BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF	
QUESTAR GAS COMPANY TO INCREASE) DOCKET No. 07-057-13
DISTRIBUTION NON-GAS RATES AND)
CHARGES AND MAKE TARIFF	DPU EXHIBIT 7.0SR
MODIFICATIONS	<u>,</u>

SURREBUTTAL TESTIMONY OF

GLEN GREGORY

ON BEHALF OF THE UTAH DIVISION OF PUBLIC UTILITIES

October 7, 2008

COST OF SERVICE AND RATE DESIGN

For the Division of Public Utilities
Department of Commerce
State of Utah

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Exhibit DPU-7.4SR	DPU Revised Cost of Service Summary
Exhibit DPU-7.5SR	QGC Cost of Service Summary

Witness Identification and Purpose of Testimony

1	Q:	Please state your name and business address.
2	A:	My name is Glen E. Gregory and my business address is 120 North Robinson
3		Avenue, Suite 1400 West, Oklahoma City, Oklahoma 73102.
4		
5	Q.	Are you the same Glen E. Gregory that submitted Direct Testimony for the
6		Division in this Docket (07-057-13)?
7	A.	Yes.
8		
9	Q.	What is the purpose of your testimony?
10	A.	The purpose of this testimony is to revise my direct testimony to make it
11		consistent with the Docket No. 07-057-13 Commission Order on the revenue
12		requirement and to develop the rates that match the rate design refinements of
13		DPU witness Marlin Barrow's direct and rebuttal testimony. The testimony will
14		also address certain comments and concerns found in the testimonies of the
15		Committee of Consumer Services (CCS) and the rebuttal testimony of Questar
16		Gas Company (QGC or Company).
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19			Rate Design Issues
20			
21	Q.	Pleas	se state the modifications to your original rate design of the GSR and
22		GSC	classes that are needed to conform to the direct and rebuttal
23		testir	nony of DPU Witness Marlin Barrow.
24	A.	The b	pasic modifications to recommendations in my direct are set forth below:
25		1)	Make the first 45 Dth charges for both GSR and GSC rates the same.
26		2)	Keep the GSR rate flat while adjusting the GSC declining block rates to
27			recognize the impact of the GSR and GSC rates having equal charges for
28			the first 45 Dth.
29		3)	Eliminate the GSS rate schedule and merge it with GSR and GSC.
30		4)	Eliminate the IS-4 rate schedule and merge it with the new IS rate
31			schedule.
32		5)	Eliminate the IT-S rate schedule and merge it with the new TS rate
33			schedule.
34		6)	Increase the NGV rates to bring the class to cover 50% of its cost of
35			service shortfall.
36			
37	Q.	Pleas	se explain how changes 1 & 2 will address concerns raised by CCS
38		Witne	ess Dr. David Dismukes?
39	A.	Dr. I	Dismukes expressed concern that many smaller usage commercial
40		custo	mers have usage similar to residential customers stating in testimony that "it

may make more sense to develop these new customer classes from a usage perspective rather than a tax rate perspective." Dr. Dismukes also states in his testimony that "Numerous commercial customers, representing as much as a third of the proposed GSC class, have usage patterns (or at least levels) that are very similar to residential customers." I believe that if the original block rate design structures proposed by QGC are used it will alleviate a great deal of this concern. Since the first 45 Dth charges are the same for both classes, these small usage customers will be indifferent as to the rate class to which they are assigned.

- Q. Can you describe your revisions to the GSR and GSC rates in more detail?
- A. The Division's revised proposal for the GSC rate class is to make the GSC rate equal to the GSR rate for the first 45 Dth. As a result of this change, more of the revenue requirement of the GSC class will be recovered in the first 45 Dth of usage. This means that the rates for the higher usage blocks of the GSC rates will be less than those proposed in my direct testimony.

Q. In your direct testimony you stated that it is important to encourage energy efficiency and that this goal can be accomplished by lessening the use of

¹ Direct Testimony of David Dismukes, Ph.D. Docket No. 07-057-13, page 41, lines 878-880.

² Direct Testimony of David Dismukes, Ph.D. Docket No. 07-057-13, page 41, lines 874-878.

