BEFORE THE
PUBLIC SERVICE COMMISSION OF UTAH

Application of QUESTAR GAS COMPANY for Recovery of Gas Management Costs in its 191 Gas Cost Balancing Account	Docket Nos. 04-057-04, 04-057-09, 04-057-11, 04-057-13 and 05-057-01

DIRECT TESTIMONY OF

BARRIE L. MCKAY

FOR

QUESTAR GAS COMPANY

APRIL 15, 2005

QGC Exhibit 1

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Q. Please state your name and business address.

A. My name is Barrie L. McKay. My business address is 180 East 100 South, Salt Lake City, Utah.

Q. By whom are you employed and what is your position?

A. I am the Manager of Regulatory Affairs for Questar Gas Company (Questar Gas or Company). My education and employment history are attached as QGC Exhibit 1.1.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide an overview of the major issues in this case. My testimony will include: 1) a road map that provides the framework for reviewing the evidence supporting Questar Gas' request to recover costs beginning January 1, 2003, and all costs it continues to incur to meet its obligation to manage its gas supplies to provide safe and reliable service; 2) a brief history of the change in gas supplies, the actions taken to address those changes, and the safety impacts caused by those changes; 3) a procedural background describing the formal requests for cost recovery that the Company has filed with the Utah Public Service Commission (Commission); 4) an introduction of the Company's witnesses; 5) the decision-making process that a prudent utility would have undertaken (consistent with Commission orders) that led to the proposed alternatives presented at the technical conferences; 6) the analysis of the costs and affiliate-conflict criteria indicating that CO_2 removal and precision blending with CO_2 removal backup are the preferred alternatives; and 7) why the Company should receive cost coverage from January 1, 2003, through January 2005, and

prospectively as set forth in Questar Gas' January 31, 2005, application in this Docket.

I. ROAD MAP

Q. Please describe your road map.

A. I have prepared a road map that provides the framework for the evidence that supports Questar Gas' request for cost recovery. The issues involved in this proceeding actually began seven years ago. Factually and procedurally, this case is complex. A copy of the road map is attached as QGC Exhibit 1.2.

Q. The overriding objective identified on the road map is that Questar Gas has an obligation to manage its natural gas supplies to provide safe and reliable natural gas service to its customers. Can you please explain this obligation?

A. The Company has always been obligated to provide safe and reliable gas service. Witnesses in this case will explain that gas appliances operate safely only when adjusted to match the heat content of the gas delivered to be burned. This safety concern is the reason the Company is obligated by Commission rule to provide a range within which the average heating value per unit of gas will fall. This obligation requires the Company to maintain the heating value and specific gravity of gas within

that range. Commission Rule 746-320-2.B states:

> B. Heating Value -
>
> 1. Utilities shall file with the Commission, as part of their tariffs, the range within which the average heating value per unit of gas to be sold will fall.
> 2. Utilities shall maintain the heating value established in their tariffs and in so doing shall regulate the chemical composition and specific gravity of the gas so as to maintain satisfactory combustion in customers' appliances without repeated adjustment of the burners.
> 3. When utilities distribute supplemental or substitute gas, they shall ensure that it performs satisfactorily regardless of heating value.

Q. This obligation and rule seem fairly clear. Why has there been such a battle in this case over whether or not Questar Gas should receive cost coverage for meeting its obligation to follow this rule?

A. There are three main reasons.

1. Some have alleged Questar Gas, or its affiliate, caused the gas supplies to change and therefore caused the safety problem.
2. Some believe undue influence from affiliate relationships caused Questar Gas to choose a solution that did not prioritize its customers first.
3. Some try to brush aside the whole issue by remaining unconvinced there is a safety issue.

Q. Are any of these three premises correct?

A. No.

Q. What will the Company show to refute these three premises?

A. 1. The gas-supply change was beyond the control of the Company or its affiliate. Coal bed methane (CBM) is a great and proven new source of gas that could not and should not have been prevented from coming on Questar Gas' system. (Reference to Sections II A, B and C of the road map (QGC Exhibit 1.2).

2. The Company will provide evidence that it was not unduly influenced by its affiliate when choosing a solution, but in fact saved its customers millions of dollars because of CBM on its system and through purchasing it as a gas supply. (Refer to Section II D of the road map (QGC Exhibit 1.2).

3. The Company will explain gas-safety fundamentals, demonstrate that a change in gas composition on Questar Gas' system can create a safety risk, show that its stance on safety is consistent with national experts' opinions and explain that appliances must be inspected. (Refer to Section III of the road map (QGC Exhibit 1.2).

