

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 7.0
MODIFICATIONS)	

PRE-FILED DIRECT TESTIMONY OF
GLEN GREGORY
ON BEHALF OF THE
UTAH DIVISION OF PUBLIC UTILITIES

August 18, 2008

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Exhibits

Exhibit DPU- 7.1	DPU Class Cost of Service Summary
Exhibit DPU- 7.2	Proof of Rate Design and Revenue, pages 1 to 10
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Attachment I	Qualifications of Glen Gregory

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 Avenue,
3 Suite 1400 West, Oklahoma City, Oklahoma 73102.

4

5 **Q: What is your occupation?**

6 A: I am an independent consultant specializing in public utility issues, such as cost of
7 capital, cost of service, and rate design.

8

9 **Q: On whose behalf are you appearing in these proceedings?**

10 A: I am appearing on behalf of the Utah Division of Public Utilities ("DPU" or "Division").

11

12 **Q: Please describe your educational and professional qualifications.**

13 A: My educational qualifications consist of a Bachelor of Arts degree from the University of
14 Oklahoma and a Masters of Arts in Economics from the University of Oklahoma. I also
15 hold the professional designation Certified Rate of Return Analyst ("CRRA") as conferred
16 by the Society of Utility and Regulatory Financial Analyst of which I have been a member
17 since 1996. This designation is awarded based upon experience and successful completion
18 of a written examination.

19 As regards to my professional experience, I was employed by the Oklahoma Corporation
20 Commission for over 20 years in a supervisory position. My employment within the
21 Commission's Public Utilities Division involved me in a variety of tasks dealing with
22 economic and financial analysis and related research. My primary responsibilities included
23 preparation of reports or testimony regarding cost allocation, rate design, cost of equity
24 estimates, competitive bidding processes, and a variety of other energy-related and
25 regulatory issues. I was also very active in the supervision and training of others in the
26 above mentioned areas. My principal areas of concentration were with electric utility and
27 gas utility regulation. Since leaving the Commission in July of 2003, I have worked on
28 various rate and regulatory matters on behalf of utility customers, municipals, and the
29 Attorney General of Oklahoma. A partial list of testimony given before the Oklahoma
30 Corporation Commission is contained in my resume, which is attached to the end of my
31 testimony as Appendix A.

32

33 **Q: Have you testified previously before the Public Service Commission of Utah**
34 **("PSCU") in proceedings concerned with cost-of-service and rate design issues?**

35 A: No. This is my first appearance before the Public Service Commission of Utah.

36

Purpose of Testimony

37 **Q: What is the purpose of your testimony in this proceeding?**

38 A: The purpose of this testimony is to address class cost of service ("CCOS") revenue
39 allocation and rate design issues on behalf of the Utah Division of Public Utilities. In this
40 testimony, I discuss Questar Gas Company's ("QGC" or "Company") class cost of service
41 allocations and recommend changes to the cost allocation methods used by the Company. I
42 also review QGC's proposals related to the allocation of QGC's requested increases to the
43 customer classes and make recommendations. Finally, I review and recommend changes to
44 QGC's proposed rate design.

45

46 **Q: Why are rate design and cost of service issues important to the Division of Public**
47 **Utilities?**

48 A: Rate design issues are especially important to DPU in this case given the complexity of
49 QGC's proposed rate design changes for the various tariffs. QGC's proposed rate design
50 changes, even with the relatively small revenue increase of approximately \$12 million,
51 would result in significant changes in cost recovery from the various customers.

52

53 **CLASS COST OF SERVICE**

54 **Inclusion of All Major Classes into the Class Cost of Service**

55

56 **Q: Should all of the major rate classes be included in the Class Cost of Service**
57 **("CCOS").**

58 A: Yes. It is a broadly accepted ratemaking principle that rates should be based on costs.
59 The CCOS is a basic tool of ratemaking and gives us the ability to determine the costs

60 that the utility incurs to serve the various classes of customers and individual customers
61 within the classes.

62
63 **Q: Does the QGC CCOS include all the major classes of service?**

64
65 A: No. The QGC CCOS excludes the large FT-1 transportation class.

66 **Q; is the exclusion of these classes appropriate?**

67 A: No. It is not appropriate to exclude any major class from CCOS because doing so limits
68 the Commission's ability to determine the actual contribution each class makes to the
69 recovery of the costs of the utility.