60		declining block rates in certain instances. Do your current revisions of the
61		GSC rate change your position?
62	A.	No. The changes I made to the GSC rate were necessary to make the first 45
63		Dth usage charge the same as the GSR. In future rate cases, the focus of rate
64		design should continue to be the development of rates that encourage greater
65		energy efficiency. In those instances when movement away from declining block
66		rates toward flat rates will help accomplish this important goal, these changes
67		should be considered.
68		
69	Q.	What adjustment to rate design is required to end the "Expansion" rate
70		classes and their charges as recommended by Division Witness Mr.
71		Barrow?
71 72	A.	Barrow? Customers on the various "Expansion" rates will need to be moved to their
	A.	
72	Α.	Customers on the various "Expansion" rates will need to be moved to their
72 73	A.	Customers on the various "Expansion" rates will need to be moved to their otherwise appropriate rate class. The upside of this change is that it will reduce
72 73 74	Α.	Customers on the various "Expansion" rates will need to be moved to their otherwise appropriate rate class. The upside of this change is that it will reduce the rates for customers in "Expansion" classes considerably. The downside is
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72 73 74 75 76 77 78		Customers on the various "Expansion" rates will need to be moved to their otherwise appropriate rate class. The upside of this change is that it will reduce the rates for customers in "Expansion" classes considerably. The downside is that the rates of the classes to which the customers are moved will need to be adjusted upward to make up for the lost revenue associated with this change.

portion of the customer base and usage. The exception is the IS-4 Expansion rate class. The IS-4 class will move 316,974 Dth into the I-4 class. Since the reformulated I-4 class has only 1,370,445 Dth, the movement of the IS-4 Expansion customers into the I-4 class will require more than a double increase to the existing I-4 customers in that class to make up for the lost IS-4 revenue from the combination of these classes. However, the moved IS-4 customers will see a substantial decrease in rates.

Α.

Q. How do you recommend that this disparity be addressed?

In my direct testimony I did not recommend moving the IS-4 into the I-4 class. Instead, I recommended a 25% increase to the I-4 rate which would have left the I-4 rate with a very reasonable usage charge of 21.26 cents per Dth. The IS-4 class was left at a zero percent increase. If the I-4 increase were held at 25%, the accommodation of the IS-4 customers into the class would cause the Dth charge to more than double. What I now recommend in the revised rate design is a 0% reduction to the revenue of the joined classes. This will result in bringing the charge back to usage charge of 21.74 cents per Dth or approximately what I originally recommended.

Q. How will the lower I-4 rate proposal affect the other rate classes?

102 A. In my direct testimony the I-4 rate class would have seen a revenue increase of \$86,218. This requires that this amount be made up by other classes if the

104		PSCU revenue requirement is to be reached. I have moved these dollars into
105		the rates of the GSR and GSC classes.
106		
107	Q.	Why is it necessary to make adjustments to the DPU rate design
108		recommendation to include the recommendations of Mr. Barrow related to
109		the Natural Gas Vehicle ("NGV" rate code)?
110	A.	In his testimony, Mr. Barrow recommended that the ("NGV") class rates be
111		increased to cover 50% of the cost of service revenue shortfall in the current
112		case.
113		
114	Q.	What adjustment is required to move the NGV class to cover 50% of the
114 115	Q.	What adjustment is required to move the NGV class to cover 50% of the revenue shortfall in that class?
	Q. A.	
115		revenue shortfall in that class?
115 116		revenue shortfall in that class? The DPU cost of service indicates that the NGV class requires an increase of
115 116 117		revenue shortfall in that class? The DPU cost of service indicates that the NGV class requires an increase of \$330,302 to cover the 50% of the shortfall. The \$330,302 of additional revenue
115 116 117 118		revenue shortfall in that class? The DPU cost of service indicates that the NGV class requires an increase of \$330,302 to cover the 50% of the shortfall. The \$330,302 of additional revenue recovered from the NGV class can be used to reduce the additional charges of
115 116 117 118 119		revenue shortfall in that class? The DPU cost of service indicates that the NGV class requires an increase of \$330,302 to cover the 50% of the shortfall. The \$330,302 of additional revenue recovered from the NGV class can be used to reduce the additional charges of
115 116 117 118 119 120	Α.	revenue shortfall in that class? The DPU cost of service indicates that the NGV class requires an increase of \$330,302 to cover the 50% of the shortfall. The \$330,302 of additional revenue recovered from the NGV class can be used to reduce the additional charges of the GSR and GSC classes.

