BEFORE THE
PUBLIC SERVICE COMMISSION OF UTAH

Questar Gas Company	)	Docket No. 02-057-02

PREPARED DIRECT TESTIMONY OF ALAN K. ALLRED FOR QUESTAR GAS COMPANY

May 3, 2002

Q. Please state your name and business address.

A. Alan K. Allred. My business address is 180 East 100 South, P.O. Box 45360, Salt Lake City, Utah 84145.

Q. What is your current job title and what are your responsibilities?

A. I am Senior Vice President of Questar Gas Company ("QGC" or the "Company"). In this position I am responsible for its state regulatory activities. I am also responsible for the gas supply, gas control, and to its accounting, budgeting, engineering, account management and support services for QGC. I have similar responsibilities for Questar Pipeline Company and Questar Regulated Services Company ("QRS").

Q. What is your educational background?

A. I hold a bachelor's degree in Finance from Utah State University and a master's degree in Systems Management from the University of Southern California.

Q. What additional experience do you have in the gas industry?

A. I have been employed by QGC (formerly Mountain Fuel Supply Company) and QRS since 1978 and was employed in the corporate planning department from 1978 to 1986, serving as Director from 1982 through 1986. During this period I dealt

with natural gas pricing, as well as matching gas supplies with demand. From 1986 to 1997, I was Director of Rates and was named Manager of Regulatory and Gas Supply Services in October 1997. I was named Vice President for Business Development in November 2000 and Senior Vice President in February 2002.

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

A. In this general rate relief application, QGC is seeking to recover an annual revenue deficiency of **$23,107,000**. This revenue deficiency has been determined by using ratemaking methods that will provide the Company with a fair opportunity to recover the costs of providing natural gas service to its customers, including a reasonable return on its invested capital during the period rates will be in effect.

The methods used here are somewhat different from those employed in QGC's most recent general rate proceedings. However, they are clearly within the explicit provisions of the Utah Public Utility Code and are specifically designed to provide rates that reasonably reflect the conditions that will exist when rates become effective in January 2003 (the "rate-effective period").

I will first describe the ratemaking mechanisms that have been used to determine rates that are currently in place for QGC and the characteristics of the Company that make it virtually impossible for QGC to recover a competitive return for its investors without continually implementing extraordinary operating & maintenance ("O&M") expense reductions. Continuing in this way will require QGC to substantially reduce the level and quality of service it can provide for its customers. I will give a fairly detailed description of the particular cost and revenue trends that must be considered and adequately addressed in the Commission's final ruling in this case.

I will describe a ratemaking approach that will give the Company a reasonable opportunity to earn its allowed rate of return and provide quality natural gas service, while ensuring that customers are not overpaying for that service.

I will also briefly address the allowed return on equity that QGC is requesting

in this case, summarize the Company's various affiliate relations and contracts, and outline the subjects of the Company's other witnesses' direct testimony.

RESULTS OF OPERATIONS

Q. As a preliminary matter, please discuss the Results of Operations that the Company is required to file with the Commission.

A. The Commission receives information about the utility's operations and financial condition through Results of Operations Reports that are filed every six months. These semi-annual reports provide the latest 12 months of comprehensive information to the Commission, and they are also reviewed by the Division of Public Utilities ("Division") and the Committee of Consumer Services ("Committee"). (Technically, the Commission has required only annual Results of Operations Reports; the mid-year reports are provided at the request of the Division.)

Among other things, these reports indicate whether the Company is earning more or less than its authorized return during the 12-month reporting period. Results are presented both on an unadjusted and fully-adjusted bases. The fully-adjusted results include: (a) Commission-ordered adjustments, (b) new adjustments necessary to reflect changes that occurred after the most recent rate case, and (c) notification of previously ordered adjustments that are no longer necessary or appropriate due to changed conditions.

The Company believes that this process is an appropriate means for the Commission to monitor the utility's general results once rates have been established and to measure the Company's situation relative to the last establishment of rates and ratemaking principles.

Q. Has QGC filed its Results of Operations for the calendar year 2001?

A. No. Because the time when the Company usually files its Results of Operations is close to the filing of this case and because those results form a basic foundation for the rate request the Company is making, we are incorporating the 2001

year-end Results of Operations Report in this case. Gary L. Robinson, Regulatory Affairs Specialist for QGC, provides the details in his testimony and explains how they relate to the Company's overall request.

Q. Do these reports tell the complete story about the returns investors actually see?

A. No. The reports have two inherent flaws. First, there is a substantial mismatch between financial statements based on established ratemaking guidelines and those set under generally accepted accounting principals ("GAAP"). For example, for the year ended December 31, 2001, QGC's Results of Operations Report shows a return on equity of about **10.27%**. Although this may be an appropriate regulatory calculation, this is not an accurate measure of the Company performance in the eyes of the financial community. For financial reporting purposes, QGC's profit and loss statement would show an equity return of only **9.10%**.