4. The Company will provide evidence that a clear and distinct decision-making process has been followed resulting in a well-documented, prudent decision for which Questar Gas is seeking cost recovery. (Refer to Section IV of the road map (QGC Exhibit 1.2).

II. BRIEF HISTORY

Q. Please provide an overview of how Questar Gas manages gas supplies.

A. Questar Gas has always managed its gas supplies to provide safe and reliable service to

its customers. As Questar Gas' witnesses will show, the composition of natural gas varies frequently due to many factors. As the natural gas industry developed, it became apparent that composition varies geographically and by producing field or basin. This is a key reason for Commission Rule 746-320-2.B. Changing gas composition is not a new problem for the Company. For example, it has been challenged by changes in heat content due to hydrocarbon processing. What originally brought these issues before the Commission was the decline in heating value of traditional supplies that the Company has relied on. However, the introduction of prevalent new supplies of CBM with a lower heating value has been and continues to be the focal point of the dispute about heat-content management.

Q. If the composition of natural gas supplies is always changing, how did Questar Gas manage for these changing supplies?

A. For years Questar Gas and its affiliate, Questar Pipeline Company (Questar Pipeline), managed gas supplies in a variety of ways to provide interchangeable supplies for Questar Gas customers. It is unlikely that a non-affiliated pipeline would have cooperated to the extent Questar Pipeline has with Questar Gas. Questar Pipeline blended various gas streams to maintain the proper heat content and occasionally configured gas flows on its lines in a non-traditional manner. Questar Pipeline also stopped processing certain gas on its southern system to accommodate Questar Gas. Questar Gas also increased its operating flexibility by filing for and receiving Federal Energy Regulatory Commission (FERC) approval to geographically expand its 7(f) service-area exemption. However, in the late 1990s these measures were overcome by

changes in gas supply and changes in the interstate natural gas pipeline grid.

Q. What happened next?

A. It became clear that available supplies would soon exceed Questar Gas' and Questar Pipeline's ability to meet the heat-content requirement of Questar Gas' customers and the Tariff's Btu range. Questar Gas was faced with supplies that would not be interchangeable with its uniquely high-Btu Tariff range and consequently with its customers' appliances. These gas supplies were, however, interchangeable with supplies in the rest of the nation. Questar Gas determined that action must be taken to conform its system to the lower-Btu supplies coming onto its system. QGC Exhibit 1.3 to my testimony shows that the pre-1998 Questar Gas base gas (set point) was significantly higher in Btu content than the gas used in the rest of the nation.

Q. What actions did the Company take in the late 1990s?

A. In January 1998, the Company met with regulators to discuss the differences in the heat content from historical supply sources and from new gas supplies coming onto the system. While the new CBM supplies represented viable and economic supply sources, these supplies were not interchangeable with existing appliance settings on Questar Gas' system. On April 21, 1998, the Company formally requested approval to change the heat-content operating range in its Tariff from 1020 - 1320 Btu/cf to 980 - 1170 Btu/cf. The Division of Public Utilities (Division) supported the change and no party objected. On May 1, 1998, the Commission approved the new tariff heat-content range. This change to the new set points, as shown in QGC Exhibit 1.3, moved Questar Gas

from being an island when compared with the majority of the nation to being in the middle of the pack for purposes of Btu range.

Q. Did this change affect existing and future appliances?

A. Implicit in this change was the fact that customers' existing appliances would need to be inspected and, if necessary, adjusted for this new range. I have attached as QGC Exhibit 1.4 a graph depicting the approximate operating ranges of properly adjusted pre-1998 appliances and the post-1998 appliances. The graph is explained more fully by witnesses later in the case but it is useful here to see that 1) the ranges are different; and 2) the ranges do overlap, thus providing an opportunity for a "transition" range. This transition range is depicted on the graph as the shaded area.

Q. How did the Company facilitate the need for appliances to change and, if necessary, be adjusted?

A. The Company informed those who manufacture, sell, install, inspect and adjust appliances for use in its service area that a change had been approved. The Company realized that to provide enough time for appliance inspections and potential adjustments it would need to manage the heat content of gas being delivered to its customers through a transition period. At that time a ten-year transition period seemed appropriate. It was determined that blending could be used to manage the lower heat content of existing traditional gas supplies. The Company investigated several options to deal with the ever increasing supply of lower-Btu gas, including CBM and traditional supplies of gas that had been processed to remove the higher-Btu hydrocarbons. The best option for managing heat content of the CBM supplies was to process gas coming

to the Payson and Indianola city gates.

