Before the

Utah Public Service Commission

Docket No. 02-057-02

QUESTAR GAS COMPANY

Direct Testimony of

Alan Chalfant

On Behalf of

Utah Industrial Energy Consumers

Project 7815 August 30, 2002



QUESTAR GAS COMPANY

Before the

Utah Public Service Commission Docket No. 02-057-02

Direct Testimony of Alan Chalfant

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.							
2	Α	Alan Chalfant; 1215 Fern Ridge Parkway, Suite 208; St. Louis, Missouri 63141-2000.							
3	Q	WHAT IS YOUR OCCUPATION?							
4	Α	I am a consultant in the field of public utility regulation with Brubaker & Associates,							
5		Inc., energy, economic and regulatory consultants.							
6	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND							
7		EXPERIENCE.							
8	Α	My qualifications are stated in Appendix A to this testimony.							
9	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?							
10	Α	I am appearing on behalf of the Industrial Gas Users intervention group ("IGU"). The							

(Questar or Company), who are identified in the IGU's petition to intervene.

members of IGU include numerous large customers of Questar Gas Company

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1 Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

2 Α I will discuss Questar's proposed use of a future test year to determine its overall revenue requirement in this case. I will also discuss Questar's cost of service study 3 4 and proposed revenue allocation and rate design. In connection with these rate-5 related issues, I will address the need to reflect the benefit to the Company and other 6 ratepayers and other ratepayers of the Company's ability to purchase customer-7 owned gas during periods of supply interruption. I will also address the allocation of 8 the costs of CO₂ removal associated with the period June 1999 through April 10, 9 2000.

10 Choice of a Test Year

- 11 Q WHAT IS QUESTAR'S PROPOSAL CONCERNING THE TEST YEAR TO BE USED
- 12 **IN THIS CASE?**
- 13 A Questar proposes to use a future test year ending on January 1, 2003.
- 14 Q HAS THE COMPANY ESTABLISHED THE COSTS AND REVENUES FOR THIS
- 15 FUTURE TEST YEAR CONSISTENT WITH THE NORMAL METHOD FOR DOING
- 16 **SO?**
- 17 A No. Typically, in jurisdictions that rely on future test years, all costs and revenues are
- based on forecasts, usually taken directly from the Company's budgeted figures.
- 19 Questar, on the other hand, has simply taken an adjusted past test year and made
- certain further adjustments for expected changes during the future test period.

ı	Q	ARE THERE POTENTIAL PROBLEMS WITH QUESTAR'S METHOD OF							
2		ESTABLISHING A FUTURE TEST YEAR?							
3	Α	Yes. First, because only some, but not all, items are adjusted, there is a strong							
4		possibility of a mismatch between costs and revenues. Second, because it is							
5		necessary to select which items are adjusted and which are not, there is a concern							
6		about whether that selection might be biased.							
7	Q	WHY HAS QUESTAR CLAIMED A NEED FOR USING A FUTURE TEST YEAR AT							
8		THIS TIME?							
9	Α	There appear to be two primary concerns: (1) the downward trend in residential							
10		usage per customer; and (2) the rapid growth in new connections.							
11	Q	HAS QUESTAR EXPLAINED WHY AVERAGE USAGE PER CUSTOMER HAS							
12		BEEN FALLING?							
13	Α	No. It merely shows graphs and data confirming that usage per residential customer							
14		has been falling since 1996.							
15	Q	WHY IS IT IMPORTANT TO KNOW WHY USAGE PER CUSTOMER HAS BEEN							
16		FALLING?							
17	Α	Because without understanding the cause of the reductions, it is not possible to make							
18		a meaningful projection of future average use per customer.							
19	Q	WOULD IT BE APPROPRIATE TO SIMPLY EXTEND THE CURRENT TREND?							
20	Α	No. Extrapolating the current rate of decrease into the future cannot produce							
21		meaningful results. For example, based on the graph shown on Exhibit QGC 1.1,							

extrapolation of the trend between 1997 and 2001 tells us that by 2022 the average use per customer will be zero. Similarly, had the period 1980 through 1986 been used to extrapolate the average use per customer for 2001, it would have suggested that average usage would have fallen to about 65 Dth per customer. In fact, average usage in 2001 is over 118 Dth per customer.