This substantial difference is based partly on costs disallowed for ratemaking purposes, but which the Company incurs because it believes they are necessary to its operations. In addition, it fails to reflect the annualized impact of significant changes in revenues, expenses and investment.

REVENUE REQUIREMENT

Q. Please describe the basic ratemaking methods the Commission has adopted in recent QGC general rate proceedings and that it has required the Company to use.

A. As a general rule during the past 15 years, the Commission has insisted that rates be determined almost exclusively on the basis of historical data. It has also indicated a strong preference for the use of a calendar year for test-year purposes. The Commission has generally refused to incorporate changes that are either known or reasonably expected to occur after the end of the historical test year. This systematic use of historical information, and rejection of attempts to update it beyond the test-year-end, is a major contributor to regulatory lag, and it puts the Company in a position of always trying to "catch up" with the increasing costs of providing utility service. I believe that the Commission stands alone nationally in following the practice of severely limiting adjustments to actual data.

Q. Do you agree with this general approach to setting rates?

A. No. Although an approach based entirely on historical information may provide a certain level of precision, this should not be the primary consideration in ratemaking. The main purpose of ratemaking is to ensure that rates are set in a way that provides the utility with sufficient revenues during the time when rates will be in effect—the rate-effective period—and allows it a reasonable opportunity to recover its costs, including an appropriate return on investors' equity. The test year should be a starting point, or foundation, that is built upon to estimate future investment and costs during the rate-effective period. This concept is discussed by Robert Hahne and Gregory Aliff:

> **7.02 Test Year Function.** Although the terms test *year* and test *period* are most often used interchangeably, a useful distinction may be made between the two in properly focusing on the role of the test period in the rate-making process. The test *year* is a measure of the operations and investment from some specified twelve-month period. The test *period* is a measure of, or is representative of, conditions during the period of new rates. A twelve-month period (past, present, or future) is selected as a test *year* and is then restated, to the extent

> necessary (or permitted), to produce the test *period* data considered reflective of conditions during the period in which rates are to be in effect. The test *year* provides the data foundation upon which the rate case is built. It is the starting point for developing investment and operating results that are presumed to be representative of future conditions so that future rate needs may be reasonably estimated. The test *year* is the raw material, and the test *period* is the finished product.
>
> The two sets of data may express the same time period (and may be identical in value), or they may express different time periods (with the test year restated to create test period results). Furthermore, while the test *year* may express data from the past, present, or future, *the test period is always a forecast* when rates are being set thereon for prospective use.

Robert L. Hahne & Gregory E. Aliff, *Accounting for Public Utilities* § 7.02 (1989, orig. ed. 1983) (emphasis in original). This concept is particularly important for QGC, which is a "rising cost" utility. I will explain what I mean later in my testimony.

Q. Are you familiar with the ratemaking principles set forth in the often-cited *Hope* and *Bluefield* cases?

A. Yes. They are a part of the foundation that anyone who deals in utility ratemaking must be familiar with.

Q. In your judgment, how does the use of historical test-year data fit with your understanding of *Hope* and *Bluefield* principles?

A. One of the basic tenets of the *Hope* and *Bluefield* cases is that utility rates must be set in a manner that reflects the cost of providing utility service including an appropriate allowed return to investors. From the *Bluefield* case:

> The question in the case is whether the rates prescribed in the commission's order are confiscatory and therefore beyond legislative power. Rates which are not sufficient to *yield a reasonable return on the value of the property used at the time it is being used to render the service* are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment. This is so well settled by numerous decisions of this court that citation of the cases is scarcely necessary:

Bluefield Water Works v. Public Service Commission, 262 U.S. 679, 690 (1923) (emphasis added). The Utah Supreme Court has also recognized this principle: "We agree that one of the fundamental goals of rate making is to select a test year that reasonably approximates the rate-effective period." *Mountain Fuel Supply Co. v. Public Service Commission*, 861 P.2d 414, 422 (Utah 1993).

If a utility's operations are stable and "flat," with very little change, actual data may provide a reasonable measure of the expectation of the rate-effective period. But, as I will explain in more detail below, a utility with rising costs and declining usage per customer, such as QGC, does *not* have a reasonable opportunity to earn "a reasonable return on the value of property used at the time it is being used to render service" when rates are based only on historical data. It follows that the ratemaking process must, in some way, take account of the changes or differences between the historical data and the conditions during the rate-effective period.