Q. Can you explain what steps were taken to process the CBM supplies coming onto Questar Gas' system?

A. Questar Gas determined that by removing carbon dioxide (CO_2) from the CBM supplies, this gas would be interchangeable with existing appliance settings. This determination led to Questar Gas' decision to contract for the removal of CO_2 from supplies reaching its Payson and Indianola gates to ensure that they would be interchangeable through the transition period.

Q. Is this overall change in gas supplies a unique problem for Questar Gas or are other local distribution companies who are receiving liquefied natural gas (LNG) or CBM supplies facing similar issues?

A. Questar Gas is not alone in addressing this issue. For example, in the early 1990s higher-Btu gas from Wyoming reached Denver where the appliances were set for more traditional Btu levels. As a result, the local distribution company (LDC) had to blend gas supplies, change some customers' appliance settings, and pay for facilities to inject air into the gas to lower the heat content. Additionally, many areas in the nation are currently facing tremendous changes resulting from the decline in more traditional supply sources and their replacement with supplies that have a very different composition. Two of the newest sources of natural gas supplies are imported LNG and CBM. Both of these sources are having impacts on LDCs that require measures to be taken to ensure that these supplies are interchangeable with existing supplies.

Q. How has this been addressed on a national level?

A. The FERC recently received a report addressing those issues from a natural gas council working group, of which Questar Gas was a member. A copy of this report titled, "White Paper on Natural Gas Interchangeability and Non-Combustion End Use," is attached as QGC Exhibit 1.5 (White Paper). Among other things it speaks to the issues of new gas supplies and interchangeability. During the development of the report, it became even more apparent that Questar Gas is unique because of its isolated history in the Rockies. Natural gas supplies from the Rockies have typically been high in heating value and specific gravity. That fact, coupled with Questar Gas' generally higher elevation, left us on somewhat of a natural gas island. This reaffirmed the fact that is demonstrated in QGC Exhibit 1.3 that the majority of the country is using gas supplies with a much lower heating value than Questar Gas.

III. PROCEDURAL BACKGROUND

Q. Please summarize the procedural background leading up to the current application seeking cost recovery for management of gas supplies.

A. I have attached a detailed timeline as QGC Exhibit 1.6. I have bolded the highlights of the historical and procedural background that brought us to this point. The Company determined that the best option for delivering interchangeable gas supplies to its customers through the transition period was to remove CO_2 from the lower-Btu supplies coming onto its system. On November 25, 1998, in Docket No. 98-057-12, the

Company requested approval of a gas-processing contract with Questar Gas' affiliate Questar Transportation Services Company (Questar Transportation). The Company also sought approval to include CO_2 removal costs incurred pursuant to this contract, estimated at $7.5 million to $8.5 million annually, in its 191 Gas Cost Balancing Account (191 Account). In June 1999, the plant came online and CO_2 removal commenced.

Q. What was the Commission's response?

A. The Commission issued its Order on December 3, 1999, ruling that CO_2 removal costs could not be recovered through the 191 Account because they were not appropriate pass through costs. The Commission further provided that recovery of the CO_2 removal costs must be considered in either a general rate case or an abbreviated proceeding.

Q. What was Questar Gas' response to the Order denying cost recovery of CO_2 removal costs in the 191 Account?

A. Questar Gas filed an application on December 17, 1999, in Docket No. 99-057-20 to increase its general rates by $22,227,000, $7.3 million of that amount being for CO_2 removal costs. The Company sought and was granted emergency relief of $7.3 million. On January 27, 2000, Questar Gas filed an appeal of the Commission's Order in Docket No. 98-057-12 to the Utah Supreme Court.

Q. What was the outcome of the general rate case with regard to the $7.3 million in CO_2 removal costs?

A. The issue of whether the Company should be allowed rate coverage for these costs was disputed by the Committee of Consumer Services (Committee) and the Division. On June 2, 2000, the Company and the Division filed a stipulation (CO_2 Stipulation) that provided $5 million could be included in rates each year for five years. The Committee was not a party to the CO_2 Stipulation. The Commission approved the CO_2 Stipulation on August 11, 2000.

Q. What was the Committee's response?

A. The Committee appealed the Commission's Order approving the CO_2 Stipulation to the Utah Supreme Court and requested that the order be reversed.

Q. What happened to the 191 Account appeal brought by Questar Gas?

A. On October 23, 2001, the Utah Supreme Court issued its decision in the appeal brought by Questar Gas in Docket No. 98-057-12, reversing the Commission decision and holding that the Company could recover its processing costs in the 191 Account.

Q. What was the result of the Court's decision allowing gas processing costs in the 191 Account?

A. After the Company filed its general rate case on May 2, 2002, the parties stipulated (191 Accounting Stipulation) that CO_2 removal costs, up to the amount of $5 million annually, would be collected in the 191 Account. On December 30, 2002, the Commission approved the 191 Accounting Stipulation and CO_2 removal costs began to be collected in the 191 Account.

