

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

---

IN THE MATTER OF THE APPLICATION  
TO INCREASE DISTRIBUTION NON-GAS  
RATES AND CHARGES AND MAKE  
TARIFF MODIFICATIONS

Docket No. 07-057-13

---

**DIRECT TESTIMONY OF GARY ROBINSON**

**FOR QUESTAR GAS COMPANY**

December 19, 2007

**QGC Exhibit 7.0**

**TABLE OF CONTENTS**

<b>I.</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>II.</b>	<b>COST-OF-SERVICE AND RATE DESIGN TASK FORCE.....</b>	<b>1</b>
<b>A.</b>	<b>Rate Design Stipulation and Task Forces.....</b>	<b>2</b>
<b>III.</b>	<b>COST-OF-SERVICE METHODOLOGY.....</b>	<b>4</b>
<b>IV.</b>	<b>COST-OF-SERVICE ALLOCATION FACTORS .....</b>	<b>4</b>
<b>V.</b>	<b>COST-OF-SERVICE RESULTS .....</b>	<b>5</b>
<b>A.</b>	<b>Rate Classes Not Included In Cost-of-Service Study .....</b>	<b>6</b>
<b>VI.</b>	<b>PROPOSED CHANGES TO CURRENT RATE SCHEDULES .....</b>	<b>7</b>
<b>A.</b>	<b>Rate Class Naming Convention .....</b>	<b>7</b>
<b>B.</b>	<b>Split of GS-1 Class Into Residential and Commercial.....</b>	<b>8</b>
<b>C.</b>	<b>Changes to the GSC and F-1 Schedules.....</b>	<b>9</b>
<b>D.</b>	<b>Elimination of the F-3 Schedule.....</b>	<b>10</b>
<b>E.</b>	<b>Elimination of the F-4 Schedule.....</b>	<b>10</b>
<b>F.</b>	<b>Changes to Interruptible Sales Schedules .....</b>	<b>11</b>
<b>G.</b>	<b>Changes to the Transportation Rate Schedules .....</b>	<b>12</b>
<b>VII.</b>	<b>RATE DESIGN.....</b>	<b>14</b>
<b>A.</b>	<b>Development of Cost Curves by Rate Schedule .....</b>	<b>17</b>
<b>B.</b>	<b>Determination of the Number of Blocks and the Size of Blocks by Rate Schedule ...</b>	<b>18</b>
<b>C.</b>	<b>Design Rates and Fees to Collect the Required Revenue by Rate Schedule.....</b>	<b>20</b>
<b>D.</b>	<b>Changes to Basic Service Fees.....</b>	<b>21</b>
<b>VIII.</b>	<b>PROPOSED RATES .....</b>	<b>21</b>

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Gary L. Robinson. My business address is 180 East First South Street, Salt Lake  
4 City, Utah.

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

6 A. I am employed by Questar Gas Company (Questar Gas or Company) as Director of State  
7 Regulatory Affairs. I am responsible for state regulatory matters in Utah and Wyoming.

8 **Q. Attached to your written testimony are QGC Exhibits 7.1 through 7.8. Were these**  
9 **prepared by you or under your direction?**

10 A. Yes.

11 **Q. What are your qualifications to testify in this proceeding?**

12 A. I have listed my qualifications in QGC Exhibit 7.1.

13 **Q. What is the purpose of your testimony in this Docket?**

14 A. I will address the Company's calculations and recommendations with regard to the class  
15 cost-of-service study presented in this case. I will discuss proposed rate design changes and  
16 applicable tariff changes, including the proposed rate changes for various rate classes of  
17 customers.

18 **II. COST-OF-SERVICE AND RATE DESIGN TASK FORCE**

19 **Q. Did the Company prepare a cost-of-service (COS) study in the last general rate case,**  
20 **Docket No. 02-057-02?**

21 A. Yes. The Company prepared a COS study in that docket. During the process of that case,  
22 the Company met with the Division of Public Utilities, the Committee of Consumer Services,  
23 the UAE Intervention Group, the United States Executive Agencies, the Salt Lake  
24 Community Action Program, the Crossroads Urban Center, and the Industrial Gas Users  
25 Group, and arrived at a stipulation regarding the COS study and the rate design changes to be

26 made in that case. These parties jointly filed the Allocation and Rate-Design Stipulation and  
27 Settlement (Rate Design Stipulation).

28 **Q. Did the Rate Design Stipulation allocate costs to the various rate classes strictly as**  
29 **they were calculated in the COS study in that case?**

30 A. No. There were adjustments made to the allocations that were agreed to by all parties that  
31 participated in the Rate Design Stipulation, and the final stipulated allocations varied from  
32 the COS study results. For example, there were some adjustments to mitigate the full impact  
33 of the COS results to some rate classes. These adjustments were justified on the basis of  
34 moving closer to the fully allocated COS but not moving the entire way in one case.

35 **A. *Rate Design Stipulation and Task Forces***

36 **Q. Did the Rate Design Stipulation also request a task force study?**

37 A. Yes. The Rate Design Stipulation specifically requested that “the issues raised by various  
38 Parties be the subject of further study and consideration by a collaborative task force.” As a  
39 result of this request, the Commission created the Allocation and Rate-Design Task Force  
40 (Task Force). See the Report and Order in Docket No. 02-057-02 (2002 Order), page 40. In  
41 the 2002 Order the Commission stated that “the goal of the Task Force is to analyze a variety  
42 of rate-design and cost-allocation issues that have arisen in this case and attempt to agree on  
43 how to resolve these issues for possible application in future proceedings.” The topics  
44 requested to be studied by the task force and which are being addressed in this case are:

45 1. **A class COS study, including allocation factors.** The Company reviewed  
46 the COS methodology used in this case with the Task Force during several  
47 meetings. I will be presenting the COS later in this testimony. Some of the  
48 allocation factors will be explained in this testimony, and the others will be  
49 discussed by Mr. Bateson in his direct testimony.

