...sensitive information on a case-by-case basis....” p.9.	“Discussion of market-sensitive information will take place in a manner that does not jeopardize QG’s bargaining position in any way....QG will hold at least one informational meeting...in April of each year where confidential, market-sensitive information can be discussed.” p.1.
	“Therefore, we direct the Division to establish an advisory committee to insure that there is	Discussion of market-sensitive information will take place in a manner that does not jeopardize

7.	public review of these competitively sensitive inputs into the model.” p.9.	QG’s bargaining position in any way. QG will hold at least one informational meeting with Commission Staff, the Division and the Committee in April of each year where confidential, market-sensitive information can be discussed.” p. 1
8.	“Environmental externalities must be considered in the planning process” p.9. “What is needed is the capacity to show how reasonable estimates of environmental costs may affect the choice of resources.” p.11.	
9.	“IRP must evaluate supply-side and demand-side resources on a consistent and comparable basis.” p.11. “Each should be compared on a total resource cost basis; that is, the total cost incurred by the utility and the ratepayer to acquire a particular resource.” p.11.	
10.	“The IRP will be used to help calculate avoided gas costs.” p. 11.	
11.	“The Commission instructs the Division to work within the public IRP process to develop a method for determining [avoided costs].” p.12.	
12.	“Coordination with other regulatory agencies is important but the IRP should meet the needs of the Utah ratepayer.” p.12	
13.	“Questar Corporation’s strategic planning should not unduly influence the development or implementation of [Questar Gas]’s IRP.” p.12.	“...QG has the responsibility to place customers’ interest before affiliate interests in preparing and implementing its IRP.” #6. p.2
	<b>GUIDELINES</b>	
14.	“The [IRP] process should result in the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty.” p.13.	“This process should result in the selection of the optimal set of resources given expectations related to costs, risk, uncertainty and technical feasibility.” p.1.
15.	“The Company will submit its IRP biennially and will provide an annual update of its operating plan.” p. 13. (The IRP or its annual update is due on April 30). p. 13.	“QG will...file an IRP annually...ending April 30.” p.1.

16.	“The [IRP] will be developed in consultation with the Commission, its staff, the Division..., the Committee..., and other parties....[The Company] will provide ample opportunity for public participation....” pp.13-14.	“The [IRP] will be developed in consultation with the Commission, its staff, the Division..., the Committee..., and other parties....” p.1.
	<b>The IRP will include the following:</b> (see pp.15-18.)	
17.	A description of objectives and goals.	“...QG will develop a list of <i>general guidelines</i> that identify the major pieces of its operational strategy for the upcoming gas year...[that] will serve as the basis for evaluating QG’s performance...” #4. p.2.  “A description of IRP objectives.” #7a. p.2.
18.	A range of estimates or forecasts of load growth, including peak demand.	A range of estimates or forecasts of load growth, including peak demand. #7c.
19.	A range of weather conditions and strategies to meet such conditions.	A range of weather conditions. #7d.
20.	An analysis of various economic and demographic factors...	An analysis of various economic and demographic factors... #7e.
21.	An evaluation of all present and future resources on a consistent basis including (1) an assessment of all technically feasible improvements.... (2) all technically feasible gas supply options.	“An economic assessment of all viable <i>delivery</i> and <i>gas supply</i> options....” #7f.
22.	An analysis of system capability and constraints...	An analysis of system capability and constraints... #7h.
23.	A planning horizon that appropriately model long-term Company-owned production as well as energy conservation and efficiency measures, and an IRP model meeting these requirements.	“A planning horizon that is of sufficient length to effectively model Company production as well as economically viable energy efficiency measures.” #7i.
24.	An analysis of how changes in regulation may affect resource options.	“A discussion of how changes or risks in the natural gas industry and/or the regulatory environment may affect resource options available to QG.” #7j.
25.	A one-year action plan, plus a second one-year plan in the off-year....	“QG will prepare and file an IRP annually.” p.1