Q. The CO_2 Stipulation allowed the Company to collect up to $5 million annually for five years (June 1999 – May 2004). What happened to those costs when Questar Gas filed a pass through with a test period that extended beyond May 2004?

A. Questar Gas' May 2003 pass through application included $5 million of processing costs even though the final collection of those costs (in June 2004) would take place after the expiration of the CO_2 Stipulation. The Commission approved the pass through on an interim basis in June 2003.

Q. What happened to the Committee's appeal to the Utah Supreme Court?

A. On August 1, 2003, the Utah Supreme Court issued its decision agreeing with the Committee that the CO_2 Stipulation should be rejected. The Committee immediately petitioned the Commission to require Questar Gas to reduce its rates by $5 million and refund the entire amount of the CO_2 removal costs that had been recovered in rates.

Q. What was the Company's response?

A. The CO_2 Stipulation had limited the Company's cost recovery to $5 million annually. Once the CO_2 Stipulation was rejected, the Company applied for recovery of its total CO_2 removal costs of approximately $6.4 million annually, pending the Commission's decision on the Committee's petition.

Q. How was this resolved?

A. The parties entered into a stipulation that allowed inclusion of $5 million in annual CO_2

removal costs in the pass through applications filed in September and December 2003 and May 2004, pending the resolution of this issue by the Commission.

Q. How was the issue of whether the Company should be granted cost recovery resolved before the Commission?

A. The parties were allowed to file briefs marshalling the evidence presented in the 1998 and 1999 cases regarding whether the Company was prudent in incurring CO_2 removal costs.

Q. What was the outcome?

A. In its August 30, 2004, Order, on page 1, the Commission denied Questar Gas' request for cost recovery of its CO_2 removal costs but clarified in its Order on reconsideration that Questar Gas was not precluded from seeking recovery in other dockets:

> the Order addressed only Questar's failure to substantiate approval of the CO_2 Stipulation in these proceedings and our necessary rejection of the Stipulation, which would have permitted recovery of some processing costs through May of 2004. Our reference to the May 2004 end date was dictated by the Stipulation's terms and was not intended to have any other preclusive effect on recovery by Questar. In regards to Questar's requests for clarification and reconsideration, **we state that our Order does not preclude Questar from seeking recovery of CO_2 processing costs in other dockets . . . . We will need to wait for Questar to make whatever arguments and present whatever evidence it deems appropriate in seeking recovery of these costs, whether incurred pre- or post-May 2004, in whatever dockets Questar may raise the issue.**

(Emphasis added)

Q. How did the Company respond?

A. Because of safety and reliability issues, Questar Gas continued to incur costs to remove

CO_2 in order to manage heat content and protect customers. The Company's pass through applications in September and December 2004 sought recovery of $7.5 million annually in costs incurred to manage the heat content of these supplies.

Q. How did the Commission address the Company's ongoing costs?

A. On September 8, 2004, the Commission opened a new docket, 04-057-09, entitled *In the Matter of the Investigation of Questar Gas Company's Gas Quality*. The following is a list of topics for technical conferences that were subsequently held in the docket:

1. October 13, 2004, Technical Conference: Gas Quality-How it Impacts Questar Gas; and Evolution of FERC Regulation in the Natural Gas Marketplace
2. October 21, 2004, Technical Conference: FERC Proceedings on Gas Quality - Potential Action at the FERC; Gas Quality Specifications; and Decision-Making Process.
3. November 12, 2004, Technical Conference: Interchangeability-Management Options.
4. November 23, 2004, Technical Conference: Green-Sticker Program.
5. December 3, 2004, Technical Conference: Discussion of Alternatives.
6. January 19, 2005, Technical Conference: Analysis of Preferred Alternatives.

7. February 1, 2005, Technical Conference: Green Sticker, Btu/Altitude Adjustment Accord.

Q. What were the results of the technical conferences?

A. Although many parties were better able to understand the actions the Company proposed to take, there still remains some level of disagreement. Therefore, the Company filed this application on January 31, 2005, seeking cost recovery for its actions taken to fulfill its obligation to manage the heat content of its gas supplies.