70 **Q: Have you identified other problems with the QGC CCOS?**

71 A: Yes, The QGC CCOS also combines the firm transportation class FT-2 with the
72 interruptible class IT. It is inappropriate to combine the latter two classes for cost-of-
73 service purposes as they represent two distinct forms of service.¹

74 **Peak-Day Factor**
75

76 **Q: Please discuss the Peak-Day Factor.**

77 A: The Company developed its Peak-Day factor based upon a supposed coldest day. There
78 are fundamental problems with the Company's approach. The first problem is that it
79 creates a material mismatch in the way peak demand is determined for transportation

¹ I support and discuss the concept of the TS tariff as proposed by QGC later in this testimony.

80 customers as compared with the way peak demand is determined for residential and
81 commercial customers. Contract demand for transportation customers is based upon those
82 customers' actual peak winter daily usage during the most recent three (3) calendar years.
83 Conversely, the peak day of the residential and commercial classes is based upon the
84 coldest day recorded in the last 20 years. The result of this mismatch is that residential and
85 commercial customers are assigned a much greater share of demand than appropriate.
86 Further, on January 15, 2007, the Company's actual historical peak day, the Company
87 delivered a record sendout of 1,091,289 decatherms. Firm transportation customers made
88 up 59,713 decatherms of this sendout and Interruptible transportation customers made up
89 75,589 decatherms of this sendout. Although the capacity and capability of the system
90 was severely tested on this day, sufficient capacity existed to serve all the customers
91 without interruption. The total peak-day demand supported by QGC for transportation
92 customer allocation is far less than the sendout needed to serve transportation customers on
93 the Company's actual peak day of January 15, 2007. For these reasons the Peak-Day factor
94 for the cost of service study should be set using the Company's actual historical results
95 from this January 15, 2007 day.

96

97 **Q: Please discuss the Company's peak-day allocation for interruptible service.**

98 A: The Company did not assign any demand component to interruptible customers in its CCOS.
99 According to data request responses concerning the history of these loads, the Company has
100 had adequate capacity for the past several years to meet the required loads of all customers,

101 including interruptible customers, on peak days² This indicates that some demand component
102 assignment is appropriate for these classes. Customer classes that are subject to "interruption"
103 should have a reduced demand allocation (as well as reduced rates) that recognizes the
104 possibility of interruption. However, this does not mean that the demand that they place on the
105 system is costless. I have developed a demand allocation factor for these types of customers
106 based upon their annual volumes divided by the number of days in a year ("365"). This
107 results in a demand component of 46,485, decatherms which is much lower than the peak day
108 demand of 75,689 decatherms observed by the interruptible class on January 15, 2007. This is
109 the method used by FERC³ and in other state jurisdictions. The result of a lesser cost
110 assignment is a lower effective rate allocation for this class.

111

112 **Q: What are the results of your revised Peak-Day Factor?**

113 A: The result is to lower the Peak-Day Allocation Factors for the GSR, GSC and FS classes
114 and raises the Peak-Day Allocation Factors for the remaining classes. This change results in
115 a peak-day allocation on 59.40%, 26.07% and 3.42% respectively for these classes. The
116 Company's allocation to these classes was 64.58%, 28.21% and 3.66% respectively.

117 **Distribution Plant Factor Study**

118 **Q: Please discuss how you used the Distribution Plant Factor Study.**

² The Company's response to DPU DR 31.07, reveals that 75,589 Dth was delivered to interruptible customers on January 15, 2007, the day of the system's historic peak.

³ Goodman, Leonard, 1998. The Process of Ratemaking. Public Utility Reports, Vienna, Virginia. 1099

119 A: The Distribution Plant Factor Study is used in the CCOS to allocate meters, regulators,
120 service lines and small diameter mains. This type of study has been used historically by the
121 Company and has been modified by the Company with input from the CCOS Task Force. I
122 have basically accepted this study for use in the CCOS allocation process even though I
123 have altered its use for certain allocations such as the allocation of small diameter mains as I
124 will discuss later in this testimony. Also, as I included FT-1 in my CCOS and separated the
125 TS back into their current FT-2 and IT classes, the allocation of meters and regulators was
126 revised to allocate their relative share of these costs.