26.	“Load forecasts integrated with resource options in a manner which rationalizes the choice of resources under a variety of economic and weather circumstances.”	“A range of load growth forecasts, which include firm customer peak-day requirements, winter-season requirements and annual requirements. A range of weather conditions. An analysis of how various economic and demographic factors, including the prices of natural gas and alternative energy sources, will affect the consumption of energy services, and how changes in the number, type and efficiency of end-uses will affect future loads.” 7c,d,e p3
27.	An evaluation of the cost-effectiveness of the resource options... (4 tests mentioned)...as defined by the California Standard Practice Manual.	
28.	An evaluation of the risks associated with the plan and how the one-year action plan addresses these risks....	
29.	Considerations permitting flexibility...so that the Company can take advantage of opportunities....	The IRP will include “Considerations permitting flexibility in the planning process.” #7l.
30.	An analysis of tradeoffs....	“QG will utilize an optimization model in preparing its annual IRP, thereby facilitating the evaluation of complex tradeoffs.” intro to #7. p.2.
31.	A range....of estimated external costs....	
32.	“[Questar Gas] will submit its IRP for public comment, review, and acknowledgement.” p. 18.	“The public, state agencies and other interested parties will have the opportunity to comment to the Commission on the adequacy of the IRP process.” #3c. p.2.
33.	“Acknowledgement of an acceptable Plan will not guarantee favorable ratemaking treatment of future resource acquisitions.” p. 19.	
34.	“The [IRP] will be used in rate and pass-through cases to evaluate the performance of the utility.” p.19.	
35.		The IRP will include “A description of any changes

		to the IRP model.” #7b. p.2.
36.		The IRP will include “A <i>‘Results’</i> section depicting QG’s proposed <i>base case gas supply portfolio and operational strategy....</i> ” #7g.
37.		The IRP will include “A set of general guidelines which clearly identify the specific resource decisions necessary to implement the IRP in a manner consistent with the strategic business plan.” #7k.

The above table represents the Division’s interpretation of the principal ideas set forth in the Commissions Order and in the Guidelines. As can be seen, the Guidelines includes a number of statements and ideas that are either in the Order or appear sufficiently similar to ideas in the Order (see items numbered 1, 2, 4, 5, 7, 13, 14, 17, 18-22, 24-26, 29, 30, 32); however, the Guidelines appear to exclude some items included in the Commission’s Order (see items 8- 12, 27, 28, 31, 33, 34);<sup>6</sup> it includes items that appear to not be in the Order (see items 35, 36, and 37), but are probably worthy additions or, at least, innocuous; and the Guidelines appear to change the meaning, interpretation, or otherwise revises the apparent intent of the Order for other items (see 3, 6, 15, 16, 23, ).

The items that are similar, or are excluded, or have been added in the Guidelines, are probably self-explanatory. Below is an explanation of some items which maybe considered revisions from the intent of the Order.

Item 3: the Stipulation defines what the Commission’s review for prudence will be based on.

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<sup>6</sup> Some of the excluded items may have already been fulfilled such as numbers 8 – 11 and 27 with this years IRP filing. Items 33 and possibly 34 are probably understood outside of the Stipulation.



Item 6: the determination of market-sensitive information appears to be taken out of the hands of the Commission and is determined by the Company, which will then invite certain parties to hear its confidential information.

Item 15: the Company will file an IRP each year under the Stipulation, instead of every two years with an update in between.

Item 16: the idea of “ample opportunity for public participation” appears to be missing from the Stipulation.

Item 23: Stipulation omits explicitly modeling for “energy conservation and efficiency measures.”

Some of these revisions seem minor while others may seem more significant. However, with the approval of the CET tariff as a pilot program, QGC has undertaken an aggressive approach to DSM programs. The IRP plan filed for 2007-2008 has a section dedicated to the analysis of the DSM programs and their results as measured by the four California tests mentioned in item # 27. Excluded items # 9, #27 and #31 seem to deal with the aspect of DSM offerings, which have been specifically addressed in the last two IRP filings with the implementation of the CET tariff. The Division feels these items should be retained in future IRP filings as part of the discussion of DSM programs.