IV. INTRODUCTION OF WITNESSES

Q. Would you identify the Company's witnesses?

A. Yes, referring to the road map, QGC Exhibit 1.2, will help understand the sequence and focus of each witness.

Mr. Lawrence Conti, the General Manager of Operations and Gas Control for Questar Pipeline, will provide testimony on the numerous significant factors that influence Questar Gas' obligation to manage the heat content of its gas supplies. Specifically, he will address natural gas combustion and interchangeability theory; the evolution of the interstate natural gas pipeline grid and the natural gas marketplace; the impact of market and regulatory changes that made Questar Gas an "island;" the history of set-point changes on Questar Gas' system; Questar Gas' past and ongoing efforts to provide interchangeable gas supplies for its system; the impact of CBM from the Ferron area on

Questar Pipeline's southern system; Questar Gas' decision to proceed with CO_2 removal; the development and analysis of 14 alternatives to the management of gas supplies; and Questar Gas' preferred alternative, precision blending with CO_2 removal as a back up.

Mr. Robert Lamarre, an independent consultant on geology of oil and gas and particularly CBM, will provide testimony to show that CBM is a critical source of supply for Questar Gas and the nation, particularly in light of the fact that non-CBM domestic production in the Rockies is dwindling. He will also explain that Questar Gas can expect to have a substantially greater volume of CBM delivered to it in the future from various pipeline systems.

Mr. Alan Walker, the Manager, of Gas Supply for Questar Gas, will provide testimony to describe and quantify the benefits to Questar Gas' Utah customers that resulted from the discovery, development, and production of CBM. Specifically, he will show that over the last six years, Questar Gas customers have realized savings of more than $36 million.

Dr. Robert Reid, an independent consultant on the economics of the gas industry and gas prices, will discuss how the natural gas industry has changed over the last 20 years and more specifically how changes in production and transportation have affected the Rockies. He will also describe his analysis of the impact that CBM development has had on natural gas prices and provide support for Mr. Walker's cost benefit analysis.

Mr. Charles Benson, an independent consultant on engineering, including interchangeability of gas supplies, will provide testimony on the safety issue. Specifically, he will address interchangeability and the indices used to measure interchangeability, combustion theory, and gas composition. He will also compare the introduction of LNG supplies on the east coast to the CBM supplies coming onto Questar Gas' system. He will discuss the NGC+ Interchangeability Work Group's "White Paper" (QGC Exhibit 1.5), the March 2005 lab test and George Schroeder's 1998 testimony and analysis. He also supports the fact that appliances must be inspected and, if necessary, adjusted when new gas supplies are coming onto a system.

V. DECISION-MAKING PROCESS

Q. Would you please summarize the technical conferences and the materials presented there?

A. The technical conferences were a good opportunity to educate interested parties on issues regarding gas quality and interchangeability. They were an opportunity for the Company to set forth the decision-making process it used in addressing heat-content management and to invite other parties and the Commission to collaborate with the Company in working through the Company's proposed alternatives. The first technical conference re-capped issues related to interchangeability, the evolving sources of gas supply, and the evolution of the interstate natural gas pipeline grid. The Company also presented a lab demonstration of the very real need for the Company to manage gas supplies to provide safe and reliable gas service for customers. The second conference

addressed the alternative of seeking relief at the FERC to keep CBM off of the Company's system or to require producers or someone else to pay for removal of CO_2. This alternative ultimately was rejected by all interested parties.

The Company proposed a process to determine the best alternative for managing the heat content of its gas supplies. This process was based on the Commission's August 2004 Order, where the Commission stated:

> One would expect a prudent gas distribution company faced with the risk of a safety issue of the magnitude faced by Questar's distribution customers to clearly *identify its objective*; to *identify alternatives* to meet the objective, to *define the method and criteria* by which it would *evaluate the alternatives* and to record or document the process in support of the ultimate decision.[1]

Furthermore, when a utility decision involves an affiliate the Commission stated:

> We anticipate that where such conflicts can arise and a utility seeks recovery of costs affected with such potential conflicts, the utility understands its burdens of proof and persuasion and takes steps (which enable it to present evidence of its actions) showing how these *conflicts were recognized, were minimized* and how the *utility prioritized its customers' interests* and was not *unduly influenced* by its affiliate interests in the actions it took.[2]

1 Order, Docket Nos. 98-057-12, 99-057-20, 01-057-14, and 03-057-05 (August 30, 2004) at 23.
2 Order on Request for Reconsideration or Clarification, Docket Nos. 98-057-12, 99-057-20, 01-057-14 and 03-057-05 (October 20, 2004) at 3.

Subsequent technical conferences addressed the various alternatives to address Questar Gas' heat-content management and its cost; the success of the Company's Green Sticker program in encouraging customers to have their appliances inspected and, if necessary, adjusted; and the details and costs of the preferred alternatives for managing heat content.