127

128 **Allocation of Distribution Mains**

129 **Q: Please discuss the importance of the allocation of distribution mains.**

130 A: The costs of serving distribution service to the QGC customers has at its core a single gas
131 plant account, which is the distribution mains, recorded in Account No. 376. This account
132 represents the largest single investment in QGC's distribution system. It accounts for
133 approximately 50% of the QGC rate base. Materials in this account include, for example,
134 pipe, valves and cathodic protection devices. It also contains non-material costs such as
135 the costs of employee labor, labor by contractors, administrative and general costs,
136 income taxes, depreciation, are allocated on the assignment of the mains to the various
137 customer classes. These mains are interconnected to distribution networks. Distribution
138 networks connect the outlet side of the city gates to the inlet side of individual customer
139 service lines. These distribution networks are shared by all customer classes.

140 The investment is necessary to install facilities that connect all customers to the
141 distribution network and to install facilities with sufficient capacity to meet the demands
142 of all customers. For purposes of classification, QGC divided these investments into (1)
143 small diameter mains of 6 inches in size or less and (2) mains greater than 6 inches in
144 size. QGC considers the former to be those investments needed to serve individual
145 customer laterals or "customer costs" and the latter to be those investments needed to
146 achieve the collective capacity for "capacity costs" requirements of all customers.

147 **Q: Can you please elaborate on some on the distinction between "customer costs" and**
148 **"capacity costs" as they relate to the distribution mains?**

149 A: Yes. Customer costs are those costs that can be directly related to a specific customer or
150 group of customers. An example of customer costs is individual meters and service lines
151 serving a specific customer. Capacity costs are more related to the ability of the system to
152 supply gas and, thus, are not directly affected by the number of customers.

153

154 **Allocation of Small Diameter ("SD" Mains)**

155

156

157 **Q: Please discuss how your recommended allocation of the small diameter ("6 inches or less)**
158 **distribution mains differs from the Company's allocation.**

159 A: The Company's method assumes that all the costs of the SD Mains are customer related. I
160 agree that the SD Mains are more customer specific than the larger mains. However, the SD
161 Mains have some capacity or demand value. All of the studies that I have seen, or been
162 involved with, have determined that some portion of even 2 inch mains have at least some

163 capacity component as well as a customer related component. While studies vary, they
164 generally do assign a higher percentage of the costs of mains in the range of 50 - 70%
165 customer and 30 - 50% capacity related. The NARUC Rate Design Manual⁴ even points out
166 that some analysts consider mains to be 100% capacity related. The capacity of pipe, of
167 course, is proportionate in size, such that the larger the pipe the more cost assignment slopes
168 to capacity versus customer related. In my CCOS I have accepted and used the QGC
169 method to assign 80% of the allocation of costs of these SD Mains. However, I have
170 allocated a conservative 20% of the remaining costs of SD Mains as capacity related by
171 using a demand allocator consisting of 80% demand and 20% throughput. The resulting
172 allocation basically is a lesser cost assignment to the residential class and a greater share to
173 the commercial class (GSC).

174

175 **Q: With regard to the allocation of distribution mains, what methods are generally favored**
176 **to determine the customer component?**

177 A: The two methods often used by regulatory bodies to determine the customer component of
178 the distribution mains are (1) the minimum size method and, (2) the zero intercept method.
179 Both methods are supported in the NARUC Rate Design Manual Under the minimum size
180 method, all distribution mains are priced out at the historic unit cost of the smallest main
181 installed on the system and assigned as customer costs. The remaining book cost of the
182 mains is assigned to capacity. The zero intercept method is similar.

⁴NARUC Gas Distribution Rate Design Manual, National Association of Regulatory Utility Commissioners, (Washington D.C). June, 1989

183 **Q: Is there a reason these two methods cannot be used to allocate the distribution mains to**
184 **customer and capacity for the QGC system?**

185 A: Unfortunately yes. While, the two methods are fairly simple to construct, both methods
186 require that the utility records the length in feet and costs of the various sizes of pipes on the
187 system. QGC does not keep these types of records. Thus, these distance sensitive methods
188 cannot be used for the QGC system.