Q. Has the Commission's historical-test-year approach created a problem for QGC's customers and investors?

A. Yes. Because of dynamic changes in our operating costs and revenues, setting rates based on historical data creates an almost insurmountable problem for QGC. This purposeful rejection of future or projected test years has forced the Company to undertake major service reductions in order to have any opportunity to earn its

allowed rate of return. It appears that the Commission's test-year philosophy is rooted in the notion that utility management must be induced through the effects of regulatory lag to manage its operations efficiently between general rate proceedings. Regulatory lag is really an acknowledgment that the rates set by the Commission will not be sufficient unless management takes action to reduce costs—whether or not there are efficiencies to be made in the process. This philosophy was articulated by the Commission in a US West general rate case order:

> Once new service rates are in effect following the rate case, Company earning performance is in management's hands. Should the Company exceed or fall short of earning the allowed rate of return, corrective action awaits the next case. This classic regulatory view of risk-sharing underlies the importance of regulatory-lag. *It is an inducement to management efficiency*.

In re US West Communications, Inc., 1993 WL 214610; 142 P.U.R.4th 1 (Utah P.S.C.1993) (emphasis added).

This philosophy works only if the test-year data used to set the rates properly reflects the conditions that will occur in the rate-effective period. When test-year data is stale and inaccurate for the rate-effective period, it becomes punitive. Regulatory lag is a fact of life, but this approach assumes that there is always a "next reduction" that the Company can make to recoup the inevitable difference between rates set on generally lower historical costs and the actual costs during the rate-effective period.

My disagreement with this Commission's approach is this: When the utility's costs are generally increasing to serve new customers and revenues are not increasing sufficiently to cover the increasing costs, the Commission's policy forces the utility to make major cost reductions just to stay "level"—even when the utility is already operating at a high level of efficiency. In QGC's case, the way rates have recently been set has made it virtually impossible for the Company to manage its business properly, serve its customers at the levels they desire, and still recover the legitimate costs of doing business, including a reasonable return to its investors.

Q. Please describe what you mean.

A. If a utility's costs and revenues are fairly constant from year to year, rates set precisely on the basis of historical data could serve as a benchmark for measuring efficient and effective management of the utility. That is, if a comprehensive analysis of costs, revenues and investment during a historical test year accurately models the rate-effective period, then normally efficient and effective management should allow a company to cover its costs and earn the allowed rate of return for its investors. Outstanding management performance should achieve a somewhat higher return without penalty. Conversely, inefficient management would penalize the utility's owners with a lower achieved return. The problem occurs when historical data are used and rates are set using inaccurate indicators of revenues, costs and investment during the rate-effective period.

Q. In what circumstances would this occur?

A. With rates set only on the basis of historical data, regulatory lag begins during the pendency of the case and continues while the rates are in effect. An instant mismatch occurs if a utility experiences material changes in costs or revenues. Thus, if a utility is subject to a trend of either increasing investment and costs or decreasing revenues, management is immediately faced with an impossible earnings situation.

On the other hand, if a utility has increasing revenues or decreasing costs or investment (or both) to serve new customers, then mismanagement can be hidden while customers overpay for service. It is only in the unlikely occurrence when revenues, costs and investment are all stable that historical test-year data effectively models the rate-effective period. *Only* then does regulatory lag properly induce the efficiencies the Commission desires. Otherwise, the incentives and signals to management are distorted: Either (1) it has no chance to keep up with regulatory lag unless it embarks on a program of debilitating cost-cutting and service reductions, potentially depriving customers of the level and quality of services they expect, or (2)

it can operate at a less-than-optimal level because the regulatory lag is working *for* it.

Q. Where does QGC fall in this spectrum?

A. QGC is firmly locked within the grip of increasing investment and decreasing revenues per customer. Because of this, the intended "incentive" built into regulatory lag has the effect of punishing past efficiency. When historical data are used to set rates for QGC, cost and investment will have already increased while revenues will have eroded before new rates take effect. Thus, QGC starts in a hole that it can climb out of only by resorting to extraordinary cost-cutting measures that invariably affect service to customers. Absent this, it cannot hope to achieve the return that it lawfully should have a reasonable opportunity to earn. Once optimum efficiencies are reached, the only remaining options are to compromise customer service or jeopardize the financial integrity of the utility. The long-term effect of either of these results is harmful to customers.

Q. Do you believe the intent of the Commission's regulatory policy is punitive?

A. Absolutely not. I believe the Commission recognizes that QGC is doing all it can to serve its customers appropriately. I also believe the Commission takes its statutory responsibilities seriously and has intended to set rates in a manner that protects customer interests while considering the interests of the Company's employees and investors. This was exhibited in the last QGC general rate case filing in Docket No. 99-057-20. In that case, the Company had experienced a serious erosion of its earned rate of return and was also subject to some significant first-time costs. In connection with filing its application, QGC sought partial interim rate relief. With the Division's affirmative recommendation, the Commission authorized annualized interim relief of about $7.0 million to become effective only two weeks after the case was filed.