124	Q:	Have you prepared any analysis representing the financial impact of DPU's
125		residential GSR and commercial GSC recommended rate structures as
126		revised in DPU Exhibit 7.1SR?
127	A:	Yes. I prepared an analysis of the residential and commercial rate structures.
128		The residential financial impact analysis is set forth at DPU Exhibit 7.2SR and the
129		commercial analysis is shown DPU Exhibit 7.3SR.
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131		Comparison of QGC Rate Design with Revised DPU Position
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133	Q.	Do you have comments concerning the class rate design and revenue
134		allocation testimony filed on September 22, 2008 by QGC?
135	A.	Yes. I agree with QGC witness Mr. Robinson that the concept of gradualism is
136		important to the current case. One important reason for gradualism in the current
137		case is that I anticipate that PSCU will give further guidance in its rate design
138		order concerning future cost allocation methods. Gradualism in determining
139		rates in the current case will lessen the possibility that the current increases to
140		customers will not be above what revised cost allocations might suggest.
141		
142	Q.	In what way is the DPU position regarding rate design and revenue
143		allocation in agreement with the proposals recommended by QGC?
144	A.	The DPU's position on gradualism is comparable with the position of the
145		Company. Further, the spread of the \$11,966,498 increase to the classes as

recommended in the revised DPU Proof of Revenue is comparable to that of the Company. Both DPU and the Company increase the TS DNG revenue by approximately 25%. Both DPU and the Company increase the FS DNG revenue approximately 10% and the FT-1 rate schedule by 12.5%. Both DPU and the Company increase the NGV class revenues sufficient to move the DNG charges 50% closer to cost of service.

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- Q. In what ways is the DPU position regarding rate design and revenue allocation <u>not</u> in agreement with the proposals recommended by QGC?
- The Company and DPU have what I would consider a limited disagreement regarding the GSR and GSC class revenue increases. The Company proposes an \$8,368,389 increase to the GSR class while DPU proposes a \$8,025,371 increase to the GSR class. The Company proposes a \$1,180,622 increase to the GSC class while DPU proposes a \$1,840,269 increase to this class.

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- 161 Q. How much of this is attributed the GSS class moving into the GSR and GSC classes?
- 163 A. The amount attributed to the GSS class moving into the GSR and GSC is
 164 approximately \$779,500 and \$470,000 respectively.

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Q. Where can the increases referenced above be found?

167 A. The Company's increases can be found in QGC Exhibit 7.8R. The DPU numbers
168 can be found in DPU Exhibit 7.1SR on page 10. I also note that these
169 referenced documents also show the increases to the other classes proposed by
170 the Company and DPU.

Α.

Q. What are some of the other differences?

The Company proposes a small decrease to the GSS Expansion rate and retains the rate code. However, as noted in this testimony and in the rebuttal testimony of Mr. Barrow, the customers of this rate are moved into the GSR and GSC rate classes. This move significantly reduces DNG charges for current customers of the GSS rate class.

The Company also proposes to accept DPU's original position to increase the I-4 DNG revenue by 25%. However, as noted in this testimony and in the rebuttal testimony of Mr. Barrow, the current DPU proposal is that the I-4 and the IS-4 Expansion class be merged. As I mentioned in the discussion in regard to the elimination and merging of the expansion classes, a 25% increase to these *merged* classes would result in a large increase to the existing I-4 customers. DPU's current proposal is to not increase DNG total revenue of the combined classes. Existing I-4 customers will see an approximate 25% increase while the current IS-4 customers will experience a substantial decrease. The existing IS-4

customers currently as a group pay about \$166,000. Moving them to the I-4 rate will reduce their DNG charges about \$93,000.

Further, the Company's rebuttal testimony recommends that the MT class receive a 25% increase. DPU's recommendation raises the Dth rate to \$0.46272 from the current \$0.29777 rate. This increase, however, was offset by the transportation administration fee decreases. The result is a 0% increase to this class.

Finally, the Company proposes to increase the IT-S Expansion rate and retain

Finally, the Company proposes to increase the IT-S Expansion rate and retain this rate code. By contrast, the DPU, as noted in this testimony and in the rebuttal testimony of Mr. Barrow proposes that the customers of the IT-S rate be moved into the TS rate class. This recommendation will significantly reduce DNG charges for current customers of the IT-S rate class with barely a noticeable impact on other TS customers. Moving the customers of this class to the TS rate code will reduce their DNG charges from \$32, 198 to approximately \$9,700 or a reduction of about \$22,500.