50 2. **The value of peaking gas available from interruptible customers during**  
51 **periods of interruption.** An estimated value of peaking gas available from  
52 interruptible sales and transportation customers has been made and included  
53 in the COS presented later in this testimony.

- 54                   3.     **Separation of the residential and commercial customers in the GS-1 class**  
55                   **into separate classes.** In response to the discussions in the Task Force  
56                   regarding the GS-1 rate class, the Company has separated the residential and  
57                   commercial customers into separate rate classes. This will be discussed in  
58                   more detail later in this testimony.
- 59                   4.     **Modification of the GS-1 rate design.** The current GS-1 rate schedule  
60                   consists of two blocks with a declining rate structure and with a  
61                   summer/winter differential. The Company is proposing to continue the  
62                   summer/winter differential on both the residential and commercial rate  
63                   schedules. It is being proposed that the residential rate schedule will consist  
64                   of a single, flat rate structure and that the commercial rate schedule will  
65                   consist of three blocks with a declining rate structure. This will also be  
66                   discussed later in this testimony.
- 67                   5.     **The amount of the basic service fee (BSF).** Mr. Bateson will discuss the  
68                   Company's proposed changes to the BSF in his direct testimony.
- 69                   6.     **Transportation rate design, including transportation service for smaller**  
70                   **customers and the amount and applicability of administrative fees,**  
71                   **criteria for qualification and demand charges for transportation service.**  
72                   Mr. Bateson will also discuss in his testimony the Company's proposal to  
73                   reduce the transportation administrative fee, which will make the  
74                   transportation service available to smaller customers and the proposed  
75                   demand charges for transportation customers that request firm service.
- 76                   7.     **The DNG summer/winter rate differential.** The summer/winter  
77                   differential is proposed to be increased in accordance with the results from  
78                   the COS.

79   **Q. Did you participate in the Task Force?**

80   A. Yes. I was one of the Company representatives to the Task Force and participated  
81   throughout the period that the Task Force met.

82 **Q. Were all the specified issues addressed in the Task Force and have the views of the**  
83 **Task Force been implemented in the proposed COS?**

84 A. The Task Force addressed all of the topics specified in the Commission Order but did not  
85 reach total agreement on all topics. Although the Task Force did not come to complete  
86 agreement on the various issues it was asked to review, there were no disagreements by the  
87 Task Force members on the basic methodology that the Company presented.

88 **III. COST-OF-SERVICE METHODOLOGY**

89 **Q. Is the COS study you are presenting in this case consistent with what was presented**  
90 **to and reviewed by the Task Force?**

91 A. Yes. The structure of the COS, the allocation factors and the computer model used in this  
92 case are the same, with some minor modifications, as to the model and factors presented to  
93 the Task Force.

94 **Q. Will you please review the methodology used in the COS study?**

95 A. The COS study allocates the rate base, expense and revenue data from FERC Accounts to the  
96 various rate schedules. The revenues and some expenses and rate-base accounts can be  
97 directly assigned to the rate schedules. Other rate base and expenses are allocated based on  
98 the various allocation factors that are explained in more detail below. The detail to the COS  
99 study is presented in response to Master Data Request A, question 6.

100 **IV. COST-OF-SERVICE ALLOCATION FACTORS**

101 **Q. Please describe the allocation factors used in the COS study?**

102 A. QGC Exhibit 7.2 lists the allocation factors used in the study and provides a description and  
103 brief discussion of why each factor is used. QGC Exhibit 7.3 shows the values for each  
104 allocation factor. The COS model is included in the revenue-requirement model, which has  
105 been provided to all parties in this case, in conjunction with filing the application. The  
106 Company is available to discuss and review the model with any party in this case at the  
107 Company's offices.

108

109 **V. COST-OF-SERVICE RESULTS**

110 **Q. Have you prepared a summary of the COS results?**

111 A. Yes. QGC Exhibit 7.4 shows the summary of the results of the COS study. Column B, lines  
112 1 through 46, on page 1 of the exhibit comes directly from Column F of QGC Exhibit 6.2,  
113 attached to Mr. Mendenhall's direct testimony. The deficiency shown on Column B, line 50  
114 of QGC Exhibit 7.4 comes from Column G, line 3 of QGC Exhibit 6.2. The amounts in  
115 Column B of the exhibit are then allocated by account to the various rate classes using the  
116 allocation factors explained previously. Line 52 of the exhibit shows the total COS in  
117 Column B and the COS for each rate schedule in Columns C through G.

118 **Q. On line 51 of QGC Exhibit 7.4 you have made a "Gradualism Adjustment." Would**  
119 **you please explain what this is and why it is included?**