We are not seeking interim relief in this case because we have filed with sufficient lead time that, if there are no major surprises through the end of 2002, the

Company should not suffer severe financial hardship. Whether 2003 will present a major problem, however, depends on the Commission's changing its view of the appropriate test year for an increasing-cost company.

Q. You have referred to QGC as an increasing-cost company. Please describe this in more detail.

A. To be more accurate, QGC is an increasing-investment/decreasing-revenue-per-customer company. The conditions under which the Company operates do not remotely approximate a stable cost and revenue environment. In particular, the Company can reasonably expect to (a) incur steadily increasing needs for new investment, as hooking up new customers continues to add to the need for additional investment in plant, (b) experience a continuing decline in average, weather-adjusted annual usage per customer, with the accompanying pressure on recovering non-gas costs from decreasing revenues per customer, and (c) experience the general upward creep of expenses, even though inflation rates are currently relatively low.

Q. **What is the evidence of the decline in usage per customer that you have identified.**

A. QGC is faced with a continuing trend of declining usage per customer that has gone on for over 20 years. Exhibit QGC 1.1 shows the temperature-adjusted usage per customer from 1980 through March 2002. Since 1980, the amount of gas used annually by a typical residential and small commercial customer has declined from about 177 Dth per year to 118.6 Dth per year in March 2002. This is a **34%** decline. It is hard to overstate the seriousness of this trend, because 71% of QGC's non-gas costs are recovered through volumetric rates, while the great majority of its costs are fixed costs. (Exhibit QGC 1.1 depicts values that are based on normal degree-days as determined over a 30-year period. Mr. Robinson's revenue-requirement and revenue-deficiency calculations incorporate 20-year degree-day data.)

Q. Doesn't this decline in usage per customer cause a corresponding decrease in QGC's variable costs?

A. No. Virtually none of QGC's non-gas costs vary with sales volumes. Exhibit QGC 1.2 shows an analysis of the major expense elements for 2001. For each category, the portion of the expenses that vary with the volume of gas sold is identified. As shown in this exhibit, **less than 6%** of the Company's costs vary with sales and transportation volumes. Because almost all of our operating costs are fixed costs (from a cost-accounting standpoint), even a small percentage decline in usage per customer results in a substantial loss in net income.

Q. What is the effect of historical data and regulatory lag on revenues the Company is allowed to collect?

A. In QGC's last general rate case, Docket No 99-057-20, annual revenues used for setting rates were determined by using the average number of customers in 1999 and actual usage incurred during the 1999 historical test year. This reflected a usage per customer of 128.0 Dth per year. As of March 2002, this key revenue variable has already dropped to 118.6 Dth per year. As shown in Exhibit QGC 1.3, while this 9.4 Dth decrease may seem small, the Company's revenues are $12.6 million less than they would have been if the usage per customer had remained at the level it was when rates were set. This calculation includes the new customers that were added since 1999. The magnitude of this figure shows the significant impact changes in usage per customer has on QGC.

This is one of the most pernicious effects of regulatory lag. Looking at this one factor in isolation, it is certain that the usage per customer in the rate-effective period will fall short of the amount reflected in any historical test year. This has two causes: First, the calculation period is almost two years back on the trend line. Second, the use of average data during the test year exacerbates the inaccuracy by another six months, although bringing the key elements forward to test-year-end by annualizing costs and using test-year-end rate base can mitigate this effect.

Q. Is the number of customers served increasing?

A. Exhibit QGC 1.4 shows the number of QGC customers served since 1985. During this 17-year period, the number of customers served by the Company has increased from about 445,000 to 735,000 by the end of 2001, and there is no evidence that it will not continue to increase.

Q. Doesn't a steady increase in the number of costumers tend to offset the decline in usage per customer?

A. No. The added revenue from new customers, combined with the decline in per-customer usage, does result in slightly increased revenues. However, the distribution non-gas ("DNG") revenues that are generated do not cover the increased cost of the growing investment required to serve this increasing customer base. Exhibit QGC 1.5 shows the net investment in property, plant and equipment from 1985 through the end of 2001. Our rapidly growing customer base has required QGC to invest over $660 million over the past 15 years to expand and maintain a gas distribution system capable of serving both old and new customers. The new investment requirement, which has more than doubled net investment since 1985, has required the Company to obtain additional funds from investors on a regular basis. About half of this amount has been raised from investors who buy QGC debt instruments. The other half ultimately has come from common stockholders of Questar Corporation.

Q. Exhibits QGC 1.1 through 1.5 are largely based on a 15-year period from 1985 to the Company's most recent test-year filing. How would you describe the Commission's ratemaking policy during this time?

