C. Scott Brown (4802)
Colleen Larkin Bell (5253)
Questar Regulated Services
180 East First South
P.O. Box 45360
Salt Lake City, Utah 84145
(801) 324-5172
(801) 324-3131 (fax)
scott.brown@questar.com
colleen.bell@questar.com

Gregory B. Monson (2294)
David L. Elmont (9640)
STOEL RIVES LLP
201 South Main Street, Suite 1100
Salt Lake City, Utah 84111
(801) 328-3131
(801) 578-6999 (fax)
gbmonson@stoel.com
dlelmont@stoel.com

Attorneys for Questar Gas Company

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of QUESTAR GAS COMPANY for Approval of a Natural Gas Processing Agreement	:	Docket No. 98-057-12
In the Matter of the Application of QUESTAR GAS COMPANY for a General Increase in Rates and Charges	:	Docket No. 99-057-20
In the Matter of the Application of QUESTAR GAS COMPANY to Adjust Rates for Natural Gas Service in Utah	:	Docket No. 01-057-14
In the Matter of the Application of QUESTAR GAS COMPANY to Adjust Rates for Natural Gas Service in Utah	:	Docket No 03-057-05

OPENING BRIEF OF QUESTAR GAS COMPANY ON PRUDENCE

TABLE OF CONTENTS

PAGE

TABLE OF AUTHORITIES

PAGE

Cases

Other Authorities

Rules

I. INTRODUCTION

Questar Gas Company ("Questar Gas" or "Company"), pursuant to the Commission's Order issued on December 17, 2003 and Scheduling Order issued on March 26, 2004, submits this brief addressing the prudence of the costs incurred by Questar Gas to remove carbon dioxide ("CO_2") from natural gas coming onto the Questar Pipeline Company ("Questar Pipeline") southern system ("CO_2 removal costs") to make that gas interchangeable with other gas received by Questar Gas at Payson Gate.[1] In *Committee of Consumer Services v. Public Service Comm'n of Utah* ("*Decision*"),[2] the Utah Supreme Court held that CO_2 removal costs may be included in rates only if the Commission finds that such costs were prudently incurred. To the extent any or all of those costs were prudently incurred, corresponding rate recovery for CO_2 removal is appropriate. Questar Gas seeks recovery of its prudently-incurred costs in this proceeding.

CO_2 removal costs have been incurred since 1999 to allow Questar Gas to manage the heat content of its gas supplies as required by Commission rule and the Company's tariff.[3]

---

[1] The main point of delivery of gas from Questar Pipeline to Questar Gas on Questar Pipeline's southern main pipeline is in Payson, Utah and is known as Payson Gate.

[2] 2003 UT 29, 75 P.3d 481.

[3] *See Infra* note 9. In this brief, the term heat content is often used as a shorthand reference for a more complex set of issues. This set of issues involves, among other things, heat content, specific gravity, Wobbe index, gas interchangeability and recommended appliance set points. These issues are important because there are serious safety issues involved with burning natural gas in appliances. The heat content and specific gravity of natural gas is affected by the mix of hydrocarbons (*e.g.*, methane, propane, butane and ethane) and inert gases (*e.g.*, CO_2 and nitrogen) in the gas stream. Heat content is measured in British thermal units ("Btu") per volume of gas, *e.g.*, cubic feet ("cf"), at specified pressure. One Btu is the quantity of heat required to raise the temperature of one pound of water one degree at sea level. Unless otherwise noted in this brief, heat content will be specified in Btu/cf and will be based on a pressure at sea level of 14.73 pounds per square inch. Specific gravity is the ratio of the mass of a given volume of gas to the mass of the same volume of air. The Wobbe index is an index used to determine the burning characteristics of gas. It is the heat content divided by the square root of the specific gravity. Interchangeability is a way to assess the ability of one gas stream to substitute for another. Depending on the interchangeability of a gas stream, local distribution companies such as Questar Gas provide recommended appliance settings to dealers, installers and repair technicians. These set points vary depending on things such as pressure that is different at different elevations.

Managing the heat content is required to avert serious customer-safety issues, and removal of CO_2 has allowed a transition period in which the Company's customers can have their appliances inspected and adjusted to safely burn gas within the current approved tariff range. The Commission has previously determined that the Company's rates, which included a portion of the CO_2 removal costs, were just and reasonable. In the Company's 1999 general rate case, Docket No. 99-057-20, the Company and the Division of Public Utilities ("Division") entered into a stipulation ("CO_2 Stipulation"), in which they agreed that $5 million of CO_2 removal costs would be included in rates and that up to $5 million could be included in rates each year for five years, subject to further regulatory review of the reasonableness of the costs in any given year during the five-year period. The Commission approved the CO_2 Stipulation in an order issued in August 2000 ("*2000 Order*"),[4] and the Company's rates have included $5 million in annual CO_2 removal costs since that time.[5]

The $5 million per year approved in rates represented approximately 68% of the Company's estimated annual CO_2 removal costs. This amount represented a reasonable and prudent settlement of the amount of CO_2 removal costs to be appropriately recovered in rates—a reasonable compromise taking into consideration the risks and uncertainties that all parties must account for in litigation. The settlement reflected the fact that the Division had some reservations about the Company's decision not to go to the Federal Energy Regulatory Commission ("FERC"). It also lowered the cost to Company ratepayers in comparison to the amount they would have been required to bear had Questar Gas gone to the FERC only to have it

[4] Report and Order, *In the Matter of the Application of Questar Gas Company for a General Increase in Rates and Charges*, Docket No. 99-057-20 (Utah P.S.C. August 11, 2000).

[5] From August 11, 2000 to December 30, 2002, recovery was through the Company's general rates. Following the Commission's order in Docket No. 02-057-02, recovery was through Account 191. Following reversal and remand of the Commission's original decision in Docket No. 98-057-12, a portion of CO_2 removal costs incurred prior to August 11, 2000 were also recovered through Account 191.

find Questar Gas responsible for all CO_2 removal costs (the most likely outcome of a FERC proceeding given the substantive merits of the case, particularly given that Questar Gas was the only Questar Pipeline customer that required CO_2 removal from gas that was in all respects compliant with Questar Pipeline's FERC-approved tariff), in which case ratepayers would have borne 100% of the cost of CO_2 removal—far in excess of the 68% provided in the settlement.

Under the proper standard for purposes of cost recovery in rates, prudence does not focus on subjective motives for utility action. Nor is prudence an all-or-nothing proposition. Rather, a proper prudence review asks whether an unaffiliated utility could have reasonably made the same decision under the same circumstances and what level of costs it could have reasonably incurred. Thus, unless the Commission determines that an unaffiliated, prudent utility could not have incurred the previously-approved amount of CO_2 removal costs, that amount remains an appropriate amount of recovery. For the reasons set forth below, an unaffiliated, prudent utility could, and likely would, have reacted to the heat-content problem in the same way Questar Gas did. Therefore, Questar Gas respectfully requests that the Commission expressly find the CO_2 removal costs previously included in rates to have been prudently incurred. This would be a confirmation of the Commission's approval of the CO_2 Stipulation in the *2000 Order*, buttressed by a finding in accordance with the *Decision* that those costs were prudently incurred. As demonstrated below, there is substantial evidence on the record previously developed in this case to support such a result. This brief marshals such evidence as required by the Commission's Order issued in these dockets on December 17, 2003.

The evidence on the record compels the conclusion that all of the CO_2 removal costs were prudently incurred, and certainly supports a finding that the 68% recovery previously approved by the Commission is well within the range of reasonableness, even if the Commission

has concerns about the Company's decision not to go to the FERC in an attempt to shift responsibility to fix the heat-content problem onto some other party.

II. FACTUAL BACKGROUND

Historically, the heat content of natural gas delivered to the Company's Utah customers has been higher than gas reaching other local distribution companies ("LDCs") in the region and nationally.[6] Prior to May 1, 1998, the Company's Commission-approved Utah tariff specified an unusually high heat-content operating range of 1020 to 1320 Btu/cf.[7] Appliances are required by code to be set to burn gas within the tariff's specified range. This is an important requirement for customers, appliance dealers, installers and repair technicians because if appliances are improperly set potentially serious safety problems may arise. These include conditions known as flame liftoff and incomplete combustion. In moderate flame-liftoff conditions, elevated levels of the potentially deadly gas carbon monoxide are present in excess of accepted code requirements. In severe liftoff conditions, the flame burns above the burner surface or is extinguished entirely. [8]

---

[6] *See, e.g.*, Allred 98 Direct, Ex. 1.2 (showing lower set points for 16 other LDCs throughout country). In this brief, the format for citations to written testimony will be the last name of the person submitting; the year of the case in which the testimony was submitted (*i.e.*, 98 or 99); whether the testimony was direct, rebuttal, etc.; and the pinpoint cite to either a page number or exhibit number within the testimony.

[7] *See* Transcript ("Tr.") 6/22/99 at 75 (Allred). In this brief, the format for citations to hearing testimony will be Tr.; the date of the transcript; a pinpoint cite to the page; and the last name of the witness in parentheses.

[8] Schroeder 98 Direct at 3-4 ("Q. What are the consequences of using natural gas outside [the] acceptable range? A. Natural gas appliances will not function safely. Two major concerns are flame liftoff and incomplete combustion. Liftoff refers to an unstable natural gas flame. In moderate liftoff conditions, products of combustion contain elevated levels of carbon monoxide. In severe liftoff conditions, the flame burns above the burner surface or is extinguished entirely. Problems with erratic burner ignition can also be experienced with liftoff conditions. A significant safety concern occurs when liftoff conditions are present and an appliance venting malfunction occurs. Under these conditions hazardous amounts of carbon monoxide will enter occupied areas of homes and buildings. Incomplete combustion is another concern of improper combinations of Btu content and specific gravity. . . . Appliances can be set to operate efficiently and safely on gas with different Btu contents. For each set point, gas within a certain range of Btu content and specific gravity can be safely burned. However, if gas outside a certain range is burned the problems I just discussed will occur.").

Both flame liftoff and incomplete combustion cause significant safety concerns. In recognition of these problems, Commission rules require Questar Gas to regulate the chemical composition and specific gravity of gas delivered to its customers within the heat-content range approved in its tariffs.[9]

Beginning in the early 1990s, the heat content of the gas delivered to Questar Gas through the interstate pipeline system gradually began to decline.[10] One factor in this decline was the discovery and development of natural gas produced from coal seams in Emery County.[11] Because coal-seam gas as delivered to the interstate pipeline system is nearly pure methane, with virtually no higher Btu components such as propane or butane, but with inert components such as CO_2, it has a lower Btu content than many other gas supplies in the region.[12] Producers of this gas pay to process it to the 3% total-inert level required by the FERC-approved tariff specifications of both Questar Pipeline and Kern River Pipeline. This lower-Btu coal-seam gas can be used by customers in every other western LDC.[13] However, the increased receipt of such gas on the Company's system would cause unsafe operating conditions for the Company's customers due to their unusually high appliance set points, which were set to burn the uniquely high-Btu gas Questar Gas historically received.

---

[9] *See* Utah Admin. Code R746-320-2.B.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.").

[10] *See, e.g.*, Questar Gas 98 Application, Ex. 1; Allred 98 Direct at 4.

[11] Allred 98 Direct at 4.

[12] *Id*. at 4-5 ("Coal seam gas is produced from wells drilled into underground coal seams. This gas has virtually no higher Btu components such as propane or butane. It does have inert gases, mostly CO_2. This gas can be transported on the interstate pipeline system in intermountain areas with up to a 3% inert gas content. The result is an average Btu content of about 980 to 990 Btu for this gas.").

[13] *See id*., Ex. 1.2.

From 1993 to 1996, production of coal-seam gas increased slowly, and the blended stream of gas delivered to Questar Gas was still well within the heat content specified in the Company's tariff.[14] However, in 1997, production of this gas began to increase at a much faster rate than previously seen.[15] Questar Gas was initially still able to manage the declining heat content without requiring a change in the Btu range specified in its tariff. However, in late-1997 Questar Gas realized that by the spring or early summer of 1999, given the increased volumes of coal-seam gas projected to be delivered to Payson Gate, blending would no longer be sufficient to ensure the delivery of safe, tariff-compliant gas to the Company's customers.[16] In January 1998, Questar Gas informed the Commission, the Division and the Committee of Consumer Services ("Committee") of the accelerating decline in the heat content of its gas supplies generally, as well as the issue specifically related to coal-seam gas.[17] Questar Gas continued to review the status of the issue with the Commission, Division and Committee throughout 1998.[18]

As the heat content of the Company's entire gas supplies continued to decline in 1998, Questar Pipeline worked with Questar Gas to arrange for additional facilities to continue blending higher and lower-Btu gas on both the northern and southern pipeline system, to meet the Company's tariff-specified heat-content range. Questar Pipeline also increased its deliveries of higher Btu gas from Overthrust Pipeline, through backhaul arrangements, and Questar Gas

[14] *See infra* notes 32, 34-35.

[15] *See infra* notes 33, 36, 40.

[16] *See infra* note 37.

[17] *See infra* note 46.