The IRP process for QGC is much different than the IRP process for Rocky Mountain Power. QGC's process is focused on the acquisition of gas supply for the upcoming heating season, measuring different supply options against price, load growth and weather sensitivities. Due to the volatile nature of the current natural gas market, the base case scenario presented in the IRP plan can and most probably will be outdated one or two months after being filed with the Commission. As an example, due to the current low Rocky Mountain gas prices, QGC has shut-in some Company owned production during the summer months and instead purchased those

volumes in the spot market. This was not anticipated in the base case. To this extent item #28 on risk evaluation maybe more problematic due to the real time nature that resource acquisitions need to be made but the IRP plan should retain some discussion of the risks involved and some alternatives to mitigate those risks. Item #8 in the original order dealt with environmental issues. Environmental issues affecting QGC are more specific to the supply side of natural gas and how those issues may effect the drilling of Company Owned Production as well as the gathering and transportation of those supplies. Any discussions regarding these issues need to be retained in the IRP process.

In the review of the original Commission order on IRP guidelines issued September 26, 1994 (Docket No. 91-057-09) and the application of QGC to modify those guidelines filed on April 18, 1998 (Docket No. 97-057-06), the Division believes the modified guidelines with certain additional items retained from the original order provide a reasonable procedure to be followed by QGC in the preparation of their annual IRP and therefore recommend to the Commission that the IRP filed in Docket No. 07-057-01 be “acknowledged” as defined at the beginning of this report. The Division recommends that items #8, #9, #27, #28, #31 and #33 of the original order be retained in future IRP guidelines.

The Division also has a number of specific enhancements for future QGC IRP filings which follow and are summarized at the end of this report.

The following is a brief discussion of the major components found in the current IRP for the plan year May1, 2007 through April 30, 2008.

## **CUSTOMER & GAS DEMAND FORECASTS**

For the 2007 calendar plan year<sup>7</sup>, QGC is expecting system sales to decrease by two million decatherms from 2006’s level of 107 million. This decline, despite expected continued growth in new customers, is attributed to lower usage per customer, which is estimated to be 109.7

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<sup>7</sup> Volume comparisons of sales and usage are based on a 12 month calendar year while the IRP Plan period is a May 2007-April 2008 period to reflect winter heating supply requirements.

decatherms by the end of 2007 compared to 112.0 for the end of 2006 or approximately a 2.05% decline in usage per customer. QGC attributes this 2.3 decatherm decline in usage per customer to a combination of more efficient gas appliances in the market, (approximately .4 from expected 1<sup>st</sup> year DSM programs), more energy efficient new homes for new customers, as well as conservation measures undertaken by customers due to the increase in the price of natural gas over the past two to three years of years.

**Recommendations for Improvement:** The Division would like to see a monthly gas balance for the 1<sup>st</sup> year May – April time period in the same format that is furnished for the semi-annual 191 pass-through filings. The Division also would like to see the GS-1 Use Per Customer (UPC), as shown in Exhibit 3-2, with a line for the Commercial class UPC which yields the total GS-1 expected UPC of 111.98 decatherms.

## **SYSTEM CONSTRAINTS AND CAPABILITIES**

With the rapid customer growth anticipated on QGC's distribution system, system capacity issue is always a concern, albeit not as big an issue cost wise as gas supplies, which is the primary focus of this IRP.

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 ("QPL") and Kern River Transmission Company ("KR") at six major city gates. The Northern System currently has enough capacity to meet peak day requirements of 1,041,067 Dths for the projected 2007-2008 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. During 2007, there are seven

budgeted projects for construction during 2007. They are (1) FL 26 Replacement- Phase Va in the Orem area at an estimated cost of \$4.8 million, (2) FL 26 Replacement Phase VI in the Orem area- estimated cost of \$7.2 million, (3) FL 99 Reinforcement, Summit and Wasatch County- estimated cost of \$5.2 million, (4) FL 83 Mountain Green extension - estimated cost of \$1.6 million, (5) FL 16 Extension, Heber – estimated cost of \$2.3 million, (6) FL 47 Extension to Syracuse, UT- estimated cost of \$2.8 million and (7) FL 7 Replacement SLC State Street- estimated cost of \$17.0 million.