Q. Was the Commission's Order used to guide the Company's decision-making process?

A. Yes. The Commission's Order provided a framework for the Company's internal discussions, planning and analysis, technical-conference presentations, and ultimately, the identification of the preferred alternative.

Q. How was this accomplished?

A. The Commission's Order was specific in its expectation that, when faced with a safety issue of the magnitude the Company believes this to be, its first step would be to "*clearly identify its objective."* The Company has done so. Its objective is, as it has always been, to "manage gas supply to provide safe and reliable gas service for customers."

Q. How were the other expectations of the Commission addressed?

A. The Commission's expectations were used as the criteria that guided the process. The Commission instructed that the steps after identifying the objective should be to "*identify alternatives to meet the objective,"* and to "*define the method and criteria by*

which [the Company] would evaluate the alternatives." In response, the Company identified, with input from the Division and Committee, 14 alternatives for meeting the objective, then developed a decision-making matrix to evaluate each alternative on the basis of the following criteria: safety, reliability, implementation, cost and potential affiliate conflicts. A copy of the decision-making matrix is attached as Exhibit 5 to the Application. Mr. Conti's testimony details the analysis of each of the 14 alternatives using these criteria.

Q. How were the Commission's expectations that the Company would apply even more strict criteria to alternatives with potential affiliate conflicts addressed?

A. The decision-making matrix included additional criteria to be used as evidence that the Company's eventual action was not unduly influenced by its affiliate interests. This matrix recognizes alternatives that have potential affiliate conflicts and also lists ways that such conflicts could be minimized and how the utility prioritized its customers' interests.

Q. Were all alternatives subjected to the criteria you described?

A. They were, and that process led to the parties narrowing the alternatives to the three preferred alternatives: 1) continued CO_2 removal; 2) precision blending of gas streams on Questar Pipeline's southern system with CO_2 removal as a backup; and 3) precision blending with Kern River supplies as a backup. Mr. Conti's testimony details the safety, reliability, implementation, and costs of these alternatives. However, because I am responsible for the affiliate and cost analysis regarding the three preferred

alternatives, I am providing the following testimony.

VI. ANALYSIS OF COSTS AND AFFILIATE ISSUES

A. COSTS

Q. Please discuss the cost analysis that was performed on the three preferred alternatives?

A. To do this, I will need to refer to QGC Exhibit 1.7, "Analysis of Preferred Alternatives," which was referred to as Exhibit 12 in the Application.

Q. Will you please describe this Exhibit?

A. This is a three-page exhibit that summarizes the analysis of the three preferred alternatives within the decision-making matrix. I will specifically focus on the cost analysis. For ease of discussion, I have modified this exhibit by adding column and line numbers. As you can see by looking at line 22, in columns 2, 3, and 4, the 2006 annualized cost of service is $5.8 million, $5.9 million and $7.6 million for CO_2 removal, precision blending with CO_2 as a backup, and precision blending with Kern River as a backup, respectively.

Q. How were these costs calculated?

A. The summary of how these costs were calculated is provided as QGC Exhibit 1.8 (which was also attached to the Application as Exhibit 13.) Again, I have modified this

exhibit by adding column and line numbers.

Q. Will you please explain QGC Exhibit 1.8?

A. Page 1 of this exhibit is a summary of the capital investment, 2006 cost-of-service and the net-present-value calculation for the three preferred alternatives. Page 2 is a comparison over time of the annual cost-of-service for the three alternatives. Pages 3 through 7 are the year-by-year cost-of-service calculations for the three alternatives.

Q. What conclusions can you draw from this cost analysis?

A. As can be seen on page 1, line 32, column 3, precision blending with Kern River backup is more costly than the other two alternatives. CO_2 removal and precision blending with CO_2 backup (line 32, columns 1 and 2) have essentially the same costs.

Q. Why is precision blending with CO_2 removal the Company's preferred alternative?

A. There are two main reasons: 1) it provides a greater opportunity to reduce total costs during the transition period, and 2) it reduces the risk of increased fuel costs.

Q. Are the higher costs shown in QGC Exhibit 1.8 the only reason for rejecting the blending/Kern alternative?

A. No. As stated in the technical conferences and in Mr. Conti's and Mr. Walker's testimony, this alternative has serious deficiencies. The fact that Kern River does not offer intra-day (no-notice) service disqualifies the alternative. The cost of no- notice

service, if it were available, would make this alternative even more costly than the other two alternatives.

B. AFFILIATE CONFLICT

Q. **Now let's go to the affiliate analysis that is shown on pages 2 and 3 of QGC Exhibit 1.7. Is there a potential underlying affiliate conflict in this case?**

A. Yes. Column 2 on pages 2 and 3, titled Gas Interchangeability, describes an underlying affiliate conflict that relates to all three preferred alternatives. Questar Pipeline is flowing CBM on its system in compliance with its pipeline Tariff and standards that, if not further processed to remove CO_2, does not meet Questar Gas' transition range. Questar Gas would like to have as much of this gas as possible meet its transition range.