120 A. For many years the residential and small commercial customers have been served in  
121 accordance with the GS-1 rate schedule. This rate schedule consisted of two blocks, 1) the  
122 first 45 Dth used in a month, and 2) all the usage in the month over 45 Dth. Almost all of the  
123 residential customers and the smaller commercial customers were billed at only the first  
124 block of this rate schedule. The larger commercial customers exceeded 45 Dth per month  
125 and were billed a lower rate for that usage. A full COS has not been used to establish the  
126 GS-1 rates for many years. When the two classes were separated in this case and a COS was  
127 performed for each class separately, it was determined that the commercial class, given the  
128 cost allocations, could receive an overall decrease in this case while the increase to the  
129 residential class would be about double the average overall increase. What this indicates is  
130 that the second block of the GS-1 rate was higher than could be justified by the COS and  
131 those customers getting charged at the first block rate have been the beneficiaries of an intra-  
132 class subsidy from the customers getting charged at the second block rate. The Company is  
133 proposing in this case that the rates for the GSC class not be calculated at the full COS, but  
134 that the difference between the rates currently charged the commercial customers and the  
135 COS be eliminated gradually over more than one rate case. In order to move about one  
136 quarter of the way to full COS, the Company has included the gradualism adjustment that  
137 transfers \$7,500,000 or 3.5% of costs from the GSR class to the GSC class. This concept of  
138 gradualism in moving from current rates to full COS rates, is one that the Commission has

139 agreed with in the past, as recently as in Docket No. 02-057-02, the Company's latest general  
140 rate case. Line 4 on page 2 of QGC Exhibit 7.4 shows the approximate percentage increase  
141 being calculated for each rate schedule in the COS. As can be seen, with the gradualism  
142 adjustment of \$7,500,000, the GSC class receives a percentage increase about 40% less than  
143 that received by the GSR class.

144 **Q. Has the Company proposed any gradualism adjustments for the interruptible sales**  
145 **or transportation rate classes?**

146 A. Not at this time.

147 **A. *Rate Classes Not Included In Cost-of-Service Study***

148 **Q. Have costs been allocated to all rate schedules in the Tariff individually?**

149 A. No. The GSS, MT, NGV, FT-1 and FT-2 Special Contract (FT-2C) rate schedules have not  
150 been included in the COS study and the revenues from these classes are treated as credits to  
151 the COS and allocated to the other rate classes. (For a definition of these rate class names,  
152 please refer to Table 1 shown on pages 7 and 8 of this testimony.) This, in effect, reduces the  
153 revenue requirement for those other rate classes and is consistent with how they have been  
154 treated in past Questar Gas general rate cases.

155 **Q. How will the rates for these rate classes be calculated in this case?**

156 A. The Company proposes that the rates for the GSS rate schedule be calculated by maintaining  
157 the double margin rates relative to the GSR rate schedule, and that the NGV, FT-1 and MT  
158 rate schedules be calculated by applying the average overall percentage change to the COS to  
159 existing rates. The FT-2C is a special contract that came to the Company with the purchase  
160 of the Utah Gas system in 2001. These contract rates will remain the same until the terms of  
161 the FT-2C special contract expire.

162



163 **VI. PROPOSED CHANGES TO CURRENT RATE SCHEDULES**

164 **A. Rate Class Naming Convention**

165 **Q. Are you proposing to change the names of some rate classes?**

166 A. Yes. The naming convention the Company has been using for many years does not always  
167 describe the current customers in the rate class and is out of date. For example, the Tariff  
168 includes an I-4 rate class, but the I-1, I-2 and I-3 rate classes, which used to be in the Tariff,  
169 have been removed. The names of the rate schedules do not affect the qualifications or other  
170 tariff provisions of the various rate schedules. However, in renaming the rate schedules, the  
171 Company is proposing to make the names more consistent and representative of the service  
172 being provided.

173 **Q. Please summarize what the Company is proposing regarding naming of the rate**  
174 **schedules?**

175 A. The following table shows the current rate schedules included in the Questar Gas Company  
176 Tariff, PSCU No. 400 (Tariff) and the Company’s proposal to rename or eliminate the  
177 schedules in this case.

<b>Table 1</b>	
<b>Rate Schedules in Questar Gas Company Utah Tariff</b>	
<b>Current</b>	<b>Proposed</b>
<b>GS-1</b> (General Service #1)	<b>GSR</b> (General Service Residential)
	<b>GSC</b> (General Service Commercial)
<b>GSS</b> (General Service South)	<b>GSE</b> (General Service Expansion)
<b>F-1</b> (Firm Service #1)	<b>FS</b> (Firm Service)
<b>F-3</b> (Firm Service #3)	Eliminated
<b>F-4</b> (Firm Service #4)	Eliminated
<b>NGV</b> (Natural Gas Vehicles)	<b>NGV</b> (Natural Gas Vehicles)
<b>I-4</b> (Interruptible Sales #4)	<b>IS</b> (Interruptible Service)
<b>IS-4</b> (Interruptible South Sales #4)	<b>ISE</b> (Interruptible Service Expansion)
<b>MT</b> (Municipal Transportation)	<b>MT</b> (Municipal Transportation)

<b>Table 1</b>	
<b>Rate Schedules in Questar Gas Company Utah Tariff</b>	
<b>Current</b>	<b>Proposed</b>
<b>FT-1</b> (Firm Transportation #1)	<b>FT</b> (Firm Transportation)
<b>FT-2</b> (Firm Transportation #2)	<b>TS</b> (Transportation Service)
<b>IT</b> (Interruptible Transportation)	
<b>IT-S</b> (Interruptible Transportation South)	<b>TSE</b> (Transportation Service Expansion)
<b>E-1</b> (Emergency #1)	<b>ES</b> (Emergency Service)
<b>T-1</b> (Temporary #1)	Eliminated

178

179

***B. Split of GS-1 Class Into Residential and Commercial***

180 **Q. Did the Task Force make any recommendations regarding separating the GS-1 rate**  
181 **schedule into residential and commercial sectors?**

182 A. The Task Force spent a significant amount of time reviewing this issue, however, there was  
183 no consensus.

184 **Q. Has the Company proposed they be separated in this case?**

185 A. Yes, as can be seen in QGC Exhibits 7.3 and 7.4, the Company has separated the residential  
186 and commercial customers into the GSR and GSC rate schedules and calculated a COS for  
187 each class of customers separately.