189
190 **Q: Did you find QGC's method to be a reasonable method for allocation of the SD**
191 **distribution mains?**

192 A: The statistical method used by the Company appears to be well thought out⁵. As I
193 mentioned before, my primary concern was the use of 100% customer specific cost
194 assignment inherent in the analysis. I am reasonably certain that the QGC grid is similar to
195 others in that customers not within the 1,000 feet sample sections of the QGC study use the
196 pipe for capacity purposes as many customers dependent upon the current operating
197 conditions will receive gas from more than one point of delivery. I believe my 20%
198 imputation of a capacity costs component is a reasonable compromise for the allocation of
199 the SD distribution mains.

200
201
202

203

204

Allocation of Feeder Lines and Large Mains

205

206 **Q: Please discuss how your allocation of the Feeder Lines and Large distribution**

207 **mains differs from the Company allocation.**

208 A: There are two important factors that drive QGC's distribution mains costs. First,

209 these costs are capital intensive. Second, these large lines and mains must be

210 sized so that they have the capability to deliver natural gas to all customers during

211 extremely cold conditions. This combination of capital requirements and sizing to

212 meet peak demands indicates that the class contributions to the peak day is the

213 appropriate factor to be used in the allocation to customer classes the costs of

214 these large lines and mains. Therefore, I have based my allocation of these costs

215 upon 80% peak day demand and 20% throughput. The 80% peak day demand

216 allocation recognizes that these mains are built to handle the combined peak use

217 by all customers. The 20% throughput allocation recognizes that the utility also

218 provides sustained year-round service to the combined customers.

219

220

221

222

TS & IS Value of Gas Purchased

⁵ although difficult to duplicate.

223

224 **Q: Why did you find it necessary to delete the Company's value of peaking gas**
225 **adjustment in the QGC CCOS?**

226 A: I removed this adjustment to reflect the fact that the Company has not purchased gas from
227 interruptible or firm transportation customers for the use of human needs customers for
228 several years. This change has no affect on the QGC revenue requirement. It does have a
229 marginal impact on the class rates of return for the classes affected.

230

231 **Q: Do you believe that peaking gas taken from transportation customers should be**
232 **compensated?**

233 A: Yes. If and when peaking gas is taken by QGC for the use of human needs customers, then
234 QGC should compensate the transportation customers for the value of the gas. The price
235 paid could be recovered in the gas-balancing account (Account 191).

236

237 **Allocation of Meters & Regulators**

238 **Q: What changes have you made to the Allocation of Meters & Regulators?**

239 A: Since I included FT-1 and considered FT-2 and IT as separate services in my CCOS, I
240 allocated a portion of the costs of Meters & Regulators to these three classes. The proxy for
241 this cost component was developed from the per-customer assignment made by QGC. The
242 change had only a marginal effect on the costs assignments to the various classes.

243

244 **Class Cost of Service Summary**

245 **Q: Have you prepared a class cost of service study?**

246 A: Yes. I prepared a class cost of service study which reflects the results of the PSCU decision
247 on the revenue requirement. This class cost of service study was prepared using the QGC
248 class cost of service software program. In addition to matching the PSCU decision on the
249 revenue requirement. I also made the adjustments to the cost allocations that I previously
250 discussed in this testimony.

251

252 **Q: What are the current returns for the different major rate classes as shown by your**
253 **class cost of service study?**

254 A: The current returns are summarized in Table 1.

255

256

Table 1

257

Rates of Return by Major Class Categories

Customer Class	Current Rate of Return
GSR	7.43%
GSC	8.97%
FS	4.51%
FT-2	7.63%
FT-1	3.88%
IS	-1.46%
IT	-4.71%
Total QGC	7.39%

258

259 **Q: Have you attached a summary of your proposed class cost of service study?**

260 A: Yes. The rate base, operating income, rate of return and other information regarding the
261 seven major classes are summarized on my DPU Exhibit 7.1.

262 **REVENUE ALLOCATION TO THE CLASSES**

263
264 **Increase of Revenue to the Various Classes**

265
266 **Q: Please discuss your recommendation for allocation of the PSCU's allowed revenue**
267 **increase.**

268 A: I propose that classes with negative rates of return receive a 25% increase in rates. These
269 classes are the IS class and the new TS class. The FS and FT classes show much lower than
270 the average rates of return and are increased 10% and 12.5% respectively. GSR and GSC
271 classes show solid current returns and are increased 4.66%. My CCOS agrees with the
272 Company's CCOS in that it indicates the transportation and interruptible rates produce
273 revenues that are well short of the cost of providing service. I also note that these customers
274 currently have inexpensive rates. Even with a 25% increase the industrial rates will remain
275 competitive in that the prices (with carefully designed rates) to industrial customers will not
276 reach the point at which they can economically choose to bypass QGC's system. Current
277 Revenues, Proposed Revenues, Dollar increase and Percent Increase for the major classes
278 are shown in Table 2 set forth below.