The Central System, which is relatively new, is served from KR and is expected to meet current peak demand customer requirements of 7,089 Dth without any reinforcements.

The Southern System receives its gas supply from QPL at Indianola and from KR at the WECCO and Central taps. The peak day forecast for the 2007-08 heating season is 73,129 Dth. Currently there is sufficient capacity on the system to meet this demand. The Indianola Tap is currently at capacity and has been so for the past few years. Current as well as any future growth will need to come from capacity on Kern River.

QGC also models and reviews the Intermediate High Pressure (IHP) system to ensure that it also can meet peak day requirements. This check involves checking the regulator-station capacities for proper pipe sizing and configurations. Based on the model calculations and modifications and reinforcements made in 2006, the current status of the IHP system is adequate for the upcoming season.

In Docket No. 04-057-03, QGC applied for and received permission to defer costs accrued for the inspections of QGC's high pressure lines located in high consequence areas. This inspection program is a federally-mandated program and is an ongoing process to insure the integrity of the pipelines that exist in populated areas. Currently, due to a Stipulation reached in Docket No. 05-057-T01, QGC will begin to amortize, over the next five years, \$3.0 million of costs currently deferred for the pipeline inspection program. This amounts to \$0.6 million per year. In addition,

QGC is authorized to collect current annual costs of up to \$1.4 million in current rates with any excess or under payment of this amount to go into a deferred account and settled at the next general rate case. This amounts to a \$2.0 million annual expense. The costs for this program could become substantially more as the system continues to age, and more and more areas of the system are found that need to be reinforced to meet the established requirements of the federal program. The current work on FL 26 in Utah County is a result of this inspection process. As of the end June 2007, there was an accrued amount of \$6.5 million in the deferral account.

The IRP also discusses 2008 projected capital projects as well as long-term projects. Preliminary capital cost projections for the 2008 capital projects are \$88.8 million. The long-term projects are currently estimated at \$55.0 million.

**Recommendations for Improvements:** The Division would recommend that the capital cost projections are actually put into the IRP document.

## **PURCHASED GAS AND COMPANY PRODUCTION**

As shown in the table below, during the past few years, natural gas prices have seen a dramatic increase, 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 have begun to moderate. This moderation is attributed to a warmer than expected heating demand months in 2006, higher storage inventories, lack of 2006 hurricane activity and post Katrina production capacity returning to pre Katrina levels.<sup>8</sup>

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<sup>8</sup> QGC 2007-08 IRP, page 2-1.