188 **Q. What was the basis for separating the GS-1 class into residential and commercial**  
189 **customers?**

190 A. The state of Utah has established separate sales tax rates for residential and commercial  
191 customers as is shown in Section 10.01 of the Tariff. The sales tax rates vary by county, and,  
192 in some circumstances, by city within a county. For the Company to calculate the proper  
193 sales taxes from the customers it serves, every GS customer has been classified in the billing  
194 system as either a residential or commercial customer. The GS-1 class was separated into the  
195 GSR and GSC classes based on this sales-tax classification.

196

197 **Q. Are the customers in the GSC class smaller or larger than the GSR customers?**

198 A. There are both larger and smaller GSC customers. The commercial class of customers is a  
199 much more diverse group than the residential group. The variation in residential customers is  
200 based mostly on the size of the residence. Almost all of the residential customers have space  
201 and water heating appliances and a significant portion have additional appliances for clothes  
202 drying and cooking. On average, the residential customers class is a homogenous group.  
203 The commercial customers, however, vary from small retail establishments, which may have  
204 only space heating, similar to a residential customer, to large hotels, malls, schools or  
205 restaurants, having significant natural gas requirements for space heating, heating pools or  
206 cooking. Because the small commercial customers are very similar to the residential  
207 customers in their usage patterns and uses of natural gas, the Company is proposing that the  
208 first block of the GSC rate schedule be the same rate as the GSR rate schedule. This will be  
209 discussed further in the rate design portion of this testimony.

210 **C. Changes to the GSC and F-1 Schedules**

211 **Q. Has the Company proposed any changes to the classification or provisions for the**  
212 **GSC and F-1 rate schedules?**

213 A. Yes. In the past, the GS-1 rate schedule was designed for residential and small commercial  
214 customers with generally low load factors. One of the limitations of being on the GS-1  
215 schedule has been a maximum daily use of 1,250 Dth. This limitation has kept very large  
216 customers off this rate schedule. For customers to receive service on the F-1 rate schedule,  
217 they have been required to have a 40% load factor and a maximum daily usage of 1,250 Dth  
218 or less. The F-4 rate schedule is the only other firm-sales rate that has been available to  
219 Questar Gas customers, and it was designed for large industrial customers. To qualify for the  
220 F-4 rate, a customer has been required to have a load factor of at least 80% and pay a  
221 minimum annual DNG charge of \$38,700.

222 The effect of these limitations is that a customer who has a maximum daily use greater than  
223 1,250 Dth and a load factor less than 80%, has not qualified for firm sales service. To  
224 receive firm service from Questar Gas, such a customer needed to qualify for firm  
225 transportation service on either the FT-1 or FT-2 rate schedules. The FT-2 rate schedule

226 requires a load factor of at least 50%, includes an annual administrative fee of \$6,800 and has  
227 a minimum annual DNG charge of \$23,200. The FT-1 schedule has an annual minimum  
228 usage requirement of 100,000 Dth as well as the administrative fee of \$6,800.

229 The Company has received some requests for firm service from customers that fall in the  
230 gaps between these firm-service schedules. In order to remedy this situation, the Company  
231 proposes to raise the maximum daily usage limit of 1,250 Dth on the GSC and F-1 rate  
232 schedules to 2,500 Dth per day, while maintaining the 40% load factor requirement for the  
233 F-1 schedule. In the Company's experience, a customer with demand requirements  
234 approaching 2,500 Dth per day will naturally migrate to transportation service. The  
235 Company currently has no firm sales customers that require a maximum daily usage  
236 approaching 2,500 Dth.

237 ***D. Elimination of the F-3 Schedule***

238 **Q. What is the Company proposing with regard to the F-3 rate schedule?**

239 A. The F-3 schedule is currently used for interruptible sales and transportation customers to buy  
240 firm standby service on Questar Gas' distribution system. With the proposed changes to the  
241 transportation schedules discussed later in this testimony, the need for transportation  
242 customers to use the F-3 schedule will be eliminated. In addition to the F-3 schedule, Tariff  
243 Section 8.01 currently allows sales customers to "ribbon" usage between two different rate  
244 schedules for usage on the same meter. For example some I-4 customers contract for standby  
245 firm service on the F-3 schedule, while others have chosen to have a contracted level of  
246 service each month billed at the F-1 rate, while all additional usage through that meter during  
247 the month is billed at the I-4 rate. By eliminating the F-3 schedule, the IS customers that  
248 currently use the F-3 for firm standby will need to contract for a level of "ribboned" firm  
249 service on the new FS or GSC rate schedules.

250 ***E. Elimination of the F-4 Schedule***

251 **Q. What is the Company proposing with regard to the F-4 rate schedule?**

252 A. The F-4 rate schedule is a little-used industrial-firm-sales rate schedule. Since the  
253 introduction of transportation service, few customers have requested service on the F-4 rate.

254 Currently the Company has one customer on this rate schedule. The current F-4 customer  
255 uses the allowance to ribbon usage between rates and has the first 1,000 Dth usage per day  
256 billed at the F-4 rate and the remainder of the usage in any given day on the Interruptible  
257 Transportation (IT) rate schedule. The Company is proposing to charge transportation  
258 customers directly for their firm demands on a new Transportation Service (TS) rate  
259 schedule. As a result, transportation customers will not be allowed to ribbon usage between  
260 a firm sales rate and the TS rate. This will eliminate the need for the F-4 rate schedule.  
261 Therefore, the Company is proposing to eliminate the F-4 rate from the Tariff. The  
262 allowance for sales customers to ribbon their usage is being left in Section 8.01 of the Tariff.  
263 If the existing F-4 customer desired, it could ribbon its usage on the proposed IS and the FS  
264 or GSC rate schedules instead of remaining a transportation customer.