[18] *See id.*

amended its service-area determination approved by the FERC under section 7(f) of the Natural Gas Act, to give it more opportunity to blend gas.[19]

Recognizing that it was perhaps the only LDC with such a high heat content in its tariff and that the decline in heat content was a safety issue, Questar Gas concluded, and all regulators and the Committee concurred, that the long-term solution to declining heat content was to lower the Btu range specified in the Utah tariff and make a corresponding change to recommended appliance set points.[20] Following consultation with the Commission, Division and Committee, the Company's Utah tariff was amended effective May 1, 1998 to reduce the heat content to an operating range of 980 to 1170 Btu/cf. The Division supported this change in its memorandum filed on April 30, 1998.[21] No one disputed the need to make the change. However, Questar Gas also recognized that customers would not have sufficient time before spring or early summer of 1999 to inspect and adjust their appliances to the new set points associated with the new heat-content operating range specified in the tariff.[22]

Thus, the Company was faced with a situation where within twelve to fifteen months its customers were going to face a significant safety threat due to the fact that their uniquely high appliance set points were no longer going to be compatible with the heat content of the gas being delivered to their homes and businesses.[23] It had to act. Doing nothing was not an option.[24]

---

[19] *See, e.g.*, Allred 98 Direct at 5; Tr. 6/22/99 at 10 (Allred) ("Questar Gas, with the cooperation of Questar Pipeline, [is] blending gas streams, we're using backhaul arrangements, we've expanded Questar Gas's [7(f)] service territories just from Cache Valley to the entire Wasatch Front. We've used injection of propane, and . . . we've not been processing [natural gas] liquids out of the Price dew point plant so that those higher Btu value gas[es] will be blended with the coal seam gas.").

[20] *See infra* notes 48, 49, 55.

[21] *See* Allred 98 Rebut., Ex. 1.1R.

[22] *See infra* notes 52, 53.

[23] *See infra* note 96.

[24] *See infra* note 54.

Questar Gas acted, and the record reflects that the actions it took and the costs it incurred were prudent. The Commission should now so find.

III. ARGUMENT

A. THE COMPANY WAS PRUDENT UNDER THE PROPER PRUDENCE STANDARD.

In the *Decision*, the Utah Supreme Court mandated that before Questar Gas can recover its CO_2 removal costs in rates it must show those costs were prudently incurred. This requires the Commission to undertake an analysis to determine whether Questar Gas has met its burden of proof to demonstrate prudence.

Throughout these proceedings the Committee has sought to undermine the prudence of the Company's actions by making assumptions about the subjective intent of Questar Gas or its affiliate Questar Pipeline. It has alleged improper affiliate interest as the driving motivator for key decisions and acted as if such alleged improper motives were the end of the story as far as prudence is concerned. In so doing, the Committee has miscast the question of prudence. The proper prudence standard must be applied to the actions taken by the utility in order to reach a proper result.

Under the proper standard, prudence is assessed by determining whether actions taken were **objectively** reasonable based on what a utility knew or should have known. *See* Order, *In re Mountain Fuel Supply Co.*, 1994 WL 570655, Nos. 91-057-11 & 91-057-17, at *5 (Utah Pub. Serv. Comm'n Sept. 10, 1993) ("The decision must be judged in light of what [the utility] knew or reasonably should have known at that time."). A proper prudence review "examines whether a 'reasonable utility manager, under the same circumstances and acting in good faith, would **not** have made the same decision.'" *In re Portland Gen. Elec. Co.*, 1999 WL 719758, UP 158, Order No. 99-498, at *3 (Or. Pub. Serv. Comm'n Aug. 17, 1999) (citation omitted) (emphasis added).

It does not matter what the subjective intent of the utility was in making its decision or how the decision was made.[25] What matters is whether a reasonable utility could have made the same decision.

Prudence does not focus on the success of the utility's actions in hindsight, but focuses on the prospective reasonableness of the actions at the time they were taken. *See* Charles F. Phillips, Jr., *The Regulation of Public Utilities, Theory and Practice* 340 (Public Utilities Reports, Inc. 1993) ("Prudence . . . involves foresight, not hindsight. Decisions must be judged as to their reasonableness at the time they were made and not after the fact."); *Re W. Mass. Elec. Co.*, 80 PUR 4th 479, 501 (Mass. Dep't of Pub. Utils. 1986) ("such a determination [regarding prudence] may not properly be made on the basis of hindsight judgments"); *In re Consol. Edison Co. of N.Y., Inc.*, No. 79-1, at *5-*6 (N.Y. 1979) (prudence should be determined "by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problems prospectively rather than in reliance on hindsight").

"Reasonableness" contemplates a range of acceptable utility practices, rather than a single, optimal practice, and the Commission should not substitute its own judgment for that of

[25] In addition to the Committee's misguided focus on motivation, a Division witness suggested that even if a decision was prudent, it might be imprudent if the process by which it was reached was not well documented. *See* Hanson 98 Direct at 19 ("Various options had been considered over time with some of them eliminated. Apparently there is no document that compares all of the alternatives. I was surprised that there was no such document considering that the decision involves such a considerable dollar commitment. I always like to see a clear and complete record of the analysis used to made the decision when a transaction involves an affiliate."). This opinion also misses the mark. Such a test, which the Committee has also stressed, is completely subjective—asking how the utility conducted and documented its decision-making, and does not comport with the proper objective prudence standard. Nonetheless, even on a subjective basis, the Company clearly did consider, and submitted evidence of its consideration of, a wide variety of options before settling on CO_2 removal as the most reliable and lowest cost way to deal with the changing heat-content issue within the time available. *See, e.g.*, DeBernardi 98 Direct at 2-3 ("Considerations for resolution of the declining Btu content of gas and to allow time for an orderly reorificing can be categorized in three areas: 1) Constructing pipelines and other facilities, 2) Enhancing gas stream Btu value, and 3) Removing inert gases. . . . We analyzed various options which are described in Data Request 1.1 given to the Division of Public Utilities in this case. . . . We considered these options because they each increased system capacity to allow the company to either blend low Btu gas with higher Btu gas or isolate the low Btu gas for delivery to other systems.").

the utility. *See In re Mountain Fuel Supply Co.*, 1994 WL 570655, at *5 ("Prudence recognizes that reasonable persons can have honest differences of opinion without one or the other necessarily being imprudent."); *In re San Diego Gas & Elec. Co.*, 31 C.P.U.C.2d 236 (Feb. 24, 1989) ("[A] reasonable and prudent act is not limited to the optimum act, but includes a spectrum of possible acts."); *Re W. Mass. Elec. Co.*, 80 PUR 4th at 501 ("[N]or is it appropriate for the [commission] merely to substitute its best judgment for the judgments made by the company's managers.").

Finally, prudence is not an all-or-nothing determination. Rather, it is commonplace for this Commission to explicitly or implicitly find prudence up to a certain level of rate recovery and then deny recovery over that amount. This equates to a finding of **partial** prudence. In US WEST Communications' 1995 rate case, Docket No. 95-049-05, for example, the Committee made similar arguments to those it has made in this case, to the effect that affiliate interests had tainted the decision-making process and that no recovery was appropriate. *See Re US West Communications, Inc.*, 1995 WL 798880, at *12 (Utah Pub. Serv. Comm'n Nov. 27, 1995) ("The Committee argues that the Supreme Court [through the remand order in *US West Communications, Inc. v. Public Service Comm'n*, 901 P.2d 270 (Utah 1995)] has in essence given us just two choices: find that the Company has met its burden and allow full recovery of these transactions in rates; or find that the Company has not met its burden, and, lacking a means to quantify the cost overruns, disallow all affiliate transactions from rate recovery."). The Commission, however, rejected the Committee's all-or-nothing approach and found:

> Although we conclude the Company did not meet its burden, we do not agree with the Committee that every dollar of affiliate transactions should be disallowed from rate recovery. Lacking any evidence to the contrary, we conclude that ratepayers received some value for the goods and services obtained through USWC's affiliate relationships. We are not convinced, however, that these services were obtained at lowest cost. The

> Company has failed to meet its burden and we adopt the Division's recommendation to disallow ten percent of [the affiliate] charges.

Id., *modified on reconsideration, Re US West Communications, Inc.*, 1996 WL 523851 (Utah Pub. Serv. Comm'n June 6, 1996); *see also Re US West Communications, Inc.*, 142 PUR 4th 1 (Utah Pub. Serv. Comm'n 1993) (finding various partial disallowances appropriate when "[US WEST] had not justified these charges as necessary and reasonable").

Other commissions and courts follow the same practice. Indeed, it is a universally accepted principle of utility regulation that prudence does not constitute an all-or-nothing decision. *See, e.g., U S West Communications, Inc. v. Ariz. Corp. Comm'n*, 915 P.2d 1232, 1237 (Ariz. Ct. App. 1996) (Commission found US WEST's building lease payment to affiliate to be 50 % too high: "This finding would have supported a disallowance of $5,421,633, but the Commission also found that US West's shareholders and customers shared the benefits of US West's centrally located, consolidated, Class A office space. So that the shareholders and customers might likewise share the burdens, the Commission halved the disallowance to $2,710,816." Court of Appeals upheld Commission's decision.); *Potomac Elec. Power Co. v. Pub. Serv. Comm'n of D.C.*, 661 A.2d 131, 143-44 (D.C. Ct. App. 1995) (District court "sustain[ed] the Commission's conclusion that PEPCO ha[d] not shown that all its DSM costs resulted from prudently managed programs and, therefore, its conclusion that PEPCO cannot reasonably be allowed to recover 100% of those costs from the ratepayers."); *Wash. Utils. & Transp. Comm'n v. Wash. Water Power Co.*, 1984 Wash. UTC LEXIS 69, *28-29 (Wash. Util. & Transp. Comm'n 1984) (Commission found that 10 % of construction expenses for wood-fired power plant were imprudent and therefore should be disallowed from recovery in rates).[26] Thus,

[26] *See also, e.g., Nucor Steel v. Pub. Util. Comm'n of Tex.*, 26 S.W.3d 742, 749 (Tex. Ct. App. 2000) (court of appeals upheld Commission's decision that "allowed TXU to recover certain costs but disallowed other costs when the evidence did not establish TXU's prudence"); *Midland Cogeneration*

there is no reason that the Commission must find that either all or none of the CO_2 removal costs were prudently incurred. The Committee's own witness admitted as much in this very case. Michael McFadden, testifying for the Committee, stated that he did not believe prudence was the issue with regard to the CO_2 removal costs.[27] However, if it were, he testified, "Of course, if the Commission found that the Company was imprudent, the Commission could disallow **a portion** or all of the costs."[28]

When the proper standard for determining prudence is applied to this case, the question before the Commission becomes whether a prudent utility would have incurred all or some portion of the costs Questar Gas incurred for CO_2 removal when it recognized that the appliance set points of its customers were soon going to be dangerously incompatible with the heat content of the gas the utility would be receiving. To answer this question, the Commission must assess the objective reasonableness of the Company's assessment of the heat-content problem at the time and the steps it took and costs it incurred to solve the problem. When the Commission properly assesses the issues this way—rather than merely focusing on allegedly improper motives, as the Committee has done—the Commission will conclude that the evidence on the record requires a finding that the CO_2 removal costs were prudently incurred and that the 68%

Venture Ltd. P'ship v. Pub. Serv. Comm'n, 501 N.W.2d 573 (Mich. Ct. App. 1993) (disallowing only unreasonable portion of affiliate costs); *Re N.Y. Tel. Co.*, 121 PUR. 4th 117 (N.Y. Pub. Serv. Comm'n 1991) (same); *Re Block Island Power Co.*, 59 PUR 4th 430 (RI Pub. Utils. Comm'n 1984) (scope of inquiry calls "only for the disallowance of profits and costs paid to affiliates and subsidiaries which are unreasonable"), *aff'd*, 505 A.2d 652 (R.I. 1986); *Re Narragansett Elec. Co.*, 17 PUR 4th 164 (RI Pub. Utils. Comm'n 1976) (duty of commission to examine utility payment to affiliate and reject "those portions" found to represent unreasonable expenses); *Northwestern Bell Tel. Co. v. State*, 216 N.W.2d 841 (Minn. 1974) (in reviewing affiliate transactions commission should disallow only excessive portion of cost paid).

[27] In light of the *Decision*, prudence is now most assuredly "the issue" with regard to the CO_2 removal costs.

[28] *See* Tr. 6/5/00 at 241 (McFadden) (emphasis added).

stipulated recovery in rates is well within the range of reasonable recovery based on costs an unaffiliated LDC would have incurred.

The Committee's concern with affiliate interests is not ignored under the proper prudence standard, it is just assessed differently than the Committee argues that it should be assessed. The Commission has long recognized that expenses resulting from affiliate transactions should be given a higher level of scrutiny than expenses arising under transactions with unrelated third-parties.[29] However, that standard does not mean that affiliate transactions are improper per se or that they are inherently disadvantageous to ratepayers. Rather, it means that the reasonableness of the transaction must be determined by assuming that Questar Gas is not affiliated with Questar Pipeline. In other words, assuming Questar Gas received its gas supplies from an unaffiliated interstate pipeline and the heat content of its gas were declining because the interstate pipeline were now transporting coal-seam gas (that met the pipeline's FERC-approved tariff), could an unaffiliated LDC have prudently chosen CO_2 removal and incurred the same costs Questar Gas incurred.[30]

In the previous proceedings, some parties contended that Questar Gas may have been imprudent by virtue of the actions or inactions of Questar Pipeline, such as Questar Pipeline's acceptance of coal-seam gas on its system. In applying the proper prudence standard, however, issues such as whether Questar Pipeline should have accepted the coal-seam gas, whether it was doing so only to increase its profits, or whether it would have been able to voluntarily change its

[29] *See, e.g., Re Foothills Water Co.*, No. 91-2010-01, 1992 WL 501201, at *5 (Utah Pub. Serv. Comm'n Nov. 30, 1992) ("Any transaction which affects the capital or expenses of a public utility is subject to regulatory scrutiny. Where the utility transacts business with an affiliate, this scrutiny must be even more exacting because of the absence of arms-length bargaining.").