**Natural Gas Prices**  
**Questar Pipeline - First of Month Index**  
(Bold Italic numbers are projections)

<b>Winter Season</b>								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
October	\$4.17	\$0.97	\$1.17	\$4.00	\$4.42	\$9.48	\$2.42	<b><i>\$4.49</i></b>
November	\$4.28	\$2.38	\$2.78	\$3.91	\$6.55	\$10.21	\$5.80	<b><i>\$6.62</i></b>
December	\$6.14	\$2.02	\$3.29	\$4.31	\$5.91	\$8.46	\$5.54	<b><i>\$7.84</i></b>
January	\$8.58	\$2.19	\$3.09	\$5.10	\$5.47	\$8.78	\$3.71	<b><i>\$7.91</i></b>
February	\$6.42	\$1.60	\$3.05	\$4.92	\$5.32	\$6.39	\$6.00	<b><i>\$7.83</i></b>
March	\$4.79	\$1.85	\$5.00	\$4.33	\$5.38	\$5.81	\$5.79	<b><i>\$8.06</i></b>
<b>Summer Season</b>								
	2001	2002	2003	2004	2005	2006	2007	2008
April	\$4.50	\$2.67	\$3.19	\$4.19	\$6.02	\$5.32	\$3.10	<b><i>\$7.23</i></b>
May	\$3.87	\$2.09	\$4.00	\$4.89	\$6.04	\$5.39	\$4.34	<b><i>\$6.66</i></b>
June	\$2.42	\$1.53	\$4.78	\$5.52	\$5.24	\$4.53	\$2.82	<b><i>\$6.54</i></b>
July	\$1.74	\$1.15	\$4.52	\$5.20	\$5.74	\$4.75	\$3.05	<b><i>\$6.80</i></b>
August	\$1.93	\$1.47	\$3.87	\$5.22	\$5.75	\$5.50	\$2.78	<b><i>\$6.70</i></b>
September	\$1.90	\$1.09	\$4.29	\$4.39	\$7.64	\$4.12	<b><i>\$5.15</i></b>	<b><i>\$6.84</i></b>

Due to the price volatility in the natural gas markets, QGC has embarked on a hedging program for the purchases of its winter gas supply which 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, and since June 2005, monthly update meetings have been held with regulatory authorities in which input has been sought by QGC on the strategies being deployed. Currently, due to recent downward trends in prices in the gas markets, the strategy to hedge the purchase requirements has been reduced to nine percent.

The IRP gas purchase plan is based on a set of assumptions derived from the best available data at the time the IRP is 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 are

tracked and reported on a quarterly basis. The following is an analysis of the 2006-07 IRP based on those filed quarterly reports.

For the first quarter of the 2006-07 plan-year (May-July, 2006) purchase volumes were ten percent lower than the plan due to a warmer than normal June and July and Company Owned Production being five percent greater than plan. This resulted in a total decreased purchase dollar variance of \$10.2 million of which \$3.8 million is attributed to the ten percent reduction in purchase volumes and \$6.4 million resulted from actual purchase prices being lower than expected IRP plan purchase prices.

During the second quarter of the 2006-07 plan-year (Aug-Oct, 2006), purchase volumes exceeded the plan by eighteen percent due to a colder than normal September and October. Company production was three percent lower than normal. The total decrease from plan purchases was \$4.3 million for the second quarter. \$12.5 million of this decrease was due to reduced gas prices. This \$12.5 million decrease was off set \$8.2 million by the increased purchase volumes.

With normal weather November and December and much colder than normal weather during January 2007, purchase volumes exceeded plan by 20% while Company production was 7% below plan levels. The total purchase cost was \$1.0 million lower than plan amounts. The increased purchase volumes at plan prices would have resulted in a \$45.4 million increase in costs, however, due to reduced gas purchase prices, actual purchase costs were \$46.4 million lower resulting in an over all cost reduction of \$1.0 million from plan purchase cost.

Weather for the fourth quarter was warmer than normal. This resulted in a nine percent drop in purchase volumes and a ten percent decrease in Company production. The nine percent variance in purchase volumes resulted in \$13.2 million savings from plan costs and a \$7.9 million savings from lower prices for an overall savings of \$21.1 million from plan amounts.

Compared to the 2006-07 IRP plan year, actual purchase volumes exceeded the plan by 4,423 MDth while Company production was 1,915 MDth below plan. The total cost of the purchased volumes was \$36.6 million below plan. At planned purchase prices, the incremental purchase volumes of 4,423 would have exceeded plan by \$36.5 million, however, due to an average purchase cost of \$6.13 /Dth compared to an plan average cost of \$7.20 /Dth, \$73.1 million was saved.

The 2007-08 IRP reflects Company owned production of 49, 631 MDth and gas purchase volumes of 64,285 MDth at an average price of \$7.00/Dth. For plan purposes the price of natural gas peaks during December 2007 at \$8.13/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 as well as purchased at the first-of-month spot price. The exact amounts of each will depend on the trends in the spot market as compared to forecasts. The current FOM price for August of \$2.78/Dth is \$3.33/Dth lower than anticipated in the IRP.