265 *F. Changes to Interruptible Sales Schedules*

266 **Q. Did the Task Force review the Company's transportation rate schedules with regard**  
267 **to designing a small-transportation rate schedule?**

268 A. Yes. However, all Task Force parties did not agree on the best way to design a schedule.

269 **Q. Has the Company proposed a small-transportation rate in this case?**

270 A. Not explicitly. However the Company is proposing changes to the transportation  
271 administrative fee (Admin Fee) that will allow smaller customers to move to transportation  
272 service if they so choose. Mr. Bateson will discuss the Admin Fee in more detail, but in  
273 summary, the Company is proposing to reduce the primary fee charged to the first  
274 transportation delivery point on the Questar Gas distribution system from \$6,800 per year to  
275 \$4,500 per year. The secondary Admin Fee, charged to all other transportation delivery  
276 points by a single organization, is proposed to be reduced to \$2,250, from the current \$2,550.

277 The customers who would most likely make use of such a transportation schedule are the  
278 current interruptible sales customers on the I-4 and IS-4 schedules and some of the larger  
279 firm sales customers on the F-1 schedule. The Company contacted some of these customers  
280 to determine the level of interest in a small transportation rate and found little interest. To  
281 the contrary, some of these customers indicated that they are much more comfortable with

282 the current sales options in which they do not have to worry about arranging for their own  
283 gas supplies and making nominations to the Company for their daily usage.

284 **Q. Has the Company proposed any changes to the current I-4 and IS-4 rate schedules?**

285 A. Yes. The Company is proposing to change the block breaks for these schedules. The current  
286 block structure is as follows: Block 1: the first 875 Dth; Block 2: the next 121,625 Dth; and  
287 Block 3: all over 122,500 Dth. This block structure has been in place for many years and  
288 was established when the size and nature of the interruptible sales class included many of the  
289 customers that are now transporting on the Questar Gas system. Given the current I-4  
290 customers, these blocks do not make much sense. Almost all customers go through the first  
291 block every month, and no current I-4 customer goes all the way through the second block.  
292 To make the blocks more meaningful, and to have the rates follow the cost curves more  
293 closely (this will be discussed in more detail later in this testimony), the proposed blocks are  
294 as follows: Block 1: the first 2,000 Dth; Block 2: the next 18,000 Dth; and Block 3: all over  
295 20,000 Dth.

296 **G. *Changes to the Transportation Rate Schedules***

297 **Q. Has the Company proposed any changes to the transportation rate schedules?**

298 A. Yes. Currently transportation customers must select between interruptible and firm  
299 transportation service on the IT and FT-2 rate schedules. In this case, the Company is  
300 proposing to restructure the transportation service rate schedules. Instead of having to select  
301 whether to transport all of their gas supplies on firm or interruptible schedules, transportation  
302 customers will be able to transport their gas supplies on the TS rate schedule, on an  
303 interruptible basis, and contract specifically for a level of firm service. By separating the  
304 firm demand charges from the interruptible transportation charges, customers can be billed  
305 more accurately for the services they actually need and they will have more flexibility in  
306 contracting for service. In addition, the Company will be better able to manage the design  
307 and operation of the distribution system because customers will contract specifically for the  
308 level of firm daily service they really need.

309 **Q. How have the demand charges on the new TS and TSE schedule been calculated?**

310 A. Mr. Bateson will discuss the calculations of these charges in his testimony.

311

312 **Q. Will transportation customers continue to pay an Admin Fee?**

313 A. Yes. However, as I have just explained, the Company is proposing to reduce the charge to  
314 \$4,500 per year, down from the \$6,800 that was stipulated to in Docket No. 02-057-02.  
315 Customers with more than one end-use site will be billed \$2,250, down from the current  
316 \$2,550, for each additional site.

317 **Q. Has the Company updated the support for the Admin Fee?**

318 A. Yes. Mr. Bateson is providing the support for this fee in his direct testimony.

319 **Q. Will the restructuring of the transportation rate schedules cause some customers to**  
320 **want to change the rate they are on?**

321 A. It is likely the changes proposed by the Company in this case will cause some customers to  
322 want to change rate schedules. During the months this case is being considered by the  
323 Commission, it is important for customers to consider which rate schedules they want to  
324 utilize and the level of firm demand for which they want to contract. This will allow the  
325 Company to design the rates for the number of customers that will be on those rate schedules  
326 during the rate-effective period. The Company will coordinate with its large commercial and  
327 industrial customers to make them aware of these proposed changes and help each determine  
328 its appropriate rate schedule prior to the end of this case so that when the Commission's final  
329 decision regarding the revenue-requirement portion of this case is complete, the Company  
330 can design rates to reflect the expected usage in each rate schedule on a going-forward basis.

331 **Q. Are customers free to switch between sales and transportation and between**  
332 **interruptible and firm sales service at any time?**

333 A. No. Large commercial and industrial customers generally sign up for service on Questar  
334 Gas' system on an annual basis, from July to June each year. Knowing what rate schedules  
335 customers will be served on during the heating season is critical as the Company plans and  
336 procures sufficient gas supplies to serve the customers. For example, if interruptible sales or  
337 transportation customers are allowed to move to firm service during the middle of the heating

338 season, the gas supplies that have already been contracted for during the heating season may  
339 not be sufficient to serve the firm demand during a peak-day, or even during periods of  
340 normal weather during the heating season. If this were the case, the Company would have to  
341 increase its winter delivery capacity by purchasing high-priced peaking gas. This would  
342 increase gas costs to all customers. The Company proposes that customers who want to  
343 change rate schedules must notify the Company by at least March 1 of each year and the  
344 change would be effective on July 1 of that year for a one-year period. The Tariff language  
345 needed to implement this proposal is included in QGC Exhibit 9.5 attached to Mr. Bakker's  
346 direct testimony.