Q. What steps were taken to minimize the conflict?

A. Assuming that Questar Gas' customers do not benefit from CBM, Questar Gas analyzed whether there is a way to minimize the conflict by requesting that the FERC change Questar Pipeline's Tariff or provide an interpretation of Questar Pipeline's Tariff that would restrict CBM, without further CO_2 removal, from flowing on Questar Pipeline. It should be noted that producers of CBM already process the CBM by removing CO_2 to a level that meets Questar Pipeline's Tariff specifications. The CO_2 removal contracted for by Questar Gas is necessary to make the gas interchangeable with the transition range I have previously described.

Q. How were customers prioritized first?

A. At the second technical conference Questar Gas analyzed the possible outcomes of going to the FERC. None of the parties in attendance at the technical conference felt that it was a wise choice to go to the FERC at this time. Additionally, Mr. Walker testifies that by allowing CBM supplies to come onto its system, Questar Gas customers have saved over $36 million. He also testifies that if Questar Pipeline's Tariff were used to keep CBM off its system, then it would be likely that Questar Gas' company-owned production would also be kept off Questar Pipeline's system unless it was processed to remove heavy hydrocarbons. This could result in costs for processing company-owned production of approximately $8 to $18 million annually. Therefore, customers' overall costs are lower by not going to the FERC.

Q. How can Questar Gas show there was no undue influence?

A. Questar Gas is willing to go to the FERC and seek relief but believes, as do other parties, that this is not a prudent choice. Both the Division and the Committee rejected this alternative in the technical conferences. Additionally, Mr. Walker has testified that a prudent utility would be wise to "influence" the increased production of CBM by purchasing the gas and passing on the significant savings.

C. CO_2 REMOVAL AFFILIATE CONFLICT

Q. Now would you please describe the potential affiliate conflicts associated with continued CO_2 removal?

A. Continuing the practice of processing gas as needed has a potential affiliate conflict. Questar Transportation, an unregulated subsidiary of Questar Pipeline, owns and operates the processing plant. Questar Transportation would normally seek a higher return on investment than regulated utilities. Questar Gas would prefer not to pay more than its Commission-authorized rate of return.

Q. How can this affiliate conflict be minimized while giving priority consideration to Questar Gas' customers?

A. To minimize the obvious conflict, a prudent utility would attempt to negotiate a contract with its affiliate that costs no more than it could provide the service itself. Questar Gas has done so. Given this, it would be of no benefit for Questar Gas to pursue ownership of the plant, although that is another option for minimizing the affiliate conflict. A third option would be to negotiate with a third party, but as indicated above, an unregulated company would expect much higher rates of return on its investment to provide this necessary service. Questar Gas' customers have been prioritized first.

D. PRECISION BLENDING AFFILIATE CONFLICT

Q. Please describe the affiliate conflicts associated with precision blending.

A. Precision blending with CO_2 removal as a backup has potential affiliate conflicts. Although processing would be curtailed, the same affiliate conflicts described above exist when the backup service is needed. Additional affiliate conflicts exist because Questar Pipeline is the only interstate pipeline available to provide the blending service

in the area it is needed. Questar Pipeline would expect to earn its FERC-allowed rate of return on investment for its blending service. This may be higher than what is currently allowed Questar Gas.

Q. How can this affiliate conflict be minimized while giving priority consideration to Questar Gas' customers?

A. To minimize the conflict and prioritize its customers first, Questar Gas would have to be an active participant in Questar Pipeline's proceedings to establish a blending service rate and advocate the best possible position for Questar Gas' customers. On the other hand, if a blending service could be negotiated between Questar Pipeline and Questar Gas that did not legally require FERC approval, Questar Gas would attempt to negotiate a contract similar in terms with returns to those currently allowed by this Commission. This would be evidence that Questar Gas' customers have been prioritized first and that they are paying a fair price for the service.

VII. COST RECOVERY BEGINNING JANUARY 1, 2003

Q. What is the level of cost recovery you are seeking in this case?

A. Questar Gas is seeking to recover all costs it is incurring to manage the heat content of gas coming onto its system. As I have shown in my cost-analysis discussion, Section VI, and on QGC Exhibit 1.8, the costs of the Company's preferred alternative (precision blending with CO_2 removal as a back up) are approximately $5.9 million, $5.7 of which is Utah's allocation on an annual basis. Questar Gas is also seeking recovery of past

costs from January 1, 2003, through January 2005.