279

280

Table 2

281

Allocation of Revenue Increase by Major Class Categories)

282

Class	GSR	GSC	FS	FT-1	IS	New TS
Current Rate Revenue	\$175,210,018	\$41,426,827	\$3,866,562	\$1,481,696	\$344,872	\$4,762,417
Proposed Revenue	\$183,374,806	\$43,357,318	\$4,253,219	\$1,666,908	\$431,090	\$5,953,021
\$ Difference	\$8,164,788	\$1,930,491	\$386,657	\$185,212	\$86,218	\$1,190,604
% Difference	4.66%	4.66%	10.00%	12.50%	25.00%	25.00%
Current Average Unit Price	2.774	1.603	0.540	0.179	0.252	0.174
Proposed Average Unit Price	2.904	1.677	0.594	0.202	0.315	0.217
\$ Difference Average Unit Price	0.129	0.075	0.054	0.022	0.063	0.043
Dth	63,152,743	25,849,158	7,158,193	8,268,846	1,370,445	27,434,587
Move to Full CCOS	8,953,350	(1,139,552)	844,487	404,200	310,838	2,593,174
Move to One Half the CCOS	4,476,675	(569,776)	422,244	202,100	155,419	1,296,587
Increase required for 1/2 Move	2.56%	-1.38%	10.92%	13.64%	45.07%	27.23%

283

284 **Q: How did you determine that that the various increases were appropriate for under-**
285 **earning classes?**

286 A: I looked closely at the current class revenue deficiency in recommending these increases.
287 I first looked at how much it would take to bring these classes to the average rate of
288 return as allowed by the PSCU. As shown in Table 2 the revenue shortfall for these
289 classes is quite large. I determined that a gradualism adjustment would be appropriate
290 for these classes. To determine the appropriate level I looked at what increase it would

291 take to cut their class deficiency by 1/2. As you can see at the bottom of Table 2 the
292 increases required to cut their deficiency by 1/2 are still significant. The CCOS results
293 indicate that the increases I have proposed are reasonable. The increase required for the
294 IS class is so large, I decided it would be reasonable to cap the increase at 25%.

295

296 **Q: Do you have any other comments that support the reasonableness of your revenue**
297 **increases to the classes as proposed?**

298 A: Yes. Percentage increases can be misleading. If one looks at the average unit price
299 given in Table 2 one can see that the current prices to these customers are much lower
300 than that to the GSR and GSC classes. One can also see that the unit price increases to
301 the transportation customers and the IS customers is still less than that which will be
302 imposed on the GSR and GSC classes.

303

304 **Q: Do you believe that a 4.66% increase to the GSR and GSC is sufficient?**

305 A: Yes. The Conservation Enabling Tariff ("CET") provisions will result in greater long term
306 increases than the 4.66% increase I have proposed. Transportation and interruptible
307 customer rates are not affected by the CET.

308

309

310

311

312

313

RATE DESIGN

314

315

Rate Design Proposals

316

317 **Q: Please discuss your rate design goals in general.**

318 A: One important ratemaking goal is to give customers greater control over their bills and
319 encourage energy efficiency. One way to encourage greater energy efficiency is to lessen
320 the "slope" in declining block rates or move to flat usage rates. Declining block rates with a
321 substantial slope reduce the incentives for customers to conserve natural gas by reducing the
322 payback that can be achieved by making investments in more efficient furnaces, insulation
323 etc. Conversely flat or flatter usage structures increase the relative payback that can be
324 achieved from these types of investments. Some may argue that the distribution usage
325 charges are too small to affect customers and that structural changes are not necessary. I
326 would argue that we do not know the "tipping point" price that each individual will decide to
327 lessen his usage or purchase more efficient equipment. What we have learned from recent
328 experience is that natural gas prices are uncertain and subject to very high upward
329 movements that are primarily related to supply and demand. I believe that anything the
330 PSCU can do to encourage conservation can aide the QGC ratepayers in dealing with these
331 uncertain natural gas prices. Therefore my proposals for all classes will reduce this "slope"
332 or recommend flat usage structures whenever possible.