[30] The Committee has accepted this proposition in its argument previously. *See, e.g.,* Committee 99 Brief at 10 ("Questar Gas' **ratepayers cannot be asked to pay more than the costs that an unaffiliated company in a competitive environment would have been able to collect from its customers**.") (emphasis added).

tariff to benefit an affiliate, become irrelevant. Under the proper standard, it is assumed that Questar Pipeline would act in its own best interests irrespective of the impact of those actions on Questar Gas and its customers. The issue for this Commission is not whether Questar Pipeline acted improperly or in disregard of the interests of customers of Questar Gas, the issue is whether Questar Gas acted prudently in light of the decisions made by Questar Pipeline.

A benefit from applying the proper prudence standard is that questions are left to be resolved in the appropriate jurisdiction. Questar Pipeline is regulated by the FERC and any issues regarding Questar Pipeline do not properly belong before this Commission. Questar Gas, on the other hand, is predominately regulated by this Commission. If someone believes Questar Gas did something improper, the appropriate forum to raise that issue is this Commission. The motives of Questar Pipeline are irrelevant to a determination of the prudence of Questar Gas.

Below, Questar Gas marshals the evidence to support its position that it acted prudently, and demonstrates why the Commission should make a finding that the portion of CO_2 removal costs recovered in rates pursuant to the CO_2 Stipulation were prudently incurred.

B. THE EVIDENCE FULLY SUPPORTS A FINDING OF PRUDENCE

1. The Company's Assessment Of The Dangers Of The Heat-content Problem And Decision To Do Something Urgently To Solve That Problem Were Prudent.

As noted above, until 1998, Questar Gas was able to manage the declining heat content of the gas supplies delivered to its system without requiring a change in the heat content specified in its tariff.[31] From 1993 to 1996, production of coal-seam gas increased slowly and the blended stream of gas delivered to Questar Gas was still well within the Btu range that could safely be burned in customers' appliances.[32] However, beginning in 1997, production of the coal-seam

[31] *See, e.g.,* Allred 98 Direct at 5.

[32] *Id.*; Allred 98 Rebut., Exs. 1.5R, 1.6R.

gas began to increase at a faster rate than previously anticipated.[33] From 1993 to 1996 production remained well below 50,000 Mcf/day,[34] not even approaching one-half of the maximum summer blending limit of 95,000 Mcf/day;[35] but by the end of 1997 production escalated to 65,300 Mcf/day and was projected to increase rapidly thereafter.[36] By the fall of 1997, it became apparent that by the spring or early summer of 1999 Questar Gas would no longer be able to rely on the blended gas stream at Payson Gate to deliver gas to its customers that would conform to the tariff heat content and that could be burned safely in customers' appliances.[37]

Although the Committee speculated that Questar Gas should have anticipated the heat-content problem and taken action to address it sooner, it provided no analytical support for that speculation.[38] Indeed, its speculation that the Company might have taken action sooner was not

---

[33] Allred 98 Rebut., Ex. 1.6R.

[34] DeBernardi 98 Rebut. at 5 (coal-seam gas production was approximately 11,000 MCF/D in 1994, 30,000 Mcf/day in 1995, and 45,000 Mcf/day in 1996, all of which could be blended effectively with other volumes of gas in the pipeline, thus not justifying any additional facilities).

[35] Allred 98 Rebut., Ex. 1.6R.

[36] Production of coal seam gas escalated to 109,000 Mcf/day by the end of 1998 and was projected to reach 180,000 Mcf/day by the end of 1999. *Id.*

[37] Allred 98 Direct at 5-6 ("Q. Are [the steps taken to manage heat content] sufficient to maintain the minimum Btu level for Questar Gas? A. Up to this point they have been sufficient. However, these steps will no longer maintain Questar Gas' 1020 Btu level if the content keeps decreasing at the pipeline level. Because of open access, removal of higher hydrocarbons and new sources of gas such as coal seam gas, the Btu content of gas on interstate pipelines is likely to be near their lower Btu limits. The limits of mixing gas on Questar Gas' entire system are beginning to be reached. Adjusting customers' appliances needs to commence. It is likely that other alternatives will need to be employed to provide sufficient time for customers to make those adjustments."); *id*. at 10 ("Questar Gas studied this issue in late 1997 and informed this Commission, the division and Committee in January of 1998 that if coal seam gas production continued to increase as projected, it would become impossible to maintain the minimum 1020 Btu level associated with the 1080 set point . . . . This situation could become critical as early as the spring or early summer of 1999.").

[38] *See, e.g.,* McFadden 98 Direct at 11 ("[I]f QGC had been more timely in responding to the situation [increased coal-seam gas production], it **could** have influenced the alternatives available to it.") (emphasis added); *id.* at 17 ("McFadden Consulting believes Questar Gas **may have** been slow in

only unsupported by any analysis of the forecast and actual production of coal-seam gas and of any reasonable basis to believe that coal-seam gas production warranted a reduction of the tariffed appliance set point earlier than March of 1998, it was contradicted by the fact that traditionally the Company had to manage the heat content of its gas supply to avoid the **upper**, not the lower, limits of safe appliance operating range.[39]

The evidence on the record demonstrates that the production of coal-seam gas increased dramatically in 1997 and 1998 and that this was unanticipated.[40] Therefore, the fact that the Company first became aware of the urgency of the problem in the fall of 1997 is entirely reasonable. This is critical because, as will be explained in greater detail below, the fact that the

---

addressing the problem. Had Questar Gas reacted more speedily and modified the gas appliance set point a year or two earlier, it **might have** impacted the decision to construct the CO_2 plant.") (emphasis added).

[39] *See* Allred 98 Rebut. at 11 ("Q. Both the Division and the Committee argue that Questar Gas should have changed the recommended set point for customers' appliances earlier. Are they correct? A. No. They are both relying on the benefit of hindsight. In the early to mid 1990's, Questar Gas did know that the Btu level of gas was trending downward, but it was still well within the safe operating range of the 1080 set point. **Based on the information available at that time, it was not clear that a change in set point was called for. At that time, coal seam production from the Emery County area was well below the levels that would cause any concern.** While gas on other portions of the system was subject to processing, Questar Pipeline was successfully blending its gas stream and monitoring gas supplies well within the safe operating range. A customer set point adjustment at that time would have served to only change concerns about managing gas supplies to stay above the low end of the range into concerns about managing the gas supply to stay below the upper end of the range. **It must be remembered that the Company has a long history of taking action to manage the gas supply and ensure that the Btu content was not too high. In the mid 1990's there was simply no sound reason to implement a set point change.**") (emphasis added); Tr. 6/22/99 at 185 (DeBernardi) ("[I]t would not have been prudent to reorifice customers [in] the mid nineties or take other actions based on the speculation of the volume of coal seam gas raising to the level of current concern.").

[40] *See, e.g.*, DeBernardi 98 Rebut. at 5 ("Production of coal bed methane began to increase during the winter of 1997-98 and producers forecasted that the volumes from the northern portion of the Ferron Fairway would increase more rapidly than anticipated. QGC determined it could experience a blending problem by the spring of 1999. The Gas Quality Team focused on alternatives to deal with the Btu issue as soon as it became apparent that there could be a blending problem. In fact, production has actually increased at a greater rate than even predicted by the producers."); Tr. 6/22/99 at 185 (DeBernardi) ("[S]everal such [coal-seam] projects . . . have been attempted near Questar Pipeline's system, [but] the River Gas project is the only one that has shown more than limited success. It was only the production success and forecast in the winter of '97 and '98, and the subsequent fact that the Ferron Fairway production is exceeding those forecasts, that it became apparent that there could be a unique and urgent problem with the ability to blend Btus to the Payson gate.").

problem was discovered in the fall of 1997, but required resolution by the spring or early summer of 1999, limited the options reasonably available to the Company to address the problem.

A Gas Quality Team was organized in April 1997 to study the changing quality of gas being delivered to and transported on the Questar Gas and Questar Pipeline systems.[41] The team was not originally put together to address coal-seam gas, as its creation pre-dated the awareness of the heat-content incompatibility problem related to that gas.[42] The different perspectives and expertise of the combined Gas Quality Team ensured that as broad a range of options as possible could be considered, and, in fact, the cooperation of Questar Pipeline allowed some measures to be taken that minimized costs for Questar Gas customers, which would not have been possible with an unaffiliated pipeline.[43] The Gas Quality Team was instrumental in quickly identifying

[41] *See, e.g.*, DeBernardi 98 Rebut. at 2.

[42] *See id*. ("Q. Why was the Gas Quality Team that you sponsored put together in early 1997? A. Because of the variability in gas quality that was occurring at QPC receipt points, it was decided that a cross-functional Gas Quality Team be put together to focus on the changing quality of gas being delivered to and transported on the QGC and QPC systems. The efforts of both to manage gas quality did not begin with this team."); *see also, e.g.*, Tr. 6/22/99 at 22-23 (Allred) ("[T]he initial focus of the Gas Quality Team was not the coal seam gas or Questar Gas's set point. Those came much later as an issue for that team. As I recall, the initial reasons for that team were mostly focused on gas quality issues on the Questar Pipeline system relative to liquids in the gas and interconnecting pipeline standards and [things of] that nature. . . . Later on, as the team worked and progressed, I think the focus shifted to the Questar Gas system, and in particular the coal seam gas and how to resolve that issue.").

[43] *See, e.g.*, DeBernardi 98 Rebut. at 2-3 ("[A] number of recommendations have been implemented, such as resolving the 7F Service Area limitations in the Cache Valley area, instituting an Overthrust Backhaul to enhance the Btu value of the gas delivered to QGC from QPC's northern system and suspending the operation of the QPC Price dewpoint plant which allowed the Btu value of the gas in ML 40/41 [Questar Pipeline's southern main pipeline] to remain at a higher level to blend with the coal seam gas from the Ferron area. All of these had little or no cost impact to QGC sales customers."). It has been suggested that the make-up of the team—including representatives from Questar Pipeline and Questar Regulated Services in addition to Questar Gas—did not allow the proper subjective focus on the Company's customers. *See* Hanson 98 Direct at 10-11. However, no evidence was introduced that a reasonable gas quality team consisting of only LDC representatives would have identified the heat-content problem any sooner or reacted any differently once it discovered the problem.

the heat-content problem and developing a timely and effective solution to that problem as the issue evolved.[44]

Questar Gas initially identified the potential heat-content problem in the fall of 1997.[45] After considering options to address the issue, the Company informed the Commission, Division and Committee of it in January 1998 and communicated with them on the status of the issue throughout 1998.[46] Questar Gas was perhaps the only LDC in the nation with such a high heat content in its tariff.[47] This meant that the decline in heat content was a Questar Gas system issue, the long-term solution to which was to lower the heat content in the Utah tariff and change the recommended appliance set points communicated to dealers, installers and repair technicians. All regulators and the Committee concurred with this assessment.[48] Mr. McFadden, for example, testified:

> McFadden Consulting concurs with Questar Gas that modifying the appliance set point is appropriate. **Changes in the natural gas industry occurring in the last decade or so have caused changes in the BTU content of gas that is being utilized to provide service to Questar Gas's customers**.
>
> McFadden Consulting also agrees that the long-term solution to the problem of declining BTU content is to inspect, adjust, and re-orifice all gas appliances in the service territory.[49]

---

[44] DeBernardi 98 Rebut. at 5 ("**The Gas Quality Team focused on alternatives to deal with the Btu issue as soon as it became apparent that there could be a blending problem**.") (emphasis added).

[45] *See supra* note 37; Allred 98 Rebut., Ex. 1.6R.

[46] Tr. 6/5/00 at 101 (Allred).

[47] *See, e.g.,* Allred 98 Direct, Ex. 1.2 (showing lower set points for 16 other LDCs throughout country); Compton 99 Direct at 8 ("Compared to other gas sources around the country, the BTU content per thousand cubic feet (Mcf) of Mountain Fuel's and QGC's historically acquired gas has generally been high—resulting in Utah appliances' orifices being correspondingly set for relatively high-BTU fuel.").

[48] *See, e.g.,* Allred 98 Rebut., Ex. 1.1R (April 30, 1998 Division Memorandum to Commission) ("The Division . . . recommends that the proposed tariff changes be approved. . . . The change is necessary because of the decline in the BTU content of the natural gas delivered to QGC."); *see also infra* note 54.

[49] McFadden 98 Direct at 7 (emphasis added).

Therefore, following consultation with the Commission, Division and Committee, the Company requested and the Commission approved an amendment to the tariff (effective May 1, 1998), to reduce the heat content to an operating range of 980 to 1170 Btu/cf. There is no dispute about the need to make this change and no evidence on the record to contradict the decision to modify the tariff's heat-content requirement.[50]

However, Questar Gas also recognized that even if it spent over one hundred million dollars in an effort to assist customers,[51] customers would not have sufficient time before the spring or summer of 1999 to inspect and adjust their appliances to the new set points associated with the new heat-content operating range specified in the tariff.[52] The Committee agreed that a transition period was needed to allow appliance adjustments.[53] Due to the seriousness of the heat-content problem, including potential flame-liftoff conditions and incomplete combustion, something had to be done quickly to address the problem before the spring or summer of 1999. Doing nothing was not an option.[54] There is no competent evidence on the record to the

---

[50] *See, e.g., id.*; *infra.* note 54.