Cost of Service Issues

Q. QGC disagrees with your position concerning TS, IS Value of Gas Purchased. What are your comments?

- 209 A. I have reviewed the sections of the QGC COS & Rate Design Task Force Report 210 as referenced by Mr. Robinson. Therefore for purposes of the DPU revised 211 CCOS I have returned the \$291,535 recommended by QGC as a credit to the 212 classes in the same manner as proposed by QGC. However, it would not be 213 inappropriate for the PSCU to consider a more market-based solution in the next 214 QGC rate case. I believe it would be more appropriate for the specific customer 215 that supplies the gas to be compensated for the use of the gas when it is used. 216 The compensation could include the market price plus \$1.00 per Dth (or some 217 other amount) as compensation.
- 219 Q. Mr. Bateson testified that your proposed method to allocate feeders,
 220 system compression, regulation, and measurement costs yields
 221 substantially the same results as his recommended method. Do you agree
 222 with this testimony?

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Mr. Bateson correctly notes that my recommended Allocation 230 used to 223 Α. 224 allocate feeders, system compression, and regulation and measurement costs 225 results in an allocation to the FT2 and IT (interruptible) classes are very close to 226 the Company's Allocation 230. However, he is not correct in his statement that 227 my method has the same result as the Company's 60/40 method. The purpose 228 of the allocation was not to allocate more of the total costs to these large 229 industrial customers. The purpose of the allocation was to recognize the fact 230 that, while the IT customers' usage is subject to interruptions, these customers

do contribute to the fixed costs of the system by using capacity during most peak days (since they have been interrupted only approximately one day per year over the past twenty years), thus, they should be assigned some cost for that use of capacity. My calculations indicate that the Company's 60/40 method would allocate about 5.33% of the above costs to FT2 and about 5.10% to IT for a total allocation for the combined classes (TS) of 10.43%. My method allocates about 4.57% of the above cost to FT2 and about 6.02% to IT for a total allocation of 10.59% for the combined classes.

	ГІ	11	13
QGC	5.33%	5.10%	10.43%
DPU	4.57%	6.02%	10.59%

The purpose of my allocation was to develop better pricing for both the FT2 and the IT components of the new TS rate structure. The result of my proposal for use in the combined TS rate structure would be to place slightly more of the cost recovery in the Dth charges and slightly less in the Demand Charges. The desired result would be that firm transportation customers would bear less of the burden of meeting recovery of the total costs assigned to the TS class.

249	Q.	Please respond to Mr. Bateson's claim that the Allocation 230 that you
250		propose is a commodity based allocation.

The fact is that all of the capacity allocation methods presented in this rate case, to varying degrees, share a commodity aspect in their development. The Company's allocation is based on 40% throughput, CCS 50% throughput and UAE 25% throughput. My use of the FERC 100% load factor method to reduce the otherwise peak day was used to allocate what I considered a fair share of capacity to the interruptible class. The reduction is appropriate in that it allocates considerably less capacity to that used in the test year by these customers. If my allocation was commodity based, the allocation factor would be 12.75% as these customers do make substantial use of the assets of the system. However, my allocation of 6.02% is much less than 12.75%.

Α.

Q. How much is the current discount to interruptible customers?

263 A. The discount from the firm transportation rate as shown below is about 35% or \$919,606.

IT	Dth	16,966,861	\$0.153	\$2,591,849	
Discount			\$.054	\$919,606 35.48%	

This table was calculated using the FT-2 current average DNG charge per Dth applied to the IT annual Dth. The numbers are taken from QGC's CCOS model. I believe this approximate discount of 5 cents per Dth to the interruptible load is appropriate. The discount results from not requiring a demand charge for interruptible load. I have maintained the rate discount relationship in my proposed design of the TS rate code.

Α.

Q. Please explain DPU Exhibit 7.4SR.

This Exhibit is a summary of the DPU proposed class cost of service study adjusted for the inclusion and assignment of the value of gas purchased of to the IS and TS classes. This Exhibit can be compared to DPU Exhibit 7.1 filed with my direct testimony. It shows the rate base, operating income, rate of return and other information regarding the seven major classes included in the DPU cost of service.