A. Since 1985, the Commission has based all general rate decisions for QGC on historical test-year data for which there has been little or no adjustment for known or expected changes during the rate-effective period. This is represented in Exhibit

QGC No. 1.6. Although the exhibit is a schematic representation, it demonstrates clearly that the habitual use of an historical test year for an increasing-cost utility such as QGC has a devastating effect. The Company starts in a hole at the very moment that the new and theoretically updated rates take effect.

Exhibit QGC 1.6 is a schematic diagram to illustrate these dynamics. It begins with the designation of a year of actual operation—the historical test year (Item 1 on the graph). Preparation of the case is undertaken at the end of the test year (Item 2) and is shown to take about four months (often an ambitious assumption). After filing, the statutory timetable for the Commission to reach a final decision in a rate proceeding is within 240 days after the case is filed (Item 3). Under these assumptions, new rates would be made effective two years after the beginning of the historical test year (Item 5). (Reducing the case preparation time only slightly improves the situation. A test year that overlaps the case preparation and regulatory processing period still results in a minimum lag of more than a year.)

Assuming that the rates are determined under the Commission's current test-year guidelines and that the rates will roughly reflect an average for the various ratemaking elements during the test year (Item 4 on the graph), a rate-effective period that runs about one year beyond the initial date for new rates will put the utility almost *two years behind* in matching costs with revenues (compare Item 6 with Item 4). Even if some test-year-end data is incorporated in setting rates, it only advances slightly up the line (Item 4), and the difference between cost recovery and actual cost incurred is only slightly improved.

The point is that in an increasing-cost environment, the use of a historical test year simply does not satisfy fundamental ratemaking principles and denies the utility a reasonable opportunity to recover its costs.

Q. If this is such an insurmountable problem, how has QGC been able to operate profitably in recent years?

A. It is certainly true that this gives the Company an incentive to be efficient.

The Company has found ways to serve more customers with fewer employees. Exhibit QGC 1.7 shows the increasing number of customers served per employee since 1985—from 292 to 705 customers per employee. This has been possible partly due to increases in efficiency, increased technology and, at times, by foregoing otherwise prudent expenses. Ronald W. Jibson, QGC's General Manager, discusses some of the steps the Company has taken in more detail. For example, his Exhibit QGC 2.1 shows a comparison of some major ways customer services have been reduced. These changes have allowed the Company to limit its O&M expenses.

This has not been a painless process. QGC is now serving 139,000 more customers with 372 fewer employees than it did in 1985. Even though these employees have a high commitment to serve our customers effectively and efficiently, some of our customer service ratings have declined. We simply can't continue to reduce our workforce and still provide adequate service to our customers.

Looking specifically at the period since general rates were last increased (in Docket No, 99-057-20), three unplanned events have taken place that have allowed QGC to avoid deep financial trouble: (1) The Commission has approved on an interim basis the Company's proposed treatment of a portion of bad-debt expense in Docket No. 01-057-14, and we assume this treatment will become permanent. (2) In the same docket, the Commission has approved on an interim basis the one-time recovery of $5.3 million (plus interest) in 2002 as a result of the Company's successful Utah Supreme Court appeal of the Docket No. 98-057-12 proceeding on CO_2-processing costs. (Earnings for 1999 were well below the authorized level partly because these costs were not recovered when they were incurred; similarly, booking them this year gives a one-time infusion of revenue in 2002 that will not occur during 2003.) (3) Also as a non-recurring cost reduction, the Company took the major one-time step after the last general rate order to reduce costs by offering an early-retirement program.

Nevertheless, the combined effect of these measures will still not permit the Company to earn its authorized return during 2002, but they should prevent a severe

financial problem from developing.

Importantly, we are running out of services to reduce or eliminate and one-time "fixes." We have no more offices to close, and we have little opportunity to further consolidate. We even face some risk that the Federal Energy Regulatory Commission will require us to undo some of the consolidation savings accomplished through the creation of QRS.

Q. Please discuss the Company's recent regulatory activity in its efforts to recover its costs and provide a reasonable return to investors.

A. QGC's last general rate case was filed on December 17, 1999, in Docket No, 99-057-20. At that time the Company was earning 9.44% near the end of 1999, as determined by the methods adopted by the Commission. On a similar basis, the Company was projected to earn **7.66%** as it looked forward to the year 2000—a situation that required immediate action. In an effort to expedite badly needed rate relief, the Company chose not to pursue a forward-looking test year. Instead, it based its rate request on historical 1999 test year. QGC did so, knowing full well that it would start the rate-effective period in that case (August 11, 2000) well behind the regulatory-lag curve and that its only chance to recover its costs and attain the rate of return authorized by the Commission would be to find additional areas to cut after rates were set.