[51] Tr. 6/5/00 at 102 (Allred); Allred 98 Direct at 7 ("[I]t is estimated that it would take on average about 2.5 hours per customer for the necessary adjustments to be made. Generally these adjustments include checking or changing the orifice . . . and checking and adjusting the regulator on the appliance. It was also assumed that the cost of this work would be about $180 per customer. This resulted in a total cost of about $111 million.").

[52] Tr. 6/22/99 at 39 (Allred) ("[I]t was a physical impossibility to do the reorificing in time to deal with the . . . lower Btu gas. Early on in this process, we thought that was probably the only solution, and that's why we were working on it. And we're very fortunate and happy that we discovered that the coal seam gas, if it was processed, was interchangeable with gas that meets the 1020 limit. If we hadn't discovered that fact and pursued that option, we would be in a far worse situation, and more importantly, our customers would be in a far worse situation than they are today."); Allred 98 Direct at 7 ("Discussions with HVAC contractors revealed that they did not see any way to accomplish this work in 1-2 years. They thought that **even 4-5 years was too optimistic**.") (emphasis added).

[53] *See, e.g.,* McFadden 98 Direct at 7.

[54] *See* Snider 98 Direct at 2-3; Schroeder 98 Direct at 9 ("If action is not taken, customers are likely to experience operating complications and safety concerns I have described. In my opinion, the question is not whether this problem should be addressed by the Company, but how it should be done."); Tr. 6/23/99 at 322 (Hanson) ("CHAIRMAN MECHAM: My question to you is, in general, do we hold

contrary. A prudent utility would have recognized the seriousness of the customer-safety issue at hand and determined to take the necessary steps to quickly address the problem just as Questar Gas did. Questar Gas therefore acted prudently in recognizing the problem in the fall of 1997 and determining that the problem needed to be remedied by the spring or early summer of 1999.

2. The Steps Taken By Questar Gas To Remedy The Heat-content Problem Were Prudent.

Faced with a problem the Company had not faced in its prior 70-year history and faced with this tight timeframe in which to identify and implement a solution to a significant customer-safety concern, Questar Gas considered a variety of options. The principal criteria for evaluating those options had to be, as a matter of prudence and responsibility for customer safety, whether the alternative proposals would (a) guarantee a complete resolution of the safety problem, (b) do so quickly enough, and (c) do so in a cost-effective manner.

After studying the alternatives, Questar Gas feared that no solution would be available on a timely basis.[55] In February or March 1998, however, Questar Gas determined that it could process the coal-seam gas by extracting CO_2 and that this processed gas would burn safely in customer appliances adjusted for either the new or old heat content (*i.e.*, the gas would be

---

off taking action to deal with this problem while we study alternatives? MR. HANSON: No, it's probably appropriate not to hold off taking action."); *id.* at 432 (McFadden) ("[The Btu] decline may present operational and safety concerns."); Tr. 6/23/00 at 49 (McFadden) ("We agree that there is a problem, and it's a safety problem, on Questar's system relating to the level of the Btu content, and that it has to be dealt with."); Tr. 6/23/99 at 373 (Townsend) (Q. . . . Should we be resetting these customers' appliances? What is your recommendation? A. Yeah, I think we should be doing that.").

[55] As discussed below, Questar Gas and Questar Pipeline considered a variety of options, including injecting higher Btu hydrocarbons into the gas stream at Payson Gate and installing additional pipeline facilities to reduce the coal-seam gas introduced into Questar Pipeline's pipeline providing deliveries to Payson Gate or to transport higher Btu content gas to Payson Gate for blending. As Mr. DeBernardi testified, "Considerations for resolution of the declining Btu content of gas and to allow time for an orderly reorificing can be categorized in three areas: 1) Constructing pipelines and other facilities, 2) Enhancing gas stream Btu value, and 3) Removing inert gases." *See* DeBernardi 98 Direct at 2.

"interchangeable" with the gas historically delivered for the uniquely high appliance set point). [56] With this knowledge, Questar Gas determined that it could provide a longer transition period for customers to adjust their appliances to the new set points.[57] After further analysis, it became clear that this solution hinged on the design and construction of a CO_2 removal plant by mid-1999, so Questar Gas undertook an expedited, but thorough, investigation of the feasibility and effectiveness of such a plant. Questar Gas determined that building a CO_2 plant was feasible and that this was less expensive and more reliable than other alternatives to manage the heat content of gas delivered to Payson Gate.[58]

---

[56] *See, e.g.,* Allred 99 Rebut. at 14 ("[I]t was not until February or March 1998 that Questar Gas determined that coal-seam gas with a 1% CO_2 content could safely be burned by customers."); Tr. 6/22/99 at 29 (Allred) ("[W]e were still working on refining [a cost estimate for expedited reorificing] even through January and into February, because we still thought that was probably the only solution."); Allred 98 Rebut., Ex. 1.1R (April 30, 1998 Division Memorandum to Commission) ("Originally QGC thought that it would be necessary to change the set points for all customers over a relatively short period of time. . . . It now appears that putting a carbon dioxide extraction plant before the coal bed methane gas enters the pipeline can mitigate the problem enough that the set point for appliances can be changed over time . . . .").

[57] *See* Allred 99 Rebut. at 15; Tr. 6/22/99 at 29 (Allred) ("And it wasn't until sometime in February or March that we realized and had the data and the information necessary to know that the CO_2 processing was a way to avoid that [expedited] reorificing.").

[58] *See, e.g.,* DeBernardi 98 Direct at 4-5 ("Q. The next long-term consideration considered by the Company was removing inert gases, would you discuss this alternative. A. The removal of carbon dioxide is a proven concept. In the case of coal seam gas, carbon dioxide is one of the components of the gas stream which lowers the Btu value. Removing carbon dioxide from the coal gas stream from 2.5% to a level of 1% increases the Btu value from approximately 984 Btu/scf (14.73 psia base) to approximately 1,000 Btu/scf. Q. If the removal of carbon dioxide results in these specifications, is the resulting gas stream acceptable to the Company's system? A. Yes. . . . In general, the resulting Btu value and specific gravity for the treated coal seam gas provides a gas composition that is compatible with both the previously recommended orifice settings and the new settings of customers' appliances. Q. Please describe why carbon dioxide removal was chosen as the solution in this case? A. **Contracting for carbon dioxide removal was the lowest cost alternative that was also timely and provided control of the Btu value of gas delivered to Questar Gas' Payson Gate. The carbon dioxide removal is the best solution because it provides control to ensure a high degree of reliability and provides an in-service date by the spring/summer of 1999. None of the other alternatives considered could accomplish this**.") (emphasis added) *see also* McFadden 98 Direct at 10 (admitting that "**the CO_2 extraction plant appears to be the most economical of the alternatives Questar Gas considered**") (emphasis added).

As discussed in more detail below, in addition to their higher costs, other options likely could not have been completed within the available time and it was unlikely they would have achieved the desired result. Therefore, after considering the most cost-effective and reliable way to accomplish the necessary CO_2 removal, Questar Gas determined that the best alternative was to have its affiliate Questar Transportation Services build and operate a CO_2 plant located between the coal-seam gas fields in Emery County and Questar Pipeline's southern main line. Questar Gas and Questar Transportation Services entered a Carbon Dioxide Extraction Agreement ("CO_2 Removal Agreement") on November 25, 1998. Construction of the plant was completed and the plant went into operation in June 1999. Operation of the plant since that time has enabled Questar Gas to deliver gas to its customers that is interchangeable with the heat content in the prior and current tariff and which thus may be safely burned during the ten-year transition period.[59] The CO_2 Removal Agreement specified that the removal would be provided for an initial term of ten years. Given the expected life of furnaces and water heaters and the appropriate timing of regular maintenance of older appliances, ten years was a reasonable term for customers to implement the change from a 1080 Btu/cf to a 1020 Btu/cf appliance Btu range mid-point without incurring unreasonable costs or taking extraordinary measures.[60]

a. The Company's Actions in Resolving the Heat-content Problem Were Prudent.

The Committee has criticized the Company's choice to use CO_2 removal. It has suggested various other alternatives. It is important for the Commission to recognize in the first

[59] *See, e.g.*, Tr. 6/5/00 at 106 (Allred) ("Since the Castle Valley plant came on line in June of 1999, it has worked exactly as designed to ensure that gas reaching Questar Gas's customers have been safe. The CO_2 processing agreement has allowed Questar Gas to meet its responsibility to manage the heat content of gas on its system as recognized in Commission Rule 746-320-2.B. While Questar Gas has spent over 18 months defending its actions and attempting to get its costs recovered, customers' safety has been protected.").

[60] *See* Allred 98 Rebut. at 2.

instance, however, that two options must be eliminated from even cursory consideration regarding prudent alternatives. First, doing nothing to address the problem would have been clearly imprudent, and no one has suggested the contrary.[61] For the safety reasons discussed above, something had to be done.

Second, the expedited approach to inspect and re-orifice customer appliances was clearly unworkable. Such a program would have cost over $100 million to implement.[62] Even assuming such expenses were economically feasible, Questar Gas estimated that it would take at least four years to complete, assuming enough technicians could be located.[63] Even segregating the distribution system and resetting only those appliances served by the Payson Gate would have been expensive, would have taken too long and would have resulted it less reliable service.[64]

Thus, the extreme positions of (a) doing nothing and (b) going to extraordinary lengths to re-orifice without providing an interim solution were not reasonable alternatives. The Committee has suggested various other alternatives to the CO_2 plant. These alternatives, however—as demonstrated below, would have been less effective and more costly than the alternative actually chosen by Questar Gas. While prudent action is not necessarily required to be the best or the most optimal action, in this case the Company's course of action—CO_2 removal—was clearly the best of the proffered alternatives.

---

[61] *See, e.g., supra* note 54.

[62] Tr. 6/5/00 at 102 (Allred).

[63] Tr. 6/22/99 at 39 (Allred) ("[I]t was a physical impossibility to do the reorificing in time to deal with the . . . lower Btu gas."); Snider 98 Direct at 4 ("[B]ased upon the resetting results at Emery County where 6500 man hours were required to reset 2,600 customers, a general re-orificing effort would require at least 1.6 million man hours to complete. Assuming a team of 200 technicians could be located and dedicated to the task they would need a time period of 4 years to complete the project.").

[64] Snider 98 Direct at 4 ("An additional consideration would be to segregate the distribution system and only reset the appliances served by the Payson Gate. However, such a partial reset option is not recommended as it would invariably result in less reliable service to the customers due to system segregation, would be costly, and would not be ready by the summer of 1999 in any event.").

Mr. DeBernardi, an industry veteran with approximately 30 years of experience provided testimony on this point.[65] In his testimony, Mr. DeBernardi addressed the various alternatives considered by the Company at the time it became aware of the urgent heat-content problem and recognized that reorificing could not be accomplished quickly enough or on a cost-effective basis. The alternatives considered were: "1) Constructing pipelines and other facilities, 2) Enhancing gas stream Btu value, and 3) Removing inert gases."[66] Mr. DeBernardi testified that removing inert gases was the best of these alternatives.[67] Mr. Snider, an expert with more than 20 years of experience, confirmed Mr. DeBernardi's view.[68]

i. Pipeline solutions were more costly and less timely and reliable.

The Company considered various pipeline solutions, to assess the possibility of increasing total system capacity to allow the Company to either blend low-Btu gas with higher Btu gas or isolate the low-Btu gas for delivery to other systems.[69] As Mr. DeBernardi testified, "In general, pipeline solutions given consideration were: 1) Paralleling Questar Pipeline's Main Lines, 2) Extending Questar Pipeline to Kern River, and 3) Building a pipeline from Payson Gate to Porters Lane Gate."[70] However, as Mr. DeBernardi testified about these pipeline options:

> All of these options would be very costly. . . . **In addition to the high costs of these options, Questar Gas believed it would be unable to complete the pipelines in time** to meet the anticipated decline in the Btu

[65] DeBernardi 98 Direct, Ex. 3.1.

[66] DeBernardi 98 Direct at 2.

[67] *See id*. at 5 ("Contracting for carbon dioxide removal was the lowest cost alternative that was also timely and provided control of the Btu value of gas delivered to Questar Gas' Payson Gate. The carbon dioxide removal is the best solution because it provides control to ensure a high degree of reliability and provides an in-service date by the spring/summer of 1999. None of the other alternatives considered could accomplish this.").

[68] *See, e.g.,* Snider 98 Direct at 5 ("Q. Do you agree with the selected carbon dioxide removal option? A. Yes. . . . the selection of carbon dioxide removal is the best alternative.").

[69] *See, e.g.,* DeBernardi 98 Direct at 3.

[70] *Id.*

> value of gas delivered to Payson resulting from increasing coal seam production. FERC certification, environmental permitting and pipeline construction could not be completed before Spring/Summer 1999. **The efficiency of any of these options also depends on the continued ability of Questar Pipeline to blend higher Btu gas and direct it to the Payson Gate, which cannot be assured**.[71]

Mr. Snider testified,

> I have also examined the cost estimates for the pipeline alternatives of paralleling the QPC main pipelines, extending QPC to Kern River's system, and constructing a pipeline from Payson Gate to Porters Lane Gate. All of Questar Gas' calculations are reasonable in their estimated cost and design, but **none are less costly options than carbon dioxide removal and all suffer the problem [of not fully addressing the fact that coal-seam gas would make it on to the interstate system and continue to affect the Company's customers]**."[72]

The Committee suggested that further pipeline alternatives may have been effective, but the assessment provided by the witnesses upon which the Committee relied was thoroughly rebutted by the Company's witnesses.[73] The alternatives would have had a serious impact on the

---

[71] *Id.* (emphasis added).