The Division 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. An example of this is currently, due to low summer gas prices at Opal as discussed above, QGC has shut-in some company production and purchased those volumes on the spot market which is a departure from the IRP plan. Through monthly meetings, which are planned during the coming heating season, QGC hopes to keep regulators informed about the magnitude and the reasons for any variance that will occur from the base plan of this 2007-08 IRP. The Division feels the current strategy being followed does provide a degree of stability but also recognizes the risks associated from locking in with physical swaps when compared to actual spot purchases. However, due to the current market volatility that exists in future price projections as well as the value placed on price stability, the Division feels the risk of rising prices more than mitigates the risk of missing a market on the down-swing.



## GATHERING, TRANSPORTATION & STORAGE

Most of the Company-owned production produced by WEXPRO is gathered under the System Wide Gathering agreement between Questar Gas and Questar Gas Management. This agreement is based on cost-of-service which 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 1<sup>st</sup>. The table below is summarizes the history of the one-part cost-of-service rate broken out between the monthly reservation charge and the commodity charge.

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

The major issue outstanding with transportation is the Kern River rate proceeding before FERC and Questar Pipeline's cricondentherm-hydrocarbon-dew-point (CHDP) limits. As discussed in the IRP, QGC intervened in that case on two issues. Those issues dealt with the Straight Fixed Variable rate design (SFV) and the rolling of debt in rate designs. The FERC Commission issued in favor of keeping SFV rate designs which QGC favored as well as allowing the rolling in of debt costs which QGC opposed. Subsequent to that ruling there have been requests for

rehearing including the blending of the debt costs. Those rehearing dates have not been scheduled yet. The CHDP issue will not have any cost impact on QGC ratepayers since QPL is only codifying their current practices regarding QGC gas supplies.

## **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.”<sup>9</sup> 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.”<sup>10</sup>

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.”<sup>11</sup>

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<sup>9</sup> 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.

<sup>10</sup> “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.

<sup>11</sup> Ibid

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 application the Conservation Enabling Tariff Adjustment Option (CET).<sup>12</sup> On January 16, 2007, the Commission issued an order approving a three year pilot program of DSM initiatives undertaken by QGC. As part of that order, the Division was to prepare a first year evaluation report and file it with the Commission. This report was filed with the Commission on July 25, 2007 in Docket No. 05-057-T01.

In reviewing the Exhibits contained the in IRP, the Division questioned some of the results shown in Exhibit 9.9. The Company, in responding to those questions, discovered an error in modeling the DSM cases as compared to the base case and has furnished a revised Exhibit 9.9. This revised Exhibit 9.9 is provided as an attachment to this report. The revised exhibit corrects some of the volume data and the cost data show on line 420 of the exhibit.

The 2007-08 QGC IRP report provides a good summary of the operational expectations of QGC for the next heating season as well as projections of usage over the next several years. For the next IRP report due out in May of 2009, the Division recommends the following suggested improvements to the IRP report.

#### **SUMMARY OF SUGGETIONS FOR IMPROVEMENTS;**

- 1. Provide a Gas Balance Exhibit for the first year which summarizes by month Gas Demand broken out by Sales to GS-1 residential and GS-1 commercial separately and then Total Sales ( the difference being sales to all other rate classes), Company Use and Lost and Unaccounted For. Gas Supply should show Company Production, Company Purchases, Storage Injections and Withdrawals.**

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<sup>12</sup> “Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy”, Docket No. 05-057-T01, December 16, 2005.

- 2. Break out the GS-1 Use Per Customer (UPC), as shown in Exhibit 3-2, with a line for the Commercial class UPC which yields the total GS-1 expected UPC of 111.98 decatherms. The Commercial class classification should be based on a Load Factor which the Company feels will distinguish commercial operations that are more typical to having residential type load factors.**
  
- 3. Include the capital cost projections for projects listed in the IRP document.**