Q. What did the Company do to respond to this problem?

A. As I mentioned, the Commission granted about $7.0 million of annual interim relief, which was supplemented by an additional $6.5 million when the case concluded. Shortly after the Commission's Report and Order in Docket No. 99-057-20, we instituted an early-retirement program to cut O&M expenses. Although some may have viewed this action on the tail of a rate-case order with a degree of

skepticism, the simple fact was that QGC was faced with a rate order based on historical data that was already eight months old when the rate-effective period began.

We knew this cut in workforce was likely to erode service levels, but we had no other choice. The workforce portion of our O&M costs is the lone area where we have any significant cost-cutting ability left. The program became effective on November 1, 2000, and 262 employees accepted the early-retirement offer. This singular step reduced the Company's O&M costs by $5.1 million on an annualized basis.

Q. Having obtained rate relief in August 2000 and implemented an early-retirement plan to control costs, discuss the developments leading up to this filing in May 2002.

A. Exhibit QGC 1.8 shows this development by displaying the summaries of the major cost-of-service and revenue elements at four key points from the time of the Company's filing in Docket No. 99-057-20 in December 1999 through the end of the year 2002 in this case.

Column (a) – The 1999 column shows that the Company was experiencing a revenue shortfall of approximately $13.5 million at year-end 1999. (The numbers in this column reflect the 1999 test-year data and results incorporated in the Commission's Report and Order in Docket No. 99-057-20.)

Column (b) – The 2000 column is calculated on the same basis as column (a) for the year 2000; that is, this column represents the fully adjusted 2000 results and includes the annualized effects of the August 2000 rate increase and the early retirement. Offsetting the rate increase was the impact of declining usage per customer, which fell from 128.1 Dth per year, as reflected in the 1999 test-year data, to 125.7 Dth per year for 2000. As a result, DNG revenues increased by only $2.6 million from the 1999 test-year level plus the $13.5 million of granted rate relief. Rate base grew by $35 million, and this caused the required return to be $3.4 million

higher.

Thus, even with the annualized early-retirement savings, the Company's revenues fell some **$2.3 million** short of those required to earn its allowed 11.0% return for 2000.

Column (c) – This column moves the Company forward to the calendar year 2001 and depicts the results at year end by using: (i) annualized year-end labor costs, (ii) year-end rate base, (iii) per-customer usage at the end of the year, and (iv) number of customers on the system at year end. Other than these effects, the results are otherwise "fully adjusted" to incorporate the Commission's ratemaking treatments in the 99-057-20 case.

This shows that the erosion of the Company's ability to earn the return authorized in the last case continued, with the annual deficiency rising to **$5.6 million**. While revenues were increasing somewhat, costs were outrunning this increase.

Column (d) – This is essentially the summary of the determination of the revenue deficiency in this case. Mr. Robinson provides the detailed derivation of these values in his testimony and exhibits. This column shows clearly that the Company cannot keep up with the increased costs on its system. Even at the equity-return level of 11.0% from the last case, the annual deficiency will have grown to **$15.1 million** before new rates can be made effective, and amounts to **$23.0 million** if the current cost of equity capital of 12.6% is recognized.

Q. What do you conclude from this exhibit?

A. The trends are unmistakable. The costs of serving new customers outpaces the revenues generated. More importantly, the majority of the cost increases are beyond QGC's control. They are driven by the increasing rate base, which is in turn the result of our increasing customer base. The only management option in this regulatory-lag environment is to find ways to reduce O&M expenses. From the day new rates were made effective, there was a revenue shortfall, and it began to grow

due to the fact that the costs and revenues used to set rates were based on outdated historical data.

Further, if the Company were to seek rate relief in this case using 2001 historical test-year values, the calculated revenue deficiency would amount to about $3.4 million—even with full year-end labor annualization, rate base, per-customer usage and total customers. (It would be even further from reality if average values for the year were used—in the range of $2.5 million more.)

There has to be a better answer than limiting the use of information to the historic period. QGC simply cannot continue to provide both an adequate level of service for customers and a proper return for investors under that regulatory framework.

Q. In your judgment, what are the realistic alternatives for the Commission to consider in this rate case filing?

A. It is unquestionable that the declining usage per customer and increasing investment in rate base are long-standing trends that are likely to continue into and beyond the rate effective period. Unless these trends are fairly dealt with in the rate-setting process, QGC will not have a reasonable opportunity to earn the allowed return.

If rates are again based on out-of-date historical values, they will not reflect the conditions during the rate-effective period. The Company will be forced to seek yet another gut-wrenching cost reduction that will lower service quality, eliminate some existing services, lower employee morale and increase customer complaints and dissatisfaction. Although we are always looking to implement changes that increase efficiency and take advantage of advancements in technology, these are incremental and are not of a magnitude that can offset the effects of regulatory lag. Mr. Jibson provides more details of the options that the Company will face if it is required to continue to operate under the current ratemaking framework.