[72] Snider 98 Direct at 4-5 (emphasis added); *see also* Tr. 6/22/99 at 238-39 (Snider) ("[T]he Company has properly, in my opinion, examined and compared the alternative solutions available to it, [and] has taken the correct steps to solve the coal seam gas problem. The best long term alternative is to reset all the appliances, which the Company has undertaken. However, the resetting project cannot be accomplished fast enough to solve the coal seam gas problem safely in [the] short term. The comparison of short term alternatives by the Company have correctly concluded [sic] that new pipeline and other pipeline alternatives are more costly and may be problematic as coal seam gas may be connected to those systems as well. . . . [R]emoving the CO_2 to a 1 percent level with a CO_2 removal plant is the most cost feasible solution.").

[73] S*ee, e.g.*, Tr. 6/22/99 at 185-86 (DeBernardi) ("The options [suggested by Mr. McFadden and Mr. Hanson] consisted of, one, processing the gas to remove carbon dioxide; two, looping Questar Pipeline's Main Line 40 and 41; three, constructing a line from Payson to Kern River; and four, constructing a line from Kern River to Payson. Each of those options were carefully reviewed with respect to cost, timing and operating constraints. Option two, looping main Line 40/41 was more expensive and would not be able to be in operation in time, and, in reality, does not ultimately provide Questar Gas Company with the control of the gas quality on its system. Option three, constructing a line from Payson to Kern River, was more costly because of the compression requirements to deliver gas to Kern River and reorificing Questar Gas Company's southern system. It could not be constructed and be in operation in time, it would not ultimately provide Questar Gas Company control of the gas quality on its system. In addition, due to bottlenecks in . . . Questar Gas Company's system, all of this volume could not be delivered at the Hunter Park tap with Kern River and meet Questar Gas Company's load on the southern part of its distribution system during winter operation. Option four, constructing a line from

gas-supply costs of the Company's customers.[74] Indeed, Mr. Hanson, a Division witness upon whom the Committee relied for many aspects of its case, disavowed making a recommendation on these alternatives.[75]

The unrebutted evidence shows that the pipeline alternatives favored by the Committee would have had first-year costs of $2.5 million to $21.0 million more than the estimated cost of

---

Kern River to Payson, requires reorificing Questar Gas Company's southern system, requires more transportation on Kern River, and is ultimately more expensive. In addition, Questar Gas Company has no assurance of the control of gas quality on its system.").

[74] *See, e.g.,* Allred 98 Rebut. at 6-7 ("Q. Are there additional gas supply cost related to Mr. Hanson's Loop Mainline 40/41 and Payson to Kern River pipeline alternatives? A. Yes. **Both of Mr. Hanson's suggested alternatives have serious gas supply cost impacts for Questar Gas customers**. He proposes that Questar Gas have the coal seam gas that would have to be transported to Kern River delivered by a backhaul transportation arrangement to Questar Gas at Hunter Park. Mr. DeBernardi has calculated that at least 85,000 DTH per day would have to be moved to Questar Gas under the Loop Mainline 40/41 option and as much as 120,000 DTH per day under the Payson to Kern River option. . . . **Under the 85,000 DTH per day alternative, at least 10,000 DTH per day of Company-owned gas would be shut in**. Over the 150 day summer period about 120,000 DTH of Company production would be shut in each year. **The 120,000 DTH per day alternative would present additional problems since the shut-in of Company-owned production would grow to 45,000 DTH per day** or 6,750,000 DTH each year in the summer. Another problem with this alternative is that even the 85,000 DTH per day being delivered to Hunter Park on the Wasatch Front would be greater than the total sales demand at the Wasatch Front for approximately 105 days. The 120,000 DTH would exceed the Wasatch Front demand for the entire May to September period. Both of **these situations result in gas supply situations that may be impossible to accommodate**. Q. What would the cost impacts of shutting in the Company production be? A. The main impact would be that Wexpro would earn a return on a higher investment base. Since gas reserves are depreciated on a units of production basis, if this Company-owned production is not taken, the gas reserves would not be depreciated and Wexpro's investment base would not be reduced as quickly. **Extensive modeling and analysis has shown that shut-in of Company-owned production results in significant costs to customers with these costs continuing and accumulating over time because making up this production in future time periods takes a long time**. The carrying cost of this production is a key reason the IRP model calls for production of this gas each day. The Division, Committee and Commission have all stressed the importance of taking this gas, but Mr. Hanson's alternative would make D-24 gas the swing supply.") (emphasis added). Dr. Olson clearly did not understand this situation, merely calling the serious cost impact on Questar Gas customers that would be caused by shutting-in gas a "tradeoff." *See* Olson 98 Direct at 13. But then again, Dr. Olson did not understand other issues that should have been clear, such as the benefits of Wexpro providing gas to the Company. *See id*.

[75] *See* Hanson 98 Rebut. at 7 ("Q. Both Mr. Allred and Mr. DeBernardi present rebuttal testimony attacking your loop Mainline 40/41 and Payson to Kern River Pipeline Alternatives. Did you recommend these as alternatives? A. I didn't recommend them as alternatives. The emphasis of my testimony was to illustrate problems with how the various alternatives were evaluated.").

CO_2 removal and capital costs of $18 million to $54 million more than CO_2 removal.[76] The pipeline alternatives also would have taken more time, which the Company did not have.[77]

Moreover, the Committee's various pipeline alternatives required action by Questar Pipeline. An unaffiliated LDC could not have successfully required such pipeline action; therefore, an unaffiliated LDC could not have been imprudent for not implementing such pipeline alternatives.[78] Thus, the Committee's pipeline argument is built on a fatally-flawed premise. A further flaw, in addition to the Committee's failure to acknowledge that an unaffiliated LDC could not have forced a pipeline to build, is the Committee's failure to acknowledge that if Questar Gas had sought to have its affiliated pipeline perform such expensive construction, Questar Pipeline would have faced significant FERC scrutiny regarding improper affiliate influence.[79]

In short, the Committee's pipeline solutions would have cost too much, taken too long, been less reliable, required action an independent LDC could not have demanded, and caused FERC scrutiny on improper affiliate influence. In comparison, CO_2 removal was certainly prudent.

---

[76] Allred 98 Rebut., Ex. 1.2R; Tr. 6/5/00 at 104 (Allred); DeBernardi 98 Direct, Ex. 3.2.

[77] *See, e.g.*, Tr. 6/22/99 at 260-61 (Terzic) ("Questar Pipeline Company cannot itself simply build a pipeline and certainly can't require shippers to use it and pay for it. Any pipeline would need FERC approval to construct the facilities. This would require a certification process, environmental studies, and open season to file an application demonstrating market support. . . . It would [also] take quite a while.").

[78] DeBernardi 98 Direct at 3 ("All of these options . . . would have required Questar Pipeline to expand its system solely to meet the needs of Questar Gas."); Tr. 6/22/99 at 136 (Allred) ("So I think the key point, if Questar Pipeline were not an affiliate, we would be in this same situation, we'd have this problem. The difference is we wouldn't have had as much cooperation as we've had to this point.").

[79] *See, e.g.*, Terzic 98 Rebut. at 9 ("I believe the testimony of the Division and Committee about the possible actions of QPC does little more than to confuse the issue this Commission must decide. QPC is a FERC regulated pipeline. The Division and Committee seem to ignore this fact and presume than as an affiliate of QGC, QPC can unilaterally take actions . . . to solve QGC's problem. In my opinion, the presumptions are totally unrealistic and do not present a valid basis for challenging QGC's chosen course of action. While it is true that QGC and QPC are affiliates, FERC regulations do not allow QPC to take actions in favor of QGC at the expense of other shippers.").

ii. Propane injection was too expensive and unreliable.

Questar Gas also conducted several studies to assess the viability of injecting and vaporizing a high-Btu value natural gas liquid ("NGL"), such as propane, into a lower-Btu gas stream of coal-seam gas, in order to raise the overall heat content of the gas stream. The option was rejected, however, when Questar Gas determined that the costs were prohibitive and that the availability of the necessary volumes of propane (or other high-Btu NGLs) was seriously in doubt. As Mr. DeBernardi testified:

> The high operating costs disqualified [the propane injection options] from further consideration. Concern was also expressed about the ability to purchase the liquids on a consistent basis. The volumes of liquids required are very large and may not be available when needed. The price of liquids is also an operating expense not controllable by Questar. Timing for permitting and environmental compliance were also a problem.[80]

Mr. Snider also comprehensively addressed the prospect of propane injection, the practical problems with implementation and the cost problems associated with this alternative:

> Based upon my calculations, utilizing the production forecast and the projected required deliveries at the Payson Gate, the propane injection option will result in initial capital expenditures in the $5 million range with annual operating costs of $26 million in 2000 and escalating thereafter until the re-orificing project is complete. Another liability associated with the propane injection alternative is that the above figures assume a propane cost of approximately $0.33 per gallon which as history has proven is a commodity with great price volatility. I believe the propane cost assumption likely understates the actual cost of this alternative. Lastly, it is my concern as to whether such huge supplies of propane (120,000 gal/dy) would be available on a routine basis. Additionally, an alternative to lay a NGL pipeline from MAPCO to an injection station was explored but is not recommended as the composition of the liquids is not compatible with injection.[81]

---

[80] DeBernardi 98 Direct at 4.

[81] Snider 98 Direct at 5 (emphasis added); *see also* Tr. 6/22/99 at 239 (Snider) ("[T]he Company has properly, in my opinion, examined and compared the alternative solutions available to it, has taken the correct steps to solve the coal seam gas problem. The best long term alternative is to reset all the appliances, which the Company has undertaken. However, the resetting project cannot be accomplished

Just as in the case of pipeline alternatives, propane injection would have cost more than CO_2 removal and would have been less reliable. Questar Gas acted prudently in choosing CO_2 removal over propane injection.

iii. Building the CO_2 plant was the least expensive and most timely and reliable alternative available.

As the results of the above analyses suggest, and as Mr. DeBernardi testified, "Contracting for carbon dioxide removal was the lowest cost alternative that was also timely and provided control of the Btu value of gas delivered to Questar Gas' Payson Gate. The carbon dioxide removal is the best solution because it provides control to ensure a high degree of reliability and provides an in-service date by the spring/summer of 1999. None of the other alternatives considered could accomplish this."[82] Thus, after considering the reasonable alternatives, Questar Gas prudently concluded that CO_2 removal was the best alternative.

b. Questar Gas Acted Prudently in Contracting for the Building and Operation of the CO_2 Plant.

The selection of Questar Transportation Services to build and operate the plant was also prudent. The contract with Questar Transportation Services was lower cost than a contract with an unaffiliated company would have been, and service from Questar Transportation Services was more reliable. The testimony on this point is undisputed.

In order to provide gas that was interchangeable with the Company's historic appliance set point "it [would] be necessary to reduce the carbon dioxide content of the coal seam gas to

---

fast enough to solve the coal seam gas problem safely in [the] short term. . . . [P]ropane injection is more costly and may not even be reasonable.").

[82] DeBernardi 98 Direct at 5; *see also* DeBernardi 98 Direct, Ex. 3.2 (comparing costs and operational considerations of various alternatives Questar Gas considered—including, looping Main Line 40 to Kern River, extending Questar Pipeline from Payson to Kern River or Porter's Lane Gate, propane injection, and building new liquids pipeline from Mapco to Drunkards Wash; building plant to remove CO_2 from coal-seam gas was lowest cost, most reliable, and most timely alternative).

1%."[83] Plant reliability was also a chief concern, given the significant safety risk associated with failure to adequately address the heat-content problem.[84] The Company prudently considered the relevant variables, including such issues as forecasted volumes of coal-seam gas, blending capacity through Payson Gate, available land, water, and electricity, as well as the cost of building a pipeline to the new plant, in determining the necessary capacity of the plant and where to build it.[85] Questar Transportation Services properly awarded the design and construction of the plant, based on cost and other important factors such as experience.[86]

It is also undisputed that the design of the plant was appropriate, that the design company used was one of "only a handful of suppliers that [could] meet the requirements" of the plant,[87] and that "the cost of the facility is competitive and probably lower than one would expect from comparable suppliers."[88]

---

[83] Snider 98 Direct at 6.

[84] *Id.* ("The reliability of the plant should be considered a significant design criteria based on the proximity and importance of the coal seam gas supplies to the deliveries made to QGC at the Payson Gate.").

[85] DeBernardi 98 Direct at 6-7.

[86] *Id.* at 7 ("Q. Who was given the contract to design and fabricate the plant and why? A. [QTS] awarded a contract to T.H. Russell Co. This decision was based on cost and several other important factors. T.H. Russell had more experience in designing and building gas removal facilities than the other companies considered. They could do much of the fabrication and assembly in their own plant, thus decreasing the risk of scheduling interferences from outside vendors. They could provide help in selecting a field construction contractor and assist during start up and operations. Another critical item is that T.H. Russell had a plant design that was similar to the one QTS was requesting so that engineering design time could be decreased. Some companies partner with Russell almost exclusively on these types of projects because of cost, quality and delivery considerations.").

[87] Snider 98 Direct at 6-8 ("I conclude after reviewing the carbon dioxide removal requirements and the plant design provided by T.H. Russell, that the plant should accomplish such carbon dioxide removal to the required level in an efficient manner with a high degree of reliability. . . . T.H. Russell is one of only a handful of suppliers that can meet the requirements I just enumerated.").