333

334

335 **Q: Can you explain a little better what you mean by "slope" in declining block rates?**

336 A: Below is an illustration from my GSC winter rate proposal:

337	GSC	Current Rate	Proposed Rate	Difference
338	First 45 Dth Block	1.95993	2.24611	.146016
339	Next 155 Dth Block	0.81370	1.12874	.276822
340	All Over 200 Dth Block	0.81370	0.94000	.155220

341
342 Note that the proposed increase to the first block is less than the proposed increases to the
343 second block and the third block. Thus, the slope of the proposed rates is flatter in that
344 more of the cost recovery is placed in the latter usage charges. This is what is meant by
345 reducing the slope. I have not proposed a flatter structure for the GSC rate code in
346 consideration of the diversity of the usage of the commercial customers, as some have usage
347 that stays in the first block yet some have usage well over 200 Dth.

348

349 **Q: Is it also appropriate to allocate energy cost in rate pricing to reflect how seasonal use**
350 **of energy affects the cost incurred by QGC?**

351 A: Yes. Cost allocations and corresponding rates that reflect seasonal cost patterns can
352 improve the efficiency of use of QGC's system, thereby lowering the cost of energy for all
353 customers. Carefully designed seasonal rates can result in lower overall system costs if
354 consumption of energy is increased during the lower usage months and consumption is
355 reduced during the higher usage (peak) months. The optimal result would be a more
356 constant demand for energy across the seasons. This outcome should allow customers the
357 opportunity to make better decisions regarding the use of energy in their appliances such as
358 water heating, clothes drying, cooking, etc.

359

360 **Q: Please discuss how the Basic Service Fee ("BSF") is treated in your rate design**
361 **proposals.**

362 A: The BSF is addressed by DPU witness Marlin Barrow. In the design of rates I have not
363 increased the BSF for any customer or group of customers. Also, the definition of the BSF
364 is assumed unchanged.

365

366 **Q: What are the primary changes in the Residential and Commercial rates proposed by**
367 **QGC?**

368 A: The most significant change is the split of the existing GS-1 into a separate residential rate
369 code GSR and a separate commercial rate code GSC. I recommend that this separation be
370 approved but have proposed substantially different rates for the new classes than that
371 proposed by QGC.

372

373 **Q: Please discuss your rate design proposal for the new residential code GSR.**

374 A: Since all but a few residential customers do not exceed the current 45 decatherm threshold
375 of the GS-1 rate the transition to flat usage rates are simple to construct. Therefore I have
376 proposed a flat rate structure for the GSR class. The flat volumetric rates I have proposed
377 do contain a summer price of about 64 cents per decatherms less than the winter rate, which
378 is approximately the same as proposed by QGC. Summer/winter differentials are
379 appropriate as appliances added by customers that use energy year-round such as gas water
380 heaters improve the efficiency of the system.

381

382 **Q: Please discuss your rate design proposal for the new commercial code GSC.**

383 A: The usage patterns of customers that receive service under the GSC rate code are much
384 more diverse than customers of the residential class. As pointed out by QCG witness Gary
385 Robinson, "The commercial customers vary from small retail establishments, which may
386 have only space heating, to large hotels, malls, schools, having significant natural gas
387 requirement for space heating, heating pools or cooking." This makes the rate design for
388 these customers more complex. The current GS-1 has a very steep decline following the
389 first 45 decatherms of usage. QGC has proposed an even steeper relative decline. My
390 proposal begins with the rate blocks as proposed by QGC but decreases the declining block
391 slope to a noticeable degree. Summer winter differentials are designed into my proposed
392 GSC rates for the same reason they were kept in the GSR proposed rates.

393

394 **Q: Do you have any proposals or comments regarding additional changes to the rate**
395 **structure of the GSC rate in future rate cases?**

396 A: I recommend that the Company in its next rate filing develop GSC Regular and GSC Large
397 rate classifications. This will enable the development of rates that have a flat or flatter rate
398 structure that can encourage and reward greater conservation by customers while at the same
399 time limit the rate distress on commercial customers that can occur when significant rate
400 design changes are made. The target customers of the GSC Large rate code should be
401 customers that have a peak winter month consumption of 300 decatherms and greater.