Although it appears that the Company can make it through 2002 without

incurring a large revenue deficit, it would be grossly imprudent to wait for the almost surely disastrous 2003 results before filing a 2003 historical-test-year case. It will be too late.

Further, this regulatory-lag effect for an increasing-cost utility is a one-way street. Shortfalls are rarely balanced by extra earnings, but there is often swift action to terminate any period when authorized returns are exceeded. Standard ratemaking theory recognizes that the process of setting rates for the future cannot produce exact results. Similarly, it also recognizes that there will be periods when the utility earns somewhat more or less than the regulatory test-year determinations. QGC has seen very little of that symmetry.

Q. One of the reasons often given for using a historical test year is that the resulting regulatory lag will induce the utility to operate efficiently. Do you agree?

A. No. I have never agreed with the premise that a utility must have some sort of "club" over its head to operate efficiently. No matter which test period is used to set rates, there is always an inherent motivation for a utility to improve efficiency. In the short term, if a utility can become more efficient, it will produce greater earnings between rate cases. In the long term, an inefficient utility operation will cause a reduction in the demand for natural gas. Although regulatory lag may be an inducement to be efficient, it is artificial and punitive in its application and is based in part on the assumption that utility managers will not operate their businesses properly. I believe this is an unsound basis for regulating public utilities.

Q. Are there other ways to solve the problem that are consistent with Utah law?

Yes. The Utah Legislature has provided a framework that allows a broad range of methods to achieve just and reasonable rates. Utah Code Ann. § 54-4-4(c) states:

> The commission, in its determination of just and reasonable rates, may consider recent changes in the utility's financial condition or changes

> reasonably expected, but not speculative, in the utility's revenues, expenses or investments and may adopt an appropriate future test period, not exceeding twelve months from the date of filing, including projections or projections together with a period of actual operations in determining the utility's test year for rate-making purposes.

Utah law recognizes alternatives to produce rates that will approximate future conditions that will exist in 2003 when new rates become effective. One method permitted under the statute is the use of a full future test year, employing various projection techniques—a method that the Commission approved many times for utilities during the 1970s and 1980s. Although the Commission has uniformly rejected this approach over the past 15 years, it is a method that is consistent with the statutory framework. While we believe that this approach, if properly and carefully followed, is fair to all the ratemaking participants and would produce fair and reasonable estimators of the key elements, there is another way to approach the problem that is more closely related to the strict historical-test-year approach that has been required recently.

Q. What is the Company's test-year proposal?

The Company proposes to use information for calendar 2001 as the basis for a future 2002 test year ending on January 1, 2003. The information for 2001 is now available and serves as a benchmark from which to make appropriate adjustments that will give QGC a fighting chance to recover its costs (including return) in 2003. During the pendency of the case, the first nine months of this future test year will become actual. We fully understand the need to carry this process out in an even-handed manner and have included in this filing all the material, reasonably expected changes in the Company's operating results, including those that reduce the determination of Company's revenue deficiency.

Mr. Robinson presents and discusses the Company's Results of Operations for 2001 (as well as fully adjusted 2001 Results), the adjustments to rate base, revenues and expenses that reflect the reasonably expected results of the 2002 test year.

Q. Why have you chosen January 1, 2003, as the end of the test year?

A. There are some revenues and costs in this case that will be in effect through December 31, 2002, but will cease on that date and, beginning January 1, 2003, will not represent the conditions that will exist for the rate-effective period. The choice of January 1 to end the test year removes the technical question about whether these year-end changes are within the test year.

Q. Explain the Company's general treatment of rate base, number of customers and usage per customer for the test year.

A. Given the use of a 2002 test year, in order to model the conditions that will exist for the rate-effective period as closely as possible, we have incorporated the conditions reasonably expected to exist at the end of 2002 to determine the annual revenue requirement. Thus, rate base, expected number of customers and usage per customer as they are expected to be on January 1, 2003 are all incorporated in Mr. Robinson's determination of the revenue deficiency. Certain costs are also annualized as of year-end to represent the rate at which costs are being incurred at the beginning of the rate-effective period.

Q. Will the use of a 2002 future test year using end-of-period information remove all the effects of regulatory lag?

A. No. The Company's proposed rates will only reflect the conditions at the start of the rate-effective period. Consistent with the effects shown on the schematic diagram in Exhibit QGC 1.6 (Item 5), the continuing increase in number of customers (perhaps another 18,000 in 2003) and decline in per-customer usage will still subject QGC to the effects of regulatory lag.

Q. What return on equity has been incorporated in the Company's rate request?

A. Professor Williamson has performed a standard cost-of-capital analysis that is generally consistent with the Commission's current preferences. He relies primarily on a discounted-cash-flow analysis (DCF) and has determined that the cost of equity capital for QGC is **12.6%**. This is higher than the level authorized by the Commission almost two years ago, but it reflects today's conditions and is particularly important to a utility company that is dealing with a constant need for an influx of capital to finance additional utility plant for new customers.