[88] *Id.* at 8-9; *see also* Tr. 6/22/99 at 242-43 (Snider) ("I've been in the gas removal, gas pipeline business for 22 years, and there are specific requirements that companies that I've been associated with would require to undergo a risk and investment of this sort. And [the rate of return in this case is] below what these companies normally earn. . . . [T]hese companies generally enter into those kind of arrangements or risks or investments because there's other factors, whether it be profits from vertical

As Mr. Snider testified, under the reliability conditions imposed on the plant design and construction, the fees paid to Questar Transportation Services were below what an unaffiliated CO_2 removal company would have charged.[89] Rather, an unaffiliated plant owner would have required a higher minimum rate of return on investment than the amount Questar Transportation Services was paid.[90] No party provided any evidence that the plant could have been constructed more cost effectively. Indeed, as the Division stated, "Although the DPU has testified that QGC did not bid the CO_2 plant but instead went to a subsidiary to have CO_2 removal done for it[,] [n]o one, other than that, has seriously challenged the cost of the CO_2 plant. Both in 98-057-12 and in this docket [99-057-20] neither the DPU or the CCS challenged the cost to build the CO_2 plant or the expenses to operate it."[91]

---

integration with the companies, which wouldn't be present in this case, whether it would be appreciation of value, that this plant might be worth something in the future, which would not be the case here. And lastly, the ability to make additional revenues [off] of other gas, which, of course, here we don't have that either.").

[89] *See* Snider 98 Direct at 8-11.

[90] *Id.* at 9-10 ("In order to consider a corporate entity that is not a Questar affiliated company constructing and operating the carbon dioxide Removal Project some consideration must be given as to what qualifications such a non-affiliate must possess. The non-affiliate would have to be credit-worthy and financially capable of the capital requirements and liability requirements involved with a large scale gas treating plant. The non-affiliate would have to be willing to invest in a gas treating project with the cost of service styled fee structure and corresponding rate of return utilized. The non-affiliate would have to be willing to enter into the type of service agreement Questar Gas requires. And lastly, but most importantly the non-affiliate would have to be experienced in and capable of operating gas treating facilities with the high levels of reliability that is required to ensure minimum interruptions in gas deliveries or gas quality at Payson Gate and Indianola.

"There are not many companies that qualify and, in my opinion, they would not be interested in the cost of service formula contained in the QTS-QGC contract. The princip[al] reason is the very low return on equity that is embedded in the contract which references QGC's regulated return on equity. I am informed that this is presently in the 11.50% range. In my experience, this is well below the returns or hurdle rates that midstream processors demand. A second major drawback for a non-affiliate is the provision of the contract which credits any removal done for third parties back to QGC. This eliminates any opportunity to increase the return by engaging [in] any third party transactions.").

[91] Division 99 Brief at 27.

Thus, there is no dispute that Questar Gas was prudent in arranging for the design, construction, and operation of the CO_2 plant built by its affiliate Questar Transportation Services.

3. The Decision To Build The CO_2 Plant Immediately Rather Than Go To The FERC Was Prudent.

The result of the above analysis of the evidence is that there is no real question about the prudence of Questar Gas in both identifying the heat-content problem and determining to take steps to urgently solve it, or about the prudence of the steps Questar Gas actually took to solve the problem. The only remaining significant dispute is about whether Questar Gas should have gone to the FERC to attempt to get someone else to take responsibility for solving the problem.[92] The Committee has argued that a prudent, unaffiliated LDC would have gotten the producers of the coal-seam gas or the pipeline company to pay for solving the problem—which the Committee contends was caused by the coal-seam gas. The evidence on the record, however, demonstrates that it would have been unlikely that a proceeding at the FERC could have been resolved in the very limited time available. Furthermore, there is substantial evidence that an unaffiliated LDC would have been unsuccessful on the merits had it attempted to make the producers or pipeline pay for handling the heat-content problem that was unique to Questar Gas.

It is well settled that the legal standard governing the prudence of a utility management decision is one of reasonableness in light of information and circumstances existing at the time of decision making. In other words, was the management decision reasonable given

[92] As noted above, the actions or inactions of Questar Pipeline are not relevant to the Commission's prudence assessment. Prudence must be assessed by asking how an unaffiliated LDC would react to the presence of coal-seam gas on the system of its supplier pipeline. *See supra* note 31 and accompanying text.

circumstances and information reasonably available at the time.[93] The evidence shows that Questar Gas, with the knowledge it had at the time the CO_2 issue arose and using its best judgment, took an effective, economical course to solve a serious customer-safety problem at little or no risk to customers. With the Company's considerable knowledge and experience about how the FERC operates and how long it typically takes for that agency to resolve a vigorously contested issue, the Company reasonably concluded that it was unlikely to (1) succeed at the FERC at all, and (2) succeed within the requisite time. Given these two unfavorable variables, the Company's decision to go forward to solve the problem directly was certainly within the range of reasonableness necessary to satisfy the prudence standard. Questar Gas therefore acted prudently in stepping in quickly to solve the problem, and its prudently incurred costs spent solving that problem should be recoverable in rates.

a. A Possible FERC Solution Would Not Have Been Available on a Timely Basis.

The decision to implement CO_2 removal rather than gamble on possible regulatory solutions, made in the face of serious time constraints and safety concerns, was, and remains, a prudent course of action in dealing with the heat-content problem.

In early 1998, after the declining heat content and accompanying safety risks became apparent, and when Questar Gas discovered that CO_2 removal could result in gas that was interchangeable with the Company's uniquely high appliance set points, Questar Gas faced two general alternative courses of action. It could (a) attempt to have the FERC shift responsibility

[93] *See, e.g., In re Mountain Fuel Supply Co.* , 1993 WL 501430, at *22 ("The decisions must be judged in light of what [the utility] knew or reasonably should have known."); *In re Portland Gen. Elec. Co.*, 1999 WL 719758, at *3 (proper prudence review "examines whether a 'reasonable utility manager, under the same circumstances and acting in good faith, would not have made the same decision'") (citation omitted); *see also* Tr. 6/23/99 at 309 (Hanson).

for the problem onto others (meanwhile, the producers could properly continue transporting coal-seam gas on Questar Pipeline's system),[94] or (b) take direct action to solve the problem.[95]

Time constraints made these courses of action mutually exclusive. It was undisputed that heat-content levels were projected to become unmanageable by the spring or early summer of 1999, and Questar Gas had very little time to draft specifications, bid out the project, analyze bids, and contract for CO_2 removal. At a minimum, taking these actions to process the coal-seam gas was estimated to take 15 months—**roughly the entire time available to fix the heat-content problem**.[96] Given the risk to customer safety, the Company had to take action that would resolve the problem with certainty. Had Questar Gas followed the FERC course and been unsuccessful, customers would have faced the safety problem of low-Btu gas, and the Company would have had no time left to actually implement a solution. Although success in getting other entities to pay to process gas that was already meeting Questar Pipeline specifications might reduce costs to the Company's customers, failure in this course would have left consumers with gas that would not burn safely in their appliances. On the other hand, if Questar Gas undertook directly to solve the physical problem, the Company could assure safety and efficiency, but its customers would incur the cost of the solution.

---

[94] This would have entailed an attempt to convince the FERC that either producers and sellers of the coal-seam gas should reduce the CO_2 content or otherwise increase the heat content of their gas, or that Questar Pipeline should be forced to modify its tariff to cease accepting such gas, while Questar Gas waited for the outcome and took no action to address the actual physical problem on its system.

[95] Doing nothing was not a prudent option. *See, e.g., supra* note 54.

[96] Allred 99 Rebut. at 15 ("Q. At [the time lowering CO_2 levels was discovered as a viable alternative to reorificing] would Questar Gas or QPC have had time to seek FERC approval of a gas-quality modification to QPC's tariff? A. No, it was not feasible. **In April 1998, it was known that it would take about 15 months to design, build, test and bring on-line a suitable CO_2 removal plant. It was also known that the rapidly growing production levels of coal-seam gas would exceed Questar Gas's ability to blend gas to safe levels of Btu content by spring or early summer 1999. This left barely enough time to get the plant built and operational. There simply was not enough time to pursue other avenues and still have time to build the plant if those avenues proved fruitless or untimely.**") (emphasis added).

As Branko Terzic—a former FERC commissioner and state regulator, with over 30 years of experience[97]—testified, a FERC complaint would have brought protests from "a broad range of parties," potentially including "marketers, local distribution gas companies, end users, producers, brokers, other interstate pipelines, state regulators, public interest organizations, gas processors, gathering systems operators, and intrastate pipelines."[98] The producers would have vigorously opposed any attempt to burden them with the cost of further treating gas that had theretofore been fully acceptable under Questar Pipeline's FERC-approved tariff.[99] And, although it would be difficult to estimate the time it would have taken the FERC to issue an order, the proceeding could have been lengthy, as FERC proceedings more typically last years rather than months.[100] Of course, the Committee disputed these points. But the witnesses upon whom the Committee principally relied were Michael McFadden, who had never been a regulator—either on a state or federal level, George Compton, of the Division, who did "not claim to be a FERC expert,"[101] and who was not familiar with the FERC decisions upon which the Committee's timing argument rested,[102] and Charles Olson, a long-time consultant with more electric than gas experience, who performed no studies or analysis for this case, but who nonetheless **agreed** with Mr. Terzic about the typical lengthiness of FERC proceedings.[103]

---

[97] Terzic 98 Rebut., Ex. 5.1R.

[98] *Id.* at 3.

[99] *See, e.g.*, Tr. 6/7/00 at 705-06 (Weaver).

[100] Terzic 99 Rebut. at 6, 8.

[101] Compton 99 Direct at 12.

[102] *See* Tr. 6/6/00 at 430 (Compton).

[103] *See* Olson 98 Rebut. at 15 ("Cases at FERC usually take some time to resolve, especially where they entail complex and unique facts, as does this case."); *see also* Tr. 6/23/99 (McFadden) ("I think an important point to note is … it might have taken two or three or four years to work through the [FERC] system.").

The Committee cited *Northwest Pipeline Company*[104] and *Transwestern Pipeline Company*[105] as being expedited proceedings demonstrating that a FERC action could have been timely. As Dr. Compton admitted on behalf of the Division, however, the *Northwest* case took "seven or eight months" to be resolved.[106] Even assuming Questar Gas could have reliably predicted—which it could not—that it would receive an order within the *Northwest* or *Transwestern* timeframes,[107] it would not have had enough time to implement the CO_2 removal solution should it have needed to do so following the decision.[108] Thus, even an expedited proceeding would have left the Company in the very tenuous situation of absolutely having to win at the FERC or face the prospect of not having enough time to take necessary steps in the event its FERC action was unsuccessful. A prudent utility could justifiably conclude that this gamble would have been imprudent.

In sum, not only would "a complaint filed by Questar Gas to the FERC seeking a tariff change … have had little chance of approval"[109] it would have had "even less chance of approval within the time that Questar had to take definitive action to address the low-Btu problem."[110] And, while Mr. McFadden and Dr. Compton said that a FERC proceeding could be short, a reasonable, unaffiliated utility at a minimum could, and very likely would, have realized as

---

The Committee also relied, to a lesser extent, on the testimony of Darrell Hanson of the Division regarding FERC issues. Mr. Hanson was also not a FERC expert.

[104] 74 FERC ¶ 61,256 (1996).

[105] 72 FERC ¶ 61,008 (1995).

[106] *See* Tr. 6/6/00 at 428-29 (Compton).

[107] An important distinction between the Questar Gas FERC case envisioned by the Committee and the *Northwest* and *Transwestern* cases is that these latter cases were not complaint proceedings, which typically take more time than voluntary pipeline applications.

[108] *See, e.g., supra* note 96.

[109] Terzic 99 Rebut. at 2.

[110] *Id*.

Questar Gas did that the timing issue raised too much risk to rely on a FERC order. Again, when it discovered the possibility of remedying the heat-content problem by removing CO_2 out of the coal-seam gas, Questar Gas had essentially no margin of error—if it lost at the FERC there would be no time left to remedy the problem itself.[111] With responsibility for protecting customer safety, Questar Gas did not have time to gamble on the potential likelihood of a timely and successful FERC solution. There was "substantial uncertainty surrounding both the length of any proceedings at the FERC and whether the outcome would be unfavorable to coal-seam gas shippers."[112] Given this uncertainty, a prudent utility needed to act to remedy the problem.

b. It Was Unlikely That the FERC Would Have Ruled in the Company's Favor.

As Mr. Terzic—the most qualified witness to speak on likely outcomes at the FERC—testified, there existed a high likelihood that the FERC would deny the Company's request to force producers or Questar Pipeline to pay to process the coal-seam gas or keep the gas off Questar Pipeline's system. Thus, the Company could not afford to rely on a FERC solution.

As explained by Mr. Terzic, had the Company petitioned the FERC as the Committee argues, the FERC would have faced:

[111] *See* Tr. 6/22/99 at 140-41 (Allred) ("The options of going to FERC—it would be nice to get somebody else to pay for this, I wish we could. But it was Questar Gas that needed to have the lower CO_2, and we had to have a situation that we knew would work and we knew would be in place by the spring of this year, because of the coal seam production volumes, we didn't have any room to go any further. And it really wasn't until February of 1998 that we knew that [gas processing] would work. Before that we thought the only solution was massive reorificing. We basically had from February of '98—we started this plant construction—the construction contract was entered into in May of '98.").

[112] *See* Terzic 99 Rebut. at 6.