402

403 **Q: What are DPU's recommendations regarding the rate code GSS.**

404 A: DPU witness Marlin Barrow will address this rate code.

405

406 **Q: What are DPU's recommendations regarding the rate code NGV.**

407 A: DPU witness Marlin Barrow will address this rate code.

408

409 **Q: Please discuss your rate design proposal for the QGC proposed rate code FS .**

410 A: My proposal begins with the rate blocks proposed by QGC and decreases the declining block
411 slope for these rates. Summer winter differentials are designed into the proposed FS rates
412 for the same reason they were kept in the GSR proposed rates.

413

414 **Q: Please discuss your rate design proposal for the rate codes F-3 and F-4.**

415 A: These rate codes are eliminated and will be absorbed into the QGC proposed TS rate code.

416

417 **Q: Please discuss your rate design proposal for the rate code I-4.**

418 A: The I-4 current volumetric block rates are priced at average costs of about 13.5 cents per
419 decatherm. The price differential between the current billing blocks is only about 1.5 cents
420 per decatherms. My proposal is a flat volumetric rate for all usage.

421

422 **Q: Please discuss your rate design proposal for the rate code IS-4.**

423 A: A: DPU witness Marlin Barrow will address this rate code.

424

425 **Q: Please discuss your rate design proposal for the rate code FT-1.**

426 A: This rate code has special qualifications for participation. Like QGC, I retained the current
427 block structure for this rate code. The existing volumetric block rates are increased
428 proportional to the existing rates.

429

430 **Q: Please discuss your rate design proposal for the rate code FT-1L.**

431 A: This rate code is specific to a single customer, the RMP Lakeside Combined Cycle Natural
432 Gas Generation Plant, which came on line in 2007. The rate was negotiated to cover the
433 costs of adding this load to the system. The negotiated rate currently provides a \$2,976,000
434 minimum contribution to the QGC system costs and is contained in a special contract to
435 provide transportation service to the Lakeside Power Plant. Since this special contract was
436 just recently enacted, I do not propose any rate increase for this customer.

437

438 **Q: Please discuss your rate design proposal for the rate code MT.**

439 A: This special rate code for a single municipal has a one block rate structure. This structure
440 will be retained and the block rate will be increased. The block rate increase for this
441 customer will basically offset with the reduced transportation administrative charges
442 proposed by QGC.

443

444 **Q: Please discuss your rate design proposal for the rate code TS.**

445 A: The Company has proposed a combination of the transportation rate code FT-2 and the rate
446 code IT into a new single transportation rate code. The QGC proposed rate code TS will

447 actually be a two in one tariff in that it will contain a pricing structure for two substantially
448 different services (firm transportation and interruptible transportation). The current FT-2 rate
449 code currently provides the firm transportation service and the current IT code provides the
450 interruptible transportation service. The current FT-2 and IT rate codes are also very
451 different in pricing. The IT rate price is substantially less than the FT-2 rate as the service is
452 subject to interruption.

453

454 **Q: Do you have any concern with the two in one nature of the rate code TS proposal?**

455 A: My major concern is with the embedding of the two distinct types of service into one rate
456 code and class of service. However, after discussions with QGC I now believe the type of
457 structure proposed for the rate code TS can be recommended. The Company's proposal is to
458 impose a demand charge on that portion of the service that is contracted as firm
459 transportation and is the key to making the combined tariff workable. The demand charge
460 will basically take the place of the higher volumetric charges of the current FT-2 rate code
461 versus the lower volumetric charges of the current IT rate code. The demand charge will
462 enable the volumetric charges to be the same for both the firm transportation service and the
463 interruptible transportation service. The demand charge will contain the costs attributed to
464 provision of firm transportation service.

465

466 **Q: How will your proposed rate structure for the TS rate code differ from that proposed**
467 **by the Company?**

468 A: The Company has proposed a continued declining block structure for the new TS rate code.
469 I propose a flat rate structure for the volumetric rate. This recommendation is supported by
470 the fact that the demand charge was developed to cover the fixed costs that were previously
471 recovered in the volumetric rates. Moreover, the current block structure is essentially flat
472 for the IT rate code. Customers on the IT rate code will see basically the same structure as
473 is currently in place. This should assure that a smooth transition to the new rate structure.