6 Q WHAT OCCURRED TO MAKE THAT ESTIMATE SO FAR OFF THE MARK?

- 7 A For ten years, between 1987 and 1996, average use per customer remained essentially flat. This can also be seen on Exhibit QGC 1.1.
- 9 Q HAS QUESTAR PROVIDED ANY INFORMATION INDICATING THAT THE
 10 CURRENT DOWNWARD TREND IS NOT ABOUT TO END AS ABRUPTLY AS DID
 11 THE SIMILAR TREND FOR THE PERIOD 1980 THROUGH 1986?
- 12 A No.
- 13 Q HAS QUESTAR PROVIDED SIMILAR INFORMATION OR PROPOSED AN
 14 ADJUSTMENT TO THE REVENUES OF ANY OTHER CUSTOMER CLASS?
- No. Questar has only provided data for the residential Rate Schedule GS-1. This is the only rate schedule for which it has proposed to adjust test year revenues. It has offered no data concerning usage per customer to determine whether similar or offsetting adjustments would be appropriate for other classes and is proposing no changes to the test year revenue of other classes.

1	Q	QUESTAR ALSO COMPLAINS THAT ITS RAPIDLY GROWING CUSTOMER						
2		BASE HAS OUTPACED THE INCREASE IN DISTRIBUTION NON-GAS						
3		REVENUES. DOES QUESTAR OFFER ANY REASON TO BELIEVE THAT THE						
4		NUMBER OF NEW USERS COMING ON THE SYSTEM WILL CONTINUE TO						
5		INCREASE?						
6	Α	No. Questar offers no support for the assumption that new customer connections will						
7		continue to grow at a steady rate.						
8	Q	ARE THERE ANY INDICATIONS THAT THIS GROWTH MAY NOT CONTINUE?						
9	Α	Yes. According to the "Utah Labor Market Report" published by the Utah Department						
10		of Work Force Services, for August 2002 the total non-agricultural employment fell by						
11		1.6% between June 2001 and June 2002. To the extent that this is a leading						
12		indication of population trends and new customer gas hookups, it certainly casts						
13		some doubt on Questar's concern regarding the growth of new hookups.						
14	Q	EVEN ASSUMING THAT QUESTAR'S CUSTOMER BASE CONTINUES TO						
15		GROW, IS A FUTURE TEST YEAR THE ONLY WAY TO ACCOMMODATE THAT						
16		GROWTH?						
17	Α	No. First, it is not clear that it is a problem. Initially, Questar will need to use						
18		shareholder money to finance its investment. Over the life of the investments, the						
19		shareholders will earn a reasonable return. This is the way regulation was intended						
20		to work, so it is not clear why Questar considers it a problem.						

Second, to the extent it is a problem, Questar's proposed rate design in this

case should provide substantial relief. Questar witness, Barrie McKay, estimates at

page 6 of his direct testimony that the current average cost of connecting a residential

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customer is \$1,800. The customer contribution to that connection cost is now \$407
and Questar is proposing to increase it by \$100. Mr. McKay states that Questar will
re-evaluate the impact of this change before taking further action. It seems that it
would also be reasonable to review the impact of this change on Questar's earnings
before changing the current test year procedure.

6 Q PLEASE SUMMARIZE YOUR POSITION ON QUESTAR'S FUTURE TEST YEAR

7 **PROPOSAL.**

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A Questar has not demonstrated compelling circumstances that would justify the Commission changing its procedures concerning the choice of a test year and adopting the future test year proposed by Questar. Moreover, even if such circumstances were shown, Questar's method of developing its test year is not supportable because it only addresses changes to items selected by the Company while leaving other items unadjusted.

14 Cost of Service, Revenue Allocation and Rate Design

- 15 Q HAVE YOU REVIEWED THE COST OF SERVICE STUDY PRESENTED BY
- 16 QUESTAR IN THIS PROCEEDING?
- 17 A Yes. I have reviewed the summary of that study which is presented in Mr. McKay's
- 18 Exhibit QGC 5.5 as well as the workpapers associated with that Exhibit.
- 19 Q ARE THERE ANY PROBLEMS WITH THE COMPANY'S COST OF SERVICE
- 20 **STUDY?**
- 21 A Yes. Distribution feeder costs (mains) are divided into demand and commodity
- components on the basis of a 50/50 split. There is simply no rational basis for

considering any feeder costs as commodity-related, and the Company offers none. Distribution feeder costs are fixed and do not vary with the usage. These costs are commonly allocated partly on the basis of peak demand and partly on the basis of customers. The customer allocation is to reflect the fact that a certain amount of investment in mains would be incurred simply to cover the system regardless of how small the system peak demand might be. Questar totally ignores the customer component of mains, which would reduce the allocation of these costs to high load factor customers, and instead allocates one-half of these costs on the basis of throughput.

10 Q WHAT IS THE CONSEQUENCE OF ALLOCATING 50% OF DISTRIBUTION 11 FEEDER COSTS ON THE BASIS OF USAGE?

It overstates the costs of serving high load factor and interruptible classes. This is because high load factor customers make more efficient use of their demands so that their demand allocation factor is smaller than their volumetric allocation factor. In the case of interruptible classes, these customers have no reservations on the distribution feeders and none of the associated costs should be allocated to them.