- A request from an LDC that would have asked the FERC for preferential treatment at the hands of its interstate pipeline affiliate, to the disadvantage of a variety of entities that were not affiliated with either company.[113]
- A request, which, if granted, could have substantially reduced the availability and flow of gas supplies in interstate commerce – the very antithesis of the FERC's policy initiatives in promulgating Order 436 (open-access) and Order 636 (unbundling).[114]

The Committee cited *Northwest*[115] and *Transwestern*[116] to suggest that CO_2 removal should be paid for by the producers. However, Mr. Terzic testified that "the key difference between these two cases and QGC's situation is that the resulting orders in these cases had the effect of increasing the ability of the subject pipelines to move gas in interstate commerce."[117] This is consistent with the FERC's firmly established open-access policy. Mr. Terzic testified that the Company's situation at the FERC would have been more like the situation in *Williams Natural Gas Company*,[118] wherein the FERC rejected a proposal to reduce the maximum nitrogen level of a pipeline. In *Williams*, the FERC cited the fact that three interconnected

---

[113] Tr. 6/22/99 at 258 (Terzic) ("[T]he proposal to reduce maximum CO_2 levels [in the Questar Pipeline tariff] is not an action which would improve QPC's deliverability in interstate markets. Instead, such an action would be viewed as to benefit a particular customer of QPC.").

[114] Tr. 6/5/00 at 177-79 (Allred); Tr. 6/22/99 at 257-58 (Terzic) ("FERC policies promote broad and nondiscriminatory, open access transportation throughout the widest geographic area. This is aimed at encouraging pipeline to pipeline interconnections, and connecting more customers to more production areas, and allowing diverse sources of gas to reach the maximum customer base possible."); *see generally id*. at 256-62.

[115] 72 FERC ¶ 61,008.

[116] 74 FERC ¶ 61,256.

[117] Terzic 98 Rebut. at 6; *see also* Tr. 6/22/99 at 258 (Terzic) ("In both Transwestern and Northwest Pipeline, the changes proposed . . . increased the ability of the pipelines to move gas in [interstate] commerce. In contrast, there is no indication in this case that there is a problem with QPC's, the regulated pipeline's, moving gas into interstate pipeline systems under its current tariffs.").

[118] 80 FERC ¶ 61,073 (1997).

pipelines had lower nitrogen standards than the one at issue, and rejected the proposal, finding that the existing standard did not impede Williams from delivering gas to interconnected pipelines. Likewise, Mr. Terzic and the Company's managers testified that in this case the coal-seam gas was fully compatible with not only Questar Pipeline's tariff but the tariffs of most other interstate pipelines.[119] *Williams*, like *Transwestern* and *Northwest*, advanced the principle of increasing connectivity between interstate pipelines—not restricting the flow of gas as the Committee has suggested in this case.[120]

As a matter of law, in any FERC complaint proceeding Questar Gas would have borne the burden of proving that the pipeline's longstanding tariff specifications were unjust, unreasonable, preferential or unduly discriminatory.[121] Questar Gas would have had to persuade the FERC that the pipeline should change its tariff specifications so that (a) producers who relied on those tariffs and satisfied the existing specifications would bear the cost of raising the heat content of their gas to meet the Company's unique needs and (b) producers would bear those costs even though Questar Gas had just modified its own distribution tariff, with this Commission's approval, to lower the heat content of the gas it would redeliver. Such a burden would have been difficult to meet.

---

[119] Allred 99 Rebut. at 8; Terzic 98 Rebut. at 6.

[120] Terzic 98 Rebut. at 7.

[121] *See, e.g.*, *Williams Natural Gas Co.*, 77 FERC ¶ 61,277, 1996 WL 862628, at *49 ("Under the NGA, the allocation of the burden of proof depends on the source of the proposed change. … If … a change is proposed by … a third party, section 5 of the NGA governs the burden of proof and requires that the proponent of the change first show that the existing rate is unjust and [un]reasonable, and then show that its proposal is just and reasonable.") (citations omitted); *Columbia Gas Transmission Corp.*, 15 FERC ¶ 63,003, 1981 WL 35672, at *3 (1981) ("The standard to be used in deciding the burden of proof issue must be taken from Section 556(d) of the Administrative Procedure Act which states: 'Except as otherwise provided by statute, the proponent of a rule or order has the burden of proof.'") (citing 5 U.S.C. § 556(d)).

i. The Company's unique heat-content needs would have caused the FERC to require the Company to pay to solve the heat-content problem.

It is undisputed that Questar Gas was the only Questar Pipeline customer for whom the heat content of the coal-seam gas was problematic.[122] Therefore, even if the FERC had allowed special treatment to meet the Company's unique heat-content situation the costs of the facilities necessary to meet those needs would have likely been passed-through to the Company's customers via a surcharge, as Mr. Terzic testified was the case in *Colorado Interstate Gas Company*.[123] There, LDC customers on a particular lateral had a similar problem to the Company's customers. In the case of Colorado Interstate's customers, the need was for a relatively low Btu content, whereas in the case of Questar Gas the need was for a high Btu content. The unique heat-content need is analogous, however, and a prudent utility reviewing the *Colorado Interstate Gas* precedent, along with *Williams*, would have recognized the strong likelihood of failure if it had asked the FERC to require coal-seam gas producers or others to pay to solve the utility's unique heat-content problem.

The *Colorado Interstate* case rebuts the Committee's "cost causation" argument, which argument was to the effect that the Company's customers did nothing to "cause" the heat-content problem; therefore, the costs of solving the problem must be paid by someone else. The Committee's statement of the problem is erroneous. The true problem was an isolated distribution system with uniquely high-Btu appliance set-points that was an anomaly in nationwide gas commerce. Solving the problem by joining the rest of the country benefits the

[122] *See, e.g.*, Tr. 6/22/99 at 13 (Allred) ("[T]he coal seam gas, without the CO_2 removal, is merchantable, complies with industry standards, and is gas that can be used in nearly all other distribution systems.").

[123] 83 FERC ¶ 61,089 (1998).

Company's customers through increased availability of compatible gas supplies.[124] Under *Colorado Interstate*, it is appropriate that the customers receiving the benefit also pay a portion of the costs.

Mr. McFadden admitted that the LDC's customers had to pay to solve the problem in *Colorado Interstate*,[125] and his only attempt to distinguish that case was to note that there the LDC's customers were actually purchasing and needed the gas.[126] This is a distinction without a difference, however, as whether or not the customers of Questar Gas were "purchasing" the coal-seam gas, it met the quality standards of Questar Pipeline and formed an important part of the actual gas that was being physically delivered to them;[127] it was necessary gas to meet their gas-supply needs;[128] and the actual "purchasers" of the gas did not need the CO_2 removal because

---

[124] *See, e.g.*, Terzic 99 Rebut. at 5 ("[T]he FERC has taken the position that increasing the supply of gas from the largest number of sources and locations does benefit the consumer. **Increasing the number of supply basins has the effect of both making greater supply available and of providing price competition not only for commodity gas but for pipeline transmission services.** This has benefited all customers, including those supplied by Questar Gas."); *see also* Tr. 6/22/99 at 277-78 (Terzic) ("I did not vote for [FERC Order] 636 because I thought producers would benefit from it. I voted for Order 636 . . . because I thought that consumers would benefit from it. I thought 636 would lead to more competition among producers and would, therefore, decrease the cost of produced gas. I also felt that 636 would increase the utilization on pipelines, it would uncover unused portions of the pipelines, it would increase throughput and it would lower pipeline transportation costs, ultimately, for LDCs, and for ultimate consumers. And that was the basis for it.").

[125] *See* Tr. 6/23/00 at 48 (McFadden).

[126] *See id.*; *see also* Tr. 6/6/00 at 253 (McFadden).

[127] *See, e.g.*, Tr. 6/22/99 at 70 (Allred) (The nature of all pipelines is that you do not actually get the same physical molecules of gas that you contracted for. Rather, "We get gas of the pipeline's quality standards. We are obligated to put the gas onto the pipeline that meets quality standards, and we get gas off the pipeline that meets quality standards.").

[128] *See, e.g.*, Tr. 6/5/00 at 169-70 (Allred) ("[T]here would be safety implications to customers [from refusing to take the gas], because in the wintertime, at high demand levels, we would not be able to keep all customers served from our Indianola and our Payson City gate on gas service. In other words, residential customers would . . . be in a situation of having to shut off and not receive gas. Then you've got all the safety associations, or safety concerns associated with after the system's been shut down, massive costs going around, checking house by house as you bring the system back up to ensure that as you turn the gas back on that there are no explosions or problems with pilot lights in houses.").

they did not have the Company's unusual heat-content needs.[129] Again, Mr. Terzic testified that the FERC's concerns with open access would have made the hypothetical complaint of Questar Gas highly analogous to the *Colorado Interstate Gas* case, and would have led to a finding that CO_2 removal should be paid for by the customers with the unique heat-content requirement—the customers of Questar Gas.

ii. The Committee's interpretation of Section 13.5 of Questar Pipeline's tariff would have been rejected by the FERC.

Mr. Terzic was just as emphatic that the FERC would have rejected the Committee's interpretation of Section 13.5 of Questar Pipeline's tariff.[130] That interpretation, which Dr. Compton called the "most compelling"[131] argument against the Company's prudence, was essentially that notwithstanding its full compliance with Questar Pipeline's tariff, coal-seam gas could have been kept off the southern system if any shipper objected to its presence.[132]

Former commissioner Terzic testified that this interpretation would have "wreaked havoc" on the pipeline by allowing multiple shippers to determine gas quality standards on a "whim."[133] According to Mr. Terzic, the only interpretation of Section 13.5 that would comport with FERC open-access policy was that Section 13.5

---

[129] *See, e.g.*, Tr. 6/5/00 at 154-55 (Allred) ("[E]very other customer [with the possible exception of Nephi Municipal System, with an inconsequential load] that I'm aware of on Questar Pipeline had no need for gas to be processed below the 3 percent tariff standard to get it onto the pipeline. And even though Questar Pipeline interconnects with other pipelines, like TransColorado, like Northwest, with a 2 percent CO_2 standard, but a total inert standard at 3 percent or above, and a Btu content standard in the range coal-seam gas is, there's never been a problem on that end of gas going to interconnecting pipelines. Furthermore, I want to stress this. Every decatherm of gas that's been processed to 1 percent has physically come to Questar Gas. It hasn't gone anyplace else.").

[130] Pursuant to Section 13.5 ("Questar shall not be required to accept gas at any point of receipt that is of a quality inferior to that required by shipper or a third party at any point of delivery on Questar's system.").

[131] Compton 99 Direct at 11 (citing 98 testimony of Charles Olson, on behalf of Division).

[132] *See id.*

[133] Terzic 99 Rebut. at 4.

> allows a pipeline to accept "**off-spec"** gas onto the system unless one of the other shippers objects. This provision advances the FERC policy of maximizing the amount of gas available to consumers of the interstate pipeline system. No other interpretation comports with FERC policy. The interpretation suggested by the Division and Committee witnesses would have been in violation of FERC policy as it would have allowed one shipper to keep another shipper's gas that meets FERC-approved tariff specifications from flowing on the pipeline's system.[134]

Of course, the coal-seam gas was not "off-spec." It fully complied with Questar Pipeline's tariff, and thus Mr. Terzic testified that the FERC would not have allowed the interpretation sought by the Committee.

In light of these difficulties with going to the FERC, it would have been more than reasonable for an unaffiliated LDC to determine not to rely on a solution so unlikely to solve the safety problem, especially given the great expense involved and with time being a major factor. Under the proper standard, the reasonableness of choosing not to rely on such an uncertain FERC result confirms that it was prudent not to go to the FERC. Indeed, had Questar Gas gone to the FERC and lost, instead of taking the necessary steps to solve the safety problem, one can easily imagine the Committee arguing that the Company's decision to go to the FERC was imprudent, given the fact that no time would have remained after losing at the FERC to solve the urgent safety problem.

iii. A 3%-to-2% solution would not have solved the heat-content problem.

Finally, the Committee has not advocated that the FERC would have ordered a reduction in Questar Pipeline's tariff from 3% total inerts down to 1% total inerts.[135] Rather, the Committee argued that a prudent, unaffiliated utility would have sought an order from the FERC

[134] *Id*. at 3-4 (emphasis added).

[135] *But see* Compton 99 Rebut. at 6 (testifying on behalf of Division).

requiring that Questar Pipeline lower its total inert-gas level from 3% to 2%.[136] The Committee's position, however, even if it would have been successful in spite of the *Williams* and *Colorado Interstate Gas* precedent and the reasoning discussed above,[137] ignores the fact that merely lowering total inerts from 3% to 2% would not have solved the problem. That is, even if the FERC had required coal-seam gas producers to pay for 3%-to-2% removal, there would still be costs incurred to get the level down to the necessary 1%.[138] The only evidence on the record indicates that cost recovery provided under the CO_2 Stipulation **is less than** the amount that a 2%-to-1% plant would have cost.[139] Therefore, even under the Committee's own argument, and assuming success in getting producers or the pipeline to pay for removal from 3% to 2%, the stipulated amount of recovery is reasonable as being within the amount a prudent utility would have incurred to process the coal-seam gas.

c. The Record Supports a Finding That the Company's Decision Not to Gamble on a Favorable Outcome at the FERC Was Prudent.