347 **Q. Are there any additional requirements for customers who want to transfer from**  
348 **interruptible sales or transportation service to firm sales service?**

349 A. Yes. The gas-cost rate for customers on firm-sales service includes the amortization of  
350 balances in the gas-balancing account (Account 191). Customers' shifting rate schedules  
351 could potentially transfer to firm-sales service while building up an under-collection in the  
352 gas-balancing account and then transfer back to interruptible sales or transportation and avoid  
353 paying the amortization of the balance. To offset this scenario, the Company has been  
354 requiring customers who transfer to firm sales service to remain there for at least two years.  
355 This has been done through contracts. To be consistent with this practice, customers moving  
356 from transportation or interruptible sales to firm sales service will now be required by Tariff  
357 to stay on the firm rate schedule for at least two years. Thereafter, they can switch back to  
358 transportation service by requesting a change by March 1 of any given year, with the change  
359 effective during July of that same year.

360 **VII. RATE DESIGN**

361 **Q. What were the guiding principles the Company used in preparing the proposed rate**  
362 **design?**

363 A. During the Task Force meetings, the Company made a presentation, outlining the basic  
364 concepts of COS and rate design and the various tools available when designing rates.  
365 Included was a list of ten criteria of a sound rate structure taken from the book "Principles of  
366 Public Utility Rates" by James C. Bonbright, Albert L. Danielsen and David R. Kamerschen



367 (Second Edition, March 1988). The ten criteria, or attributes, are jointly referred to as the  
368 “Bonbright Principles” and are a list of sometimes conflicting criteria that must be balanced  
369 in order to arrive at the most fair and acceptable cost allocation and rate design. The Task  
370 Force discussed these principles in detail. The Company has attempted to take into  
371 consideration the Bonbright Principles when designing the COS and rate design in this case.  
372 Shown in Table 2 is the list quoted from pages 383-384 of the book:

373 **Table 2**  
374 **Bonbright Principles**

- 375
- 376 1. Effectiveness in yielding total revenue requirements under the fair-return standard  
377 without any socially undesirable expansion of the rate base or socially undesirable  
378 level of product quality and safety.
  - 379 2. Revenue stability and predictability, with a minimum of unexpected changes  
380 seriously adverse to utility companies.
  - 381
  - 382 3. Stability and predictability of the rates themselves, with a minimum of unexpected  
383 changes seriously adverse to rate-payers and with a sense of historical continuity.  
384 (Compare “The best tax is an old tax.”)  
385
  - 386 4. Static efficiency of the rate classes and rate blocks in discouraging wasteful use of  
387 service while promoting all justified types and amounts of use:  
388 (a) in the control of the total amounts of service supplied by the company;  
389 (b) in the control of the relative uses of alternative types of service by  
390 ratepayers (on-peak versus off-peak service or higher quality versus lower  
391 quality service).  
392
  - 393 5. Reflection of all of the present and future private and social costs and benefits  
394 occasioned by a service’s provision (i.e., all internalities and externalities).  
395
  - 396 6. Fairness of the specific rates in the apportionment of total costs of service among  
397 the different ratepayers so as to avoid arbitrariness and capriciousness and to  
398 attain equity in three dimensions: (1) *horizontal* (i.e., equals treated equally); (2)  
399 *vertical* (i.e., unequals treated unequally); and (3) *anonymous* (i.e., no ratepayer’s  
400 demands can be diverted away uneconomically from an incumbent by a potential  
401 entrant).  
402
  - 403 7. Avoidance of undue discrimination in rate relationships so as to be, if possible,  
404 compensatory (i.e., subsidy free with no inter-customer burdens).  
405
  - 406 8. Dynamic efficiency in promoting innovation and responding economically to  
407

408 changing demand and supply patterns.

409  
410 9. The related, practical attributes of simplicity, certainty, convenience of payment,  
411 economy in collection, understandability, public acceptability, and feasibility of  
412 application.

413  
414 10. Freedom from controversies as to proper interpretation.

415 Professor Bonbright specifically mentions in the book that the “sequence in which the ten  
416 attributes are presented is not meant to suggest any order of importance.” As I mentioned, in  
417 some instances, the principles are conflicting. For example, the third principle relates to  
418 designing rates that are simple, that customers can understand and accept, and that the  
419 Company can administer efficiently. This principle is often in conflict with the sixth  
420 principle that relates to a COS and rate design that is fair to the various types and sizes of  
421 customers. In order to follow the sixth principle exactly, the Company would need a  
422 multitude of rate schedules, fees and rates, which would be very complicated and difficult to  
423 administer and explain to customers. In such instances, the Company has weighed the  
424 various principles and struck a balance among them.

425 **Q. Have you calculated the proposed rates that correspond to the revenue requirement**  
426 **calculated by Mr. Mendenhall and the COS you presented earlier in this testimony?**

427 A. Yes, a summary of the proposed rates, changes to block structures, and rates are shown in  
428 QGC Exhibit 7.5. These rates are shown in Tariff format in Mr. Bakker’s exhibit, QGC  
429 Exhibit 9.5. The rate design model used to calculate these rates has been provided to all  
430 parties in this case as part of the filing and in response to Master Data Request A, question 7.  
431 The Company proposes the Commission schedule a technical conference to discuss, review,  
432 and explain the model and cost curves.