I would add to Professor Williamson's recommendation the observation that QGC must compete for investment not only against other regulated "comparable" companies, but must provide an expected return that will compete with other, non-utility investments with similar risk characteristics that are available to investors.

RATE DESIGN

Q. Please outline the major rate-design features of the Company's filing.

A. We are proposing significant rate-design changes in this case. In recognition of the substantial investment per customer that is required to serve new customers, the Company is proposing revisions to its main-extension policy, accounting and ratemaking for contributions in aid of construction ("CIAC"), and other rate-design and allocation measures that will provide a fair and reasonable rate structure for QGC's customers. Barrie L. McKay, QGC's Manager of State Regulatory Affairs, will address these areas.

AFFILIATE RELATIONS

Q. QGC routinely offers an overview of its affiliate structure and affiliate transactions. Why is this done?

A. In prior orders in other utility general rate proceedings, the Commission has required utilities to explain their affiliate transactions. Accordingly, I will identify and discuss the areas where QGC conducts business with its affiliates.

Q. Please explain briefly the relationships that QGC has with its affiliated companies.

A. As shown on the Questar Corporation organization chart, Exhibit QGC 1.12, QGC is a third-tier, wholly owned subsidiary of Questar Corporation and a direct, wholly owned subsidiary of QRS. The Company has business relations with the following affiliates:

Questar Corporation, the non-operating, first-tier parent holding company. It provides a variety of administrative services, including certain management, financial, environmental, legal, human resources and communications services.

Questar InfoComm, Inc., which provides information technology and communications services to the Questar companies, including QGC.

Questar Regulated Services Company, which is a non-operating second-tier subsidiary of Questar Corporation. Its primary function is to provide those administrative services to QGC and Questar Pipeline Company that the two companies can more efficiently employ jointly than if the two companies maintained independent departments for those services.

Questar Energy Services Company, is a subsidiary of QRS that provides a variety of products and services and engages in some limited transactions with QGC, including joint trenching for QGC and other utilities, that involve minimal dollar amounts.

Questar Pipeline Company, an interstate natural gas transmission pipeline and underground storage company that is regulated by the FERC. Questar Pipeline provides the majority of QGC's firm transportation services and all storage services required by the Company.

Questar Transportation Services Company, a subsidiary of Questar Pipeline which owns and operates a CO_2-removal plant in Emery County, Utah.

Wexpro Company, whose sole function is to carry out the oil and gas

production and development functions set forth in the 1981 Wexpro Agreement. In particular, Wexpro develops and produces "Company-owned" gas under a cost-of-service arrangement set forth in detail in that Agreement.

Questar Energy Trading Company and *Shenandoah Energy, Inc.*, natural gas marketing companies from which QGC purchases a small portion of its gas supply under contracts reflecting market terms.

Questar Gas Management Company, which provides gas gathering services for certain gas supplies owned by QGC pursuant to the terms of a Commission-approved gathering agreement.

Q. Outline the general methods that QGC uses to determine the costs of goods and services acquired from affiliated companies.

A. There are two primary methods: direct (assigned) charges and allocated costs. Direct charges can be further separated into those that are subject to a specific inter-affiliate contract and those that are reflected by direct intra-corporate accounting entries.

Q. Why is Questar Corporation organized with separate operating entities?

A. Questar Corporation (and Mountain Fuel prior to 1984) has always been an integrated gas company with exploration, production, transmission and distribution activities. It can best manage and control its business by having separate, distinct business units. In addition, maintaining separate business units is the only practical way to operate some of the key functions of federally-regulated, state-regulated and unregulated businesses. Finally, by forming separate business units, each company has its own books and records to provide clearer audit trails of transactions between affiliates.

Q. Identify the primary costs that are allocated to QGC from other affiliates and describe the methods that are used to make cost allocations.

A. Costs that are incurred by Questar Corporation and QRS and for which direct assignment is not practical are allocated to all the corresponding lower-level subsidiaries. These allocations are based on allocation methods that are reflective of cost causation.

For example, employee-benefit expenses are generally allocated on the basis of number of employees or salaries. Costs similar to administrative-and-general (A&G) costs are allocated using the "*Distrigas* formula." This formula allocates costs to a specific affiliated entity in proportion to the relative contribution of plant value, labor cost and total revenue (exclusive of gas costs), of that entity to the total, where each of the three factors is equally weighted in the determination. This has become a standard method for A&G cost allocation that originated before the FERC and is widely used by other rate-regulatory agencies.

Q. Does this conclude your direct testimony?

A. Yes it does.