A.

Q. Please explain DPU Exhibit 7.5SR.

This Exhibit is actually QGC Exhibit 7.2R or the QGC summary of its Cost of Service. I have added a row (Line 53) to show the class deficiencies as calculated by QGC before the addition of a gradualism adjustment. This line is also included in DPU Exhibit 7.4SR.

- 288 Q. What is your purpose in the addition of Line 53 on both DPU Exhibit 7.4SR and 7.5SR?
- 290 A. This information on Line 53 shows that the allocation of costs to the various classes made by DPU are not extreme when compared to the allocation of costs to the various classes made by QGC. Line 53 does show that QGC assigned comparatively more costs to the GSR class than the GSC class. It also shows the total assignments of costs to the two classes to be different by \$1,650,452.

 QGC assigned \$237,786,648, DPU assigned \$236,136,196.

297 Q. What other important items regarding transportation service (TS)

298 customers can be found in the two exhibits?

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- A. These Exhibits show that QGC assigned \$7,907,367 to the TS class and that DPU assigned \$7,378,953 to the TS class. It also shows that with the gradualism adjustment, QGC assigned \$6,198,333 to the TS class and DPU assigned \$6,241,260 to the TS class. These comparable results certainly demonstrate that the DPU's position regarding the TS class cost allocations are not extreme even though both QGC and DPU used different methods to support the conclusions of their cost of service studies and recommended results.
- 307 Q. Do you have comments regarding the Company's 60/40 allocation method of the large diameter pipes and related costs?

A. I recognize that the Company's 60/40 allocation method attempts to balance the interest of the various participants of the QGC COS & Rate Design Task Force. The 60% assignment of peak use by customers recognizes to some degree that peak use drives the costs of the system more than throughput. Additionally the 40% component assigns at least some share of the fixed or capacity costs to the interruptible service. For purposes of assigning capacity costs to the interruptible loads, the 40% commodity assignment should be the minimum the PSCU should consider.

Α.

Q. What conditions would be required to make the 60/40 method an acceptable method for the allocation of system costs?

I understand that the QGC COS & Rate Design Task Force spent considerable time trying to resolve this issue without success. I recommend three major adjustments to QGC's current derivation of the 60/40 method. My first recommendation is that the QGC CCOS include all of the classes, since the deletion of a class can lead to a substantial distortion of the allocation of the cost to serve the various classes. My second recommendation is that the peak day allocation should include all of the peak day volumes (other than that of the interruptible loads). As an example, the peak day volumes used for purposes of the 2007 IRP were 1,341,382 of which 194,889 were attributed to transportation. However, in developing the CCOS only 42,654 of that amount was used for cost assignment to the transportation classes. This means that almost 80% of the

transportation peak is ignored, while gas supply customers were assigned 100% of the 1,146,493 attributed to their use. My third recommendation addresses the derivation of the peak day. As noted in QGC exhibit 8.4, the peak day assignment is a calculated peak for the sales load but is based on contract demand for transportation load. Since the transportation contract demand is calculated on a recent three year history and sales demand is estimated from the coldest temperature recorded in the last 20 years, there is an unfair comparison of the two demand components. My review of QGC daily class usage winter reports (QGC Monthly Sendout Reports) reveal that as mean temperatures fall, transportation throughput increases. These statistics further confirm that the contributions to peak should be calculated using the same weather variables for all classes of customers.

Q. Why are the above recommendations required to develop a proper Class Cost of Service Study?

A.

As I discussed in my direct testimony, the advantage of the recommendation to include all of the classes in the CCOS study is because not doing so limits the Commission's ability to determine the actual contribution each class makes to the recovery of the costs of the utility.

In regard to my second recommendation that the peak day allocation should include all of the peak day volumes because without doing so it would not

be possible to achieve the goal of development of a CCOS that includes all classes if any of the peak day load is not included as peak day is an integral part of the cost allocation drivers of any CCOS.

In regard to my third recommendation, if the peak day calculations used in the development of the CCOS are based on expected temperatures that differ in development this could lead to severe distortions in the assignment of capacity plant factors such as feeders and large diameter plant to the various classes distorting the cost assignments to the various classes. This in turn limits the ability to determine the actual contribution each class makes to the recovery of the costs.

Q. Does this conclude your testimony?

365 A. Yes.