17 Q HOW MUCH DOES THIS MISALLOCATION ADD TO THE COSTS OF FIRM AND 18 INTERRUPTIBLE TRANSPORTATION CUSTOMERS?

Relative to a pure demand allocation, it adds \$422,000 to the cost of serving FT-2 customers and \$2.4 million to the cost of serving interruptible transportation customers. Relative to a proper allocation that reflects a customer-related component, the overstatement is even greater.

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Q IS THE COMPANY'S PROPOSED ALLOCATION OF REVENUE RESPONSIBILITY 1 2 TO FIRM AND INTERRUPTIBLE TRANSPORTATION CLASSES REASONABLE? 3 Α No. Because it is based on a cost of service study that overstates the cost of serving 4 transportation classes, it allocates excessive revenue responsibility to those classes. 5 This is particularly true for the interruptible transportation class since over half of the 6 costs allocated to that class are for distribution feeders which transportation 7 customers can only use when they are not fully subscribed by firm customers. 8 However, this problem is mitigated to a certain extent by the fact that Questar does 9 not propose moving all the way to the cost of service study results in this case.

ARE YOU PROPOSING AN ALTERNATIVE ALLOCATION OF REVENUES?

Not at this time. Because the problem is mitigated somewhat by Questar's limited movement toward its cost study results, I am not providing an alternative cost of service study or revenue allocation at this time. We do ask the Commission to recognize that due to the problems with the cost of service study, the Questar proposal represents an upper limit on the revenue responsibility of the transportation classes.

ARE THERE ANY OTHER FACTORS THAT SHOULD BE RECOGNIZED IN DETERMINING THE REVENUE RESPONSIBILITY OF THE INTERRUPTIBLE TRANSPORTATION CLASS?

A Yes. Under § 5.04 of Questar's Tariff, interruptible transportation customers are required to "offer to sell their gas supplies to the Company for its use during periods of interruption in serving firm sales customers..." This is both a benefit to firm

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customers and a reduction in the quality of service for interruptible transportation
customers. It is not a factor that is reflected in the cost of service study.

Q HOW DOES THIS REQUIREMENT BENEFIT FIRM CUSTOMERS?

A It guarantees a source of supplies at rates that reflect the market index price. This
helps avoid both the need to impose curtailments on firm customers in circumstances
when other supplies are simply unavailable and the need to pay excessive spot
market prices that take advantage of emergencies.

8 Q HOW DOES THIS REQUIREMENT REDUCE THE QUALITY OF SERVICE FOR 9 INTERRUPTIBLE TRANSPORTATION CUSTOMERS?

Absent this provision, interruptible transportation customers would be interrupted only when there is a shortage of distribution capacity to deliver their gas. Indeed, that is the only quality of service reduction that is partially reflected in the cost of service study. The reduction to quality under § 5.04 is much greater than the reduction that is partially reflected in the cost of service study because it means interruptible customers will also be interrupted in the much more likely event of a gas supply shortage that affects any of the Company's sources of supply.

17 Q IS THIS OFFSET BY THE PAYMENTS THAT QUESTAR MAKES TO THE 18 CUSTOMERS FOR THEIR GAS SUPPLIES?

A No. The customers may either experience a profit or loss from their sales to Questar.

In any event, any possible profit from selling their gas will be far more than offset by the loss of the value of the product that could not be produced because of the interruption.

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1 Q HAVE YOU ATTEMPTED TO ATTACH A VALUE TO THE BENEFIT § 5.04

PROVIDES TO THE SYSTEM OR THE REDUCTION IN QUALITY OF SERVICE IT

IMPOSES ON CUSTOMERS?

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I have not. I would note, however, that several years ago the Company's interruptible transportation rate included a "Nickel Waiver" clause. Under this clause, the Company agreed to waive a 5¢ surcharge included in its rate on all throughput in exchange for the customers' agreement to sell their gas to the Company during supply interruptions. While I do not suggest that 5¢ per Dth is an accurate estimate of the value to the Company and firm customers of interruptibility under § 5.04, it can be considered a conservative estimate of that value established by the Company several years ago.

CO₂ Removal Costs

13 Q WHAT IS YOUR UNDERSTANDING OF THE CURRENT TREATMENT OF

QUESTAR'S COSTS OF CO₂ REMOVAL?

A I understand that CO₂ removal costs are currently allocated in accordance with a Stipulation reached in the last general rate case, Docket No. 99-057-20. That Stipulation allocates to Questar's transportation customers approximately 5% of CO₂ removal costs, which are capped \$5 million. According to the Commission's Order on Remand issued August 14, 2002, in Docket Nos. 01-057-14 and 98-057-12 ("Remand Order"), CO₂ plant expenses from June 1999 through August 10, 2000, amounting to \$3.76 million, will be recovered from the same classes of customers and in the same proportion as the rate design set in the general rate case, Docket No. 99-057-20.