Q. What level of past costs is Questar Gas seeking?

A. Questar Gas is seeking $14.3 million. These are the actual costs Questar Gas incurred to manage the heat content of gas from January 1, 2003, through January 2005.

Q. Why is Questar Gas seeking to recover costs incurred from January 1, 2003, through January 1, 2005?

A. Following the Utah Supreme Court's reversal of the Commission Order in Docket No. 98-057-12 on October 23, 2001, and the Commission's subsequent approval of the 191 Accounting Stipulation in Docket No. 02-057-02 on December 30, 2002, CO_2 removal costs had been collected in the 191 Account. This account is designed to collect costs on a dollar-for-dollar basis with "true-ups" or "adjustments" for actual costs occurring on a periodic basis. There have been numerous times in the history of this account when this Commission has ordered the Company to remove or include actual past costs that were deemed just and reasonable. Although the Company believes it could demonstrate the prudence of its actions in incurring CO_2 removal costs going back to periods subsequent to the time-frame at issue in the 1999 general rate case (but prior to December 30, 2002), it determined to limit its request for recovery to costs incurred during the period since costs began to be collected in the pass through account.

Q. Before we leave the subject of costs, please explain how the $5.7 will be collected from Utah customers?

A. The Company has proposed rate schedules that reflect adjustments to firm sales service customers to recover the costs of $5.7 million. A copy of the proposed rate schedules for GS-1, GSS, F-1, F-3, F-4 and NGV customers were filed with the Application as Exhibit 14.

VIII. CONCLUSION

Q. Would you please summarize the Company's case.

A. The evidence provided by the Company will allow the Commission to find that Questar Gas should be allowed the full cost recovery of its gas management costs back to January 1, 2003, as well as on a prospective basis. Specifically, the Company has shown in Mr. Conti's and Mr. Lamarre's testimony that the evolution in the nature of gas supply was beyond its control, as well as its affiliates. Therefore, the Company and its affiliate, Questar Pipeline, did not cause the safety problem. They have shown that CBM is a great and proven new source of natural gas that should be embraced, not shunned. Mr. Walker, in conjunction with Dr. Reid, has shown that the development of large quantities of CBM geographically near Questar Gas' system has, in fact, saved customers millions of dollars. The analysis in the technical conferences, provided as testimony by Mr. Conti and me, shows that going to the FERC to prevent CBM from coming on Questar Gas' system is an action that all parties agree is not viable. Mr. Benson has established the fact that there is a safety concern with the change in the gas supply.

Finally, the testimony in this case shows that the Company prudently identified an objective, identified criteria to evaluate alternative solutions and then thoroughly analyzed and explored 14 alternatives. The result was the recommendation that precision blending with CO_2 removal as a backup should be used to meet the Company's objective.

Q. What result is the Company seeking?

A. The Company is receiving no compensation for providing a necessary service to its customers. The Company has determined and shown that the preferred alternative, precision blending with CO_2 removal as a back up, is necessary to protect customers from unsafe operating conditions. The Company has shown that these services are reasonably priced. Although they are being provided by an affiliate, the Company has demonstrated that its customers have been prioritized first and that no undue influence has affected the decision to choose either this option or the resulting price for such service. The Company is asking the Commission to find that its preferred alternative is reasonable and to allow all costs of managing the heat content of gas in the 191 Account. Questar Gas' application and testimony show that the actions taken are prudent and necessary to provide safe reliable natural gas for customers.

This is a very mature issue. Most of the interested parties have literally spent years studying gas management on Questar Gas' system. This Commission has approved a new heat-content range in Questar Gas' Tariff. We are now more than half-way through the transition period that has been communicated to customers. The Company

677 continues to carefully manage the heat content of the gas being delivered to it so that it
678 falls within a safe and acceptable range. It is time for these costs that were and are
679 being prudently incurred to be allowed in rates and be found to be just, reasonable and
680 in the public interest.
681
682 **Q. Does this conclude your testimony?**
683 A. Yes

State of Utah)
) ss.
County of Salt Lake)

I, Barrie L. McKay, being first duly sworn on oath, state that the answers in the foregoing written testimony are true and correct to the best of my knowledge, information and belief. Except as stated in the testimony, the exhibits attached to the testimony were prepared by me or under my direction and supervision, and they are true and correct to the best of my knowledge, information and belief. Any exhibits not prepared by me or under my direction and supervision are true and correct copies of the documents they purport to be.

_____
Barrie L. McKay

SUBSCRIBED AND SWORN TO this 15th day of April 2005.

_____
Notary Public