433 **Q. Will you please explain the methodology used to design the proposed rates?**

434 A. The first step in the rate design process is to categorize the components of the COS (O&M  
435 expenses, depreciation, taxes, and return on rate base) into functional categories. The four  
436 categories are as follows:

437 1. **Customer Related:** Those costs that are driven by the number of

438 customers served.

439 2. **Network Related:** Those costs that are driven by the distribution network  
440 required to serve customers.

441 3. **Dth Throughput Related:** Those costs that are driven by the amount of  
442 natural gas that flows through the distribution system.

443 4. **Demand Related:** Those costs that are driven by the peak-day  
444 requirements to serve firm customers.

445 *A. Development of Cost Curves by Rate Schedule*

446 **Q. What is the next step in the process?**

447 A. The next step in the process is to develop an equation using the categorized costs that can be  
448 applied to the projected customers, usage and meter categories to determine the cost per Dth  
449 in each rate schedule at a continuum of usage levels. These costs per Dth are graphed to  
450 illustrate the cost curve for each rate schedule. Rates are then designed, including fixed  
451 charges, volumetric rates, declining block rate structures and minimum bills, to have the  
452 revenue collected per Dth follow the cost per Dth as closely as possible. This process is  
453 explained in more detail later in this testimony. QGC Exhibit 7.6 shows the cost curves for  
454 the GSR, GSC, IS, FS and TS rate schedules and the revenue per Dth collected from the  
455 proposed rates. As can be seen from the GSR graph, the use of a single block, flat rate makes  
456 the job of designing rates to follow the cost curve impossible. Because the costs associated  
457 with providing service to a customer (main, service line, meter and regulator costs) are fixed  
458 in nature over a fairly broad range (i.e., most residential customers, regardless of their size,  
459 have the same size of service line, meter and regulator), larger customers have more Dth to  
460 spread those fixed costs over and, as a result, have a lower cost per Dth. The use of a flat  
461 rate design does not take this into account, and results in high usage residential customers  
462 generally paying more than their calculated cost per Dth and low usage residential customers  
463 generally paying less than their calculated cost per Dth. However, there are reasons for  
464 implementing a flat rate design that justify its use even though the revenues do not follow the  
465 cost curve exactly. For example, following the fourth and eighth Bonbright Principles, the  
466 use of a flat rate design is much easier for customers to understand, and it encourages energy  
467 conservation and efficiency.

468 **B. *Determination of the Number of Blocks and the Size of Blocks by Rate Schedule***

469 **Q. Is the Company proposing any changes to the block structure of the rate schedules?**

470 A. Yes. As has already been briefly discussed, the GSR, GSC and IS block structures will be  
471 different than the previous GS-1 and I-4 block structures. QGC Exhibit 7.5 provides a  
472 summary of the previous block structure by rate schedule and the proposed block structures.

473 **Q. What is the basis for proposing the new block structures?**

474 A. The goal of establishing block rates is to calculate rates that follow the cost curves as closely  
475 as possible, without creating overly complicated rate structures. There has been an effort to  
476 standardize the block breaks throughout the rate schedules to be more consistent. Customers  
477 move from one schedule to another schedule for many reasons and the Company is proposing  
478 that the block breaks be consistent for such customers regardless of which schedule they are  
479 on.

480 **Q. Have you proposed a different block structure for the GSR rate class?**

481 A. Yes. The block structure used for the GS-1 class for many years has been designed with two  
482 blocks. The first block consisted of the first 45 Dth used in any month. The second block  
483 was all usage in a month that exceeded 45 Dth. Few residential customers ever exceeded the  
484 first block and, therefore, the second block was designed primarily for the commercial  
485 customers in the GS-1 rate class. For the GSR rate schedule, the Company is now proposing  
486 to design a one-block, flat rate for all usage in a month. This method of rate design is much  
487 easier for residential customers to understand and has the added benefit of helping to  
488 promote energy efficiency by sending a consistent price signal for all the gas used on the  
489 GSR rate.

490 **Q. Are there differences in the billing components of large GSR customers compared to  
491 the smaller GSR customers?**

492 A. Yes. As explained by Mr. Bateson, large residential customers that require meters with more  
493 capacity than a regular residential meter will pay a larger BSF amount.

494 **Q. Have you proposed a different block structure for the GSC rate class?**

495 A. Yes. The current GS-1 rate class has two blocks consisting of the first 45 Dth for the first  
496 block and all over 45 Dth for the second block. The Company is now proposing to stop the  
497 second block at 200 Dth per month and include a third block for all usage over 200 Dth per  
498 month. This is being done to make the GSC block structure consistent with the FS rate  
499 schedule. Some customers will be required to move from the GSC to the FS rate schedules,  
500 and vice-versa, because of the 40% load factor requirement on the FS schedule. The  
501 inclusion of the third block in the GSC schedule makes moving from schedule to schedule  
502 more seamless for the customers.

503 **Q. What is the difference between the rates calculated for the GSR and GSC rate**  
504 **classes?**

505 A. As has been pointed out, the GSR class is composed of a relatively homogenous group of  
506 customers with similar appliances, end uses and load factors. The GSC group is a much  
507 more diverse group with different usage patterns. However, it can be seen that most of the  
508 smaller commercial customers, that use natural gas primarily for space and water heating, are  
509 very similar in size, end use, and load factor to residential customers. For that reason, the  
510 Company is proposing to charge the same rate for the first block of the GSC rate schedule as  
511 the flat rate in the GSR rate schedule. This will eliminate some controversy and the desire of  
512 some residential or small commercial customers to try and move from one rate schedule to  
513 another. The Company recognizes that the use of the tax code in the Company's system is an  
514 arbitrary method of categorizing some customers as either residential or commercial. For  
515 example, there are many residential customers that operate a business out of their home. The  
516 Company is unaware of these activities, and unless the customers identify themselves as  
517 commercial customers, they will be included as residential customers. In addition, there are  
518 many small commercial customers (small offices or retail establishments), that have the same  
519 usage patterns as residential customers. For these reasons, the Company proposes to keep the  
520 GSR and the first block of the GSC rates linked.