1 Q DO YOU AGREE WITH THE ALLOCATION OF 1999-2000 CO₂ COSTS TO
2 TRANSPORTATION CUSTOMERS AS STATED IN THE COMMISSION'S REMAND

3 ORDER?

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A No. The Supreme Court's Opinion seems to require that these 1999-2000 costs be recovered through Account 191, rather than through general rates. Under Account 191 treatment, none of these costs would be recovered from transportation customers. In addition, because none of the IGU intervenors were parties to Docket Nos. 01-057-14 and 98-057-12, and because the Stipulation addresses costs going forward only, it appears that the allocation of costs to them would violate traditional principles of ratemaking which requires that rates be set prospectively.

11 Q HAVE THE IGU REQUESTED A HEARING ON THE COMMISSION'S REMAND

12 **ORDER?**

The IGU have not challenged the Commission's Remand Order in Docket Nos. 01-057-14 or 98-057-12. Although the IGU believe that there should be no allocation of CO₂ costs to transportation customers, the amount of the 1999-2000 costs is small enough that the IGU intervenors do not find it economic to pursue a hearing in those dockets.

Q SHOULD CO₂ COSTS BE INCLUDED IN TRANSPORTATION RATES TO BE SET IN THE CURRENT RATE CASE?

No. Transportation customers use appliances that can safely use gas with lower Btu levels. Most of them continually adjust their burner tips or may even reorifice their equipment to account for lower Btu levels. They receive no benefit from CO₂ removal and cannot fairly be charged with causing CO₂ removal costs, either for the period

- from June 1999 through August 10, 2000, or for the period during which rates set in the present case would be effective.
- ASSUMING THAT THE COMMISSION WERE TO ALLOW RECOVERY OF CO₂
 REMOVAL COSTS RELATED TO THE PERIOD FROM JUNE 1999 THROUGH
 AUGUST 10, 2000 FROM TRANSPORTATION CUSTOMERS, HOW SHOULD
 THEY BE RECOVERED?
- There seems to be no justification for passing these CO₂ plant costs to transportation retail customers. If they are to be allocated some of those costs, however, they should not exceed the percentage agreed to in the allocation Stipulation in Docket No. 99-057-20, and they should be spread either as set out in the Stipulation, or on a customer charge. Allocation on a volumetric basis would result in transportation customers bearing a grossly disproportionate share of those costs.
- 13 Q DOES THIS COMPLETE YOUR DIRECT TESTIMONY?
- 14 A Yes, it does.

Appendix A

Qualifications of Alan Chalfant

1 Q PLEASE STATE YOUR NAME AND BUSINESS A		PI FASE	STATE YOUR	NAMF A	UN1	BUSINESS	ADDRESS
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- 2 A Alan Chalfant. My business mailing address is P. O. Box 412000, 1215 Fern Ridge
- 3 Parkway, Suite 208, St. Louis, Missouri 63141-2000.

4 Q WHAT IS YOUR OCCUPATION?

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- 5 A I am a consultant in the field of public utility regulation and am a principal in the firm of
- 6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

I hold a Bachelor's Degree in Mathematics from Northern Illinois University and the degree of Master of Arts in Economics from Washington University. From 1968 to 1973, I was Assistant Professor of Economics at California State University at Northridge, California. Among other courses in economics and statistics, I taught courses in the economics of antitrust and regulation at both the graduate and undergraduate levels. I have also taught courses at both graduate and undergraduate levels at California Lutheran College.

In 1973, I accepted a position with the Public Service Commission of Wisconsin in the Utility Rates Division. While at the Commission, I designed the rates for electric and natural gas utilities and aided in the preparation for cross-examination of witnesses representing utilities and intervenors before the Commission.

I joined the firm of Drazen-Brubaker & Associates, Inc. in September 1974 and became a Principal in that firm in 1988. In April 1995 the firm of Brubaker & Associates, Inc. (BAI) was formed. It includes most of the former DBA principals and

staff and currently has its principal office in St. Louis, Missouri, with branch offices in Denver, Colorado; Chicago, Illinois; Asheville, North Carolina; Kerrville, Texas; and Plano, Texas.

Since 1974, I have been engaged in the preparation of studies relating to utility rate matters and have participated in numerous electric and gas rate cases. In total, I have participated in cases involving more than 60 electric utilities, 30 gas distribution utilities and 20 interstate pipelines.

8 Q HAVE YOU PREVIOUSLY TESTIFIED BEFORE A REGULATORY COMMISSION

OR A PUBLIC AUTHORITY?

I have testified before the Federal Energy Regulatory Commission and more than thirty state public utility regulatory commissions. In addition, I have appeared before a number of municipal regulatory bodies and courts.

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