The fundamental issue is whether, viewed prospectively at the time decisions were made, it would have been prudent for an unaffiliated LDC, faced with the Company's heat-content problem and available alternatives, to act in a manner consistent with the actions taken by Questar Gas in dealing with the problem. A utility's actions cannot be found to be imprudent simply because an opposing party has speculated about alternative possibilities. The standard is to evaluate what the Company knew or should have known at the time it made the decision to obtain CO_2 removal services and consider whether its actions were reasonable under the

[136] *See, e.g.,* McFadden 98 Direct at 12.

[137] As Mr. Terzic testified, the FERC would have been unlikely to order a 3%-to-2% reduction. Tr. 6/5/00 at 177-79; Tr. 6/22/99 at 256-62.

[138] *See infra* note 147.

[139] *See* Snider 99 Rebut. at 3 ("It is my opinion that, had the requirement been to treat only from 2% CO_2 to 1%, the overall costs would have been 75% of the costs of the larger removal percentages.").

circumstances. The actions need not, of course, have been optimal – only reasonable, although Questar Gas has established that there was no other course of action that would assure (a) the safety of the Company's customers, (b) on a timely basis, and (c) at the lowest cost consistent with providing such safety assurances.[140]

The coal-seam gas supply, which was interconnected to Questar Pipeline's southern system, complied in all respects with Questar Pipeline's open-access FERC tariff requirements and, therefore, Questar Pipeline was required to take delivery and transport the gas.[141] An unaffiliated LDC would have had to, as Questar Gas did, accept this reality in assessing its options. Faced with the lower heat content of the gas delivered to its system, the urgency of the situation, and the impracticality of all of its customers' reorificing their appliances within the short time available, Questar Gas determined that the implementation of CO_2 removal, rather than gambling on a FERC solution to attempt to get Questar Pipeline's tariff standards changed, was the only way to assure safety in a timely and efficient manner.

It is clear from former Commissioner Terzic's testimony that unaffiliated, reasonable utility management could, and likely would, conclude that a solution from the FERC was not a viable option. Requiring coal-seam producers or the pipeline to pay to make the gas meet the Company's unique needs was contrary to FERC policy, had scant chance of success, and had almost no chance of being resolved in a timely manner.[142]

In his dissent from the 2000 Order, Commissioner Mecham found fault that Questar Gas didn't at least try at the FERC.[143] "Trying" at the FERC without proceeding with the CO_2

---

[140] *See, e.g.,* Allred 99 Rebut. at 9.

[141] Allred 98 Direct at 9.

[142] *See* Terzic 99 Rebut. at 2.

[143] *See 2000 Order* at 60.

removal remedy would have entailed an unacceptable risk. As Mr. Allred testified, there simply was no time to wait.[144] One could alternatively speculate that Questar Gas could have started on the CO_2 plant at the same time it brought a FERC proceeding, but this would entail the mere hope that the FERC would have ruled favorably to the Company before the Company spent too much money on the plant, because a favorable FERC proceeding would have rendered the plant unnecessary. Even if it could reasonably be speculated that Questar Gas would have received a timely and favorable FERC decision, further speculation would be required that the coal-seam gas producers or others would not appeal, or that an appeal would be completed expeditiously, and that the Company could prudently cease its preparations for CO_2 removal (trusting that the favorable FERC decision would not be reversed) during the appeal. It is simply too much speculation to find Questar Gas imprudent for not trying at the FERC. It is almost impossible to concoct a "just try" scenario at the FERC that doesn't expose the Company's customers to the risk of an unfavorable outcome: whether because the FERC renders an unfavorable decision, or it takes too long to render its favorable decision, or the appeal of that decision is unfavorable or takes too long, so that by proceeding along its dual track the Company has already expended significant sums to ensure that CO_2 removal is ready to be implemented by mid-1999 if necessary. Under the dual-track "just try" approach, either the money spent on the FERC proceeding or the money spent on CO_2 removal would eventually be wasted.[145]

Questar Gas had to estimate the likelihood of timely success at the FERC prospectively. The Commission must likewise assess the Company's prudence on an objective, prospective basis. A reasonable utility manager looking forward in 1998 would know that the chance of

[144] Allred 99 Rebut. at 15.

[145] And these costs would likely have been challenged by the Committee as being imprudently incurred.

success at the FERC in forcing producers and sellers to provide the solutions to the heat-content problem for the Company's customers was **at least** seriously in doubt. Even if, as Mr. McFadden testified, "there are other steps Questar Gas *could* have taken and other alternatives that *could* have been analyzed,"[146] the critical need for a **certain** resolution of the pending safety crisis made the decision not to go to the FERC a prudent one. Given the **lack of certainty** of a timely and favorable FERC outcome, Questar Gas was prudent to pursue the cautious course of fixing the safety problem itself through CO_2 removal.

4. The Testimony On The Record Regarding The Range Of Appropriate Cost Recovery Demonstrates That The CO_2 Stipulation Was Reasonable.

Given the unrebutted testimony on the prudence of the Company in assessing the heat-content problem, the uncontested testimony on its prudence in constructing the CO_2 plant in the manner it did and the testimony on the unacceptable risk of gambling on a timely and favorable outcome had the Company sought to shift costs for the CO_2 removal at the FERC, there is substantial evidence on the record for the Commission to find that CO_2 removal costs were prudently incurred in their entirety. Recovery of the lesser stipulated amount is, therefore, clearly reasonable and appropriate.

The reasonableness of the stipulated amount is further attested to by the fact that it fits comfortably within the range of the variety of recommendations made by parties. Mr. Townsend, on behalf of the Division, confirmed the Company's view that even if the FERC were to require coal-seam gas producers to pay for CO_2 removal from 3% down to 2%, further removal would be necessary to get the total level of inerts from 2% to 1%. While he went on to assume without quantitative analysis that this meant it would be reasonable for Questar Gas to recover half of the costs of a 3%-to-1% plant (*i.e.*, half of the actual costs Questar Gas has

[146] McFadden 98 Direct at 11 (emphasis added).

incurred), the real import of Mr. Townsend's testimony is that a prudent utility would have at least incurred the costs of taking the necessary steps to process total inerts from 2% to 1%.

The only evidence on the record regarding the actual expected costs of such a 2% -to-1% plant is from Mr. Snider. His conclusion was that a 2% -to-1% plant would cost approximately 75% of a 3%-to-1% plant to operate (about $5.4 million per year, an amount in excess of the stipulated amount).[147] Thus, the logical end of Mr. Townsend's testimony about 2% -to-1% removal is that the stipulated amount is well within the amount an unaffiliated, prudent utility would have incurred to further process the coal-seam gas even assuming the producers sent 2% gas to Questar Pipeline. Indeed, the stipulated amount falls somewhere between the arbitrary amount of recovery recommended by Mr. Townsend (50%), and the amount that the evidence suggests an unaffiliated LDC would have incurred (75%) had it undertaken to process coal-seam gas from 2% to 1% total inerts.

Likewise, Dr. Compton recognized that, under one analysis at least, even if the FERC were to have identified the costs of CO_2 removal as a responsibility of Questar Pipeline, approximately 65% of the total costs would still find their way back to Questar Gas through the pipeline's transportation rates (about $4.8 million per year, an amount very similar to the $5 million provided in the CO_2 Stipulation, and certainly less than the costs and risks of pursuing a FERC proceeding, even if it were entirely successful).[148] This number is conservative because

[147] Snider 99 Rebut., Ex. QGC 9R; Tr. 6/6/00 at 234-36 (Snider).

[148] Compton 99 Direct at 25 ("[A]llocating open access benefits in proportion to the volumes purchased, would make QGC an approximate 65% beneficiary of open access on that line—since QGC is the shipper receiving 65% of the gas carried in that line. By this theory, QGC would be responsible for that same proportion of the CDR costs. That would be accomplished by a QPC cost recovery mechanism in the form of a uniform transportation rates surcharge based upon throughput volumes.").

Dr. Compton stated the dilemma of identifying with certainty the outcome of a FERC proceeding: "All the principals in this issue are basing their positions regarding the disposition of CO_2 removal costs upon their conjectures as to what FERC would permit. QGC would place the full burden on its ratepayers

100% (not 65%) of the coal-seam gas Questar Gas has been processing to 1% CO_2 has gone to the Company's customers, and the CO_2 removal "does not facilitate any additional transportation business for Questar Pipeline."[149]

Mr. Alt further substantiated the reasonableness of the stipulated amount:

> [T]the CO_2 stipulation, we believe, is reasonable because, in our view, it takes into account that Questar Gas may not have been entirely prudent in its actions by allowing less than full requested cost recovery, that **the outcome of any FERC action that might have been pursued by Questar Gas is uncertain, that Questar Gas customers have benefited from the CO_2 removal, and that the risk to ratepayers has been mitigated by capping both the term and the annual dollar cost of CO_2 removal**.[150]

The parties would undoubtedly assign different levels of likelihood to the various alternate theories they put forth, but the range of outcomes addressed by the Division's and Committee's witnesses provides substantial evidence that $5 million per year is well within the range of reasonableness as to what the evidence indicated a prudent, unaffiliated utility should have expected to incur for resolving the heat-content problem. It represented a reasonable settlement of the amount of CO_2 removal costs to be appropriately recovered in rates, reflecting

---

based upon its stated expectations regarding FERC rulings. Conversely, the Committee's expectations would yield a zero burden. The UDPU rejects both extremes. **We justify our willingness to grant QGC *some* relief based on our expectation that FERC would also find a middle ground in this matter**." Compton 99 Rebut. at 13. (bold emphasis added).

[149] Allred 99 Rebut. at 9-10 (addressing the allegation by Mr. Hanson that Questar Pipeline benefits from transporting the coal-seam gas: "Questar Gas's CO_2 processing does not facilitate any additional transportation business for Questar Pipeline. **None of the gas processed to 1% CO_2 has been transported to any other market. All of it has been used by Questar Gas's customers. Coal-seam gas that meets Questar Pipeline's 3% tariff standard can be transported on the Questar Pipeline system without consequence to any Questar Pipeline customer except Questar Gas.** In addition, Mr. Hanson fails to discuss that, as an FERC-regulated pipeline with cost-of-service based rates, all of Questar Pipeline's revenues, including any additional revenues Mr. Hanson claims, would be included in Questar Pipeline's FERC general rate cases and would serve to lower rates for Questar Pipeline customers to the extent that they are above the level of costs. Therefore, **the revenues Mr. Hanson attempts to use to justify a denial of cost recovery will, through normal regulatory processes, serve to *reduce* costs for Questar Gas's customers**.") (bold emphasis added).

[150] Tr. 6/5/00 at 56-57 (Alt) (emphasis added).

litigation risks and uncertainties that a party must account for in its decision-making. Judged against some of the theories forwarded by other parties for what a reasonable amount of recovery for CO_2 removal might be, the stipulated amount falls comfortably within the range of reasonableness, and even without choosing among the experts there is substantial evidence to support a finding of prudence for CO_2 removal costs incurred up to the stipulated amount.

IV. CONCLUSION

Faced with a serious threat to customer safety, Questar Gas acted prudently by incurring the CO_2 removal costs to ensure that customers would receive gas that could safely be burned during a reasonable transition period to adjust their appliances to conform with the heat content of gas that will eventually be delivered to them absent CO_2 removal. There is no meaningful dispute that the assessment of the heat-content problem, the decision to remove CO_2, and the steps taken to build and operate the CO_2 plant were in all respects consistent with what an unaffiliated, prudent utility would have undertaken in response to the declining heat content. Nevertheless, the Committee has sought to deny Questar Gas recovery of the CO_2 removal costs because it believes the FERC **might** have required others to bear the costs of removal of CO_2. FERC action was not pursued because it did not provide a timely and reliable solution to the safety problem associated with the declining heat content, and therefore entailed serious risk to the Company's customers.

The Commission was correct in granting rate recovery pursuant to the terms of the CO_2 Stipulation. Although the evidence supports a prudence finding for all of the CO_2 removal costs, the 68% recovery provided by the Commission-approved stipulation accounts for any reasonable differences in approach that an unaffiliated LDC might have taken. The Commission should

now expressly find that the stipulated amount of CO_2 removal costs were prudently incurred and that rate recovery up to the amount provided in the CO_2 Stipulation is just and reasonable.

RESPECTFULLY SUBMITTED: May 7, 2004.

_____

C. Scott Brown
Colleen Larkin Bell
Questar Regulated Services

Gregory B. Monson
David L. Elmont
STOEL RIVES LLP

Attorneys for Questar Gas Company

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing **OPENING BRIEF OF QUESTAR GAS COMPANY ON PRUDENCE** was served by electronic mail on the following on May 7, 2004:

Michael Ginsberg
Assistant Attorney General
Patricia E. Schmid
Assistant Attorney General
500 Heber Wells Building
160 East 300 South
Salt Lake City, Utah 84114
mginsberg@utah.gov
pschmid@utah.gov

Reed T. Warnick
Assistant Attorney General
500 Heber Wells Building
160 East 300 South
Salt Lake City, Utah 84114
rwarnick@utah.gov

Gary A. Dodge
Hatch, James & Dodge, P.C.
10 West Broadway, Suite 400
Salt Lake City, Utah 84101
gdodge@hjdlaw.com

William J. Evans
Parsons, Behle & Latimer
201 South Main Street, #1800
Salt Lake City, UT 84111-2218
wevans@pblutah.com

Jeff Fox
149 Windsor Street
Salt Lake City, Utah 84102
jeffvfox@attbi.com

Tony J. Rudman
1111 East Brickyard Road, Suite 106
Salt Lake City, UT 84106
tjrudman@utah-inter.net

_____