521 As has been pointed out, the current GS-1 rate design has included an intra-class subsidy  
522 from larger customers to smaller customers. Because the commercial customers that are  
523 being moved to the GSC rate are, on average, somewhat larger than the residential

524 customers, the winter second block rate for the GSC schedule is 40% lower than the winter  
525 first block rate and the winter third block rate is 407% lower than the second block rate.

526 **Q. Have you proposed a different block structure for other rate classes?**

527 A. Yes. To standardize the block structure throughout the Tariff, the Company proposes to have  
528 applicable block breaks in all the rate schedules at 200 Dth, 2,000 Dth, 20,000 Dth, 100,000  
529 Dth and 500,000 Dth per month. Not all the rate schedules will have all the block breaks,  
530 only those that are applicable to the size of customers in the rate schedule.

531 **C. *Design Rates and Fees to Collect the Required Revenue by Rate Schedule***

532 **Q. What is the final step in the rate-design process?**

533 A. The Company has various fees and rates to apply on customers' bills. The main billing  
534 components are as follows:

- 535 1. **Volumetric Rates.** These are rates that are applied to the monthly volume of  
536 gas used by a customer. They are further divided into declining blocks as  
537 explained earlier.
- 538 2. **Basic Service Fees.** These are fees that are determined for a customer based  
539 on the type of meter installed for the customer and the level of pressure of the  
540 gas flowing through the meter.
- 541 3. **Administrative Fees.** These are fees charged to transportation customers  
542 designed to recover the additional costs incurred by the Company solely to  
543 serve these customers.
- 544 4. **Summer/Winter Rate Differential.** This is the differential between rates  
545 charged during the winter months (November through March) and the rates  
546 charged during the summer months (April through October). This rate  
547 differential is useful to compensate high-load-factor customers (those who  
548 use gas more evenly during the year) with lower rates than for low-load-factor  
549 customers (those who use gas mostly during the peak winter season).

550                   5.     **Demand Charges for Transportation Service.** These charges will allow  
551                   transportation customers to contract annually for a fixed firm capacity per  
552                   day, available anytime.

553                   The Company uses these billing components to design rates that match the projected  
554                   revenues in a rate schedule as closely as possible to the cost curves that were calculated in  
555                   QGC Exhibit 7.6. To design an exact fit with the cost curves, the Company would have to  
556                   increase the number of blocks and fees in the schedules. The proposed rate design is a  
557                   compromise between matching the allocated costs for a rate schedule and developing a set of  
558                   rates that is simple to administer and easy for the customer to understand. The Company  
559                   must also be aware of designing rates that do not provide unintended consequences such as  
560                   calculating rates that provide incentives for customers to change rate schedules to lower their  
561                   bills at various usage levels. To avoid such problems, the Company has developed rules that  
562                   dictate the relationship between rate schedules and among the blocks in a rate schedule,  
563                   eliminating this type of consequence. QGC Exhibit 7.7 shows the revenue curves for all the  
564                   rate schedules on one graph. This graph is created to verify that the revenue curves do not  
565                   cross each other at any point of relevant usage in the rate schedules. If the revenue curves  
566                   did cross, there would be an unintended advantage for some customers to change rate  
567                   schedules if their usage was in that range. As can be seen, the Company has successfully  
568                   designed rates that do not cross.

569     **Q.     Is this the same rate-design methodology that was presented to and reviewed by the**  
570     **Task Force?**

571     A.     Yes it is.

572   **D.     Changes to Basic Service Fees**

573     **Q.     Is the Company proposing changes to the BSF?**

574     A.     Yes. Mr. Bateson will discuss the details of the calculations of the proposed BSF in his  
575                   direct testimony. QGC Exhibit 7.5 provides for each rate schedule a summary of the current  
576                   and proposed BSF.

577   **VIII. PROPOSED RATES**

578

579 **Q. Have the rates calculated from this case been presented in Tariff format?**

580 A. Yes. QGC Exhibit 9.5 attached to Mr. Bakker's testimony shows the proposed Tariff rate  
581 schedules in legislative and proposed format. These Tariff sheets contain the rates that will  
582 recover the test-year costs from the various customer classes. The rates were derived from  
583 the test-year data and information found in the Direct Testimony and exhibits of Mr.  
584 Mendenhall and Mr. Bateson, and the cost-allocation and rate-design methods I have  
585 described above.

586 **Q. Have you calculated the impact of these rates on the typical residential customer?**

587 A. Yes, I have. QGC Exhibit 7.8 shows the impact of this proposed rate increase. The  
588 annualized change in rates calculated in this case is an increase of \$47.06 or 7.16% per year  
589 for a typical Utah residential customer on the GSR rate schedule using 80 Dth per year. The  
590 projected month-by-month changes in bills are shown in Exhibit 7.8.

591 **Q. Does this conclude your testimony?**

592 A. Yes.



State of Utah )

) ss.

County of Salt Lake )

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

---

Gary L. Robinson

SUBSCRIBED AND SWORN TO this \_\_\_\_ day of December 2007.

---

Notary Public