474

475 **Q: Do you have any recommendations regarding the treatment of the TS rate code in**
476 **future rate cases?**

477 A: Given the distinct nature of the two services to be provided under the TS rate code, it is
478 appropriate to separate in future rate cases the cost-of-service analysis for the two services.
479 In other words, the firm transportation service revenue contributions would be compared
480 with the firm transportation costs. Likewise, the interruptible transportation service
481 contributions would be compared with the interruptible transportation costs.

482

483 **Q: Have you prepared an Exhibit presenting proof of your recommended revenue**
484 **proposals for the various classes?**

485 A: I developed a proof of revenue that will produce DPU's recommended revenue for the
486 various classes. This proof of revenue, along with the recommended rate designs, can be
487 found on Exhibit DPU 7.2. This exhibit also shows the structure and increases to the
488 various rate codes. Page 10 of the proof of revenue contains a summary of the increases and
489 proposed revenues for all the classes.

490

491 **Q: Have you prepared any analysis representing the financial impact of DPU's residential**
492 **GSR and commercial GSC rate structures?**

493 A: Yes. I prepared an analysis for residential and commercial rate structures. The residential
494 analysis is DPU Exhibit 7.3 and the commercial analysis is DPU Exhibit 7.4.

495

496 **Transportation Administrative Charges**
497

498 **Q: Do you have any comments regarding the QGC proposed changes to the current**
499 **Transportation Administrative Charge?**

500 A: Yes. QGC has proposed a reduction of the current first occurrence annual charge from
501 \$6,800 to \$4,500. Additionally QGC has proposed a reduction of the second and additional
502 occurrences annual charge from \$2,550 to \$2,250. This reduction in charges should be
503 supported. All current transportation customers will benefit from the reduction of fees. It
504 will also offset the increases to transportation charges that I have proposed. Some of the
505 larger sales customers may also benefit if the costs of the administrative charges have kept
506 them from moving to the transportation tariffs.

507

508 **Conversion from Transportation to Sales Service**
509

510 **Q: Do you have any comments regarding QGC's proposal concerning requirements for**
511 **customers who want to transfer from interruptible sales or transportation service to**
512 **firm sales service?**
513

514 A: Yes. The Company's requested changes are understandable. The Company will require
515 customers who transfer to firm sales to remain on firm sales for two years. Given the
516 volatility of the natural gas market, it is quite likely that QGC's system supply prices at times
517 will be below market. If so, current transportation customers would have an incentive to ask
518 to switch back to the system supply. If QGC were required to purchase additional supply at
519 higher market prices the system supply unit price would be driven up for existing
520 customers.

521

522 **Transportation Balancing Charges**

523 **Q: What are your comments regarding QGC's proposed changes to transportation**
524 **balancing charges?**

525 A: QGC's proposed minimal change to definitions for transportation balancing charges. I
526 recommend these wording changes be accepted.

527

528 **Cash-In, Cash-Out Gains and Losses**

529

530 **Q: What are your comments regarding the QGC proposed changes to cash-in, Cash-out**
531 **Gains and Losses charges?**

532 A: QGC's proposed changes are designed to reflect more closely the market area of the
533 customers and should have minimal effect on customer charges.

534

535 **Q: Does this conclude your direct testimony?**

536 A: Yes, it does.

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ATTACHMENT I

QUALIFICATIONS OF GLEN GREGORY

EDUCATION:

Masters of Arts, Economics, University, of Oklahoma, 1980
Bachelor of Arts, University of Oklahoma, 1975

CREDENTIALS:

Certified Rate of Return Analyst, 1996

EXPERIENCE

- Independent Utility Regulation Consultant 5 years
- Manager, Senior Analyst (utility regulation),
- Oklahoma Corporation Commission 21 years

Independent Consultant, July 2003 to the present.

Mr. Gregory specializes in public utility issues, such as cost of capital, cost of service, rate design and other public utility issues.

Oklahoma Corporation Commission, November 1982 to July 2003.

Manager, Senior Analyst - Public Utility Division - Mr. Gregory specialized in the areas of rate design, cost allocation, and financial analysis for cost of capital and rate of return. Mr. Gregory was also substantially involved in preparation of reports and testimony regarding competitive bidding, utility deregulation, utility merger activities, evaluation of state and Federal restructuring proposals and a variety of other energy-related and regulatory issues. As a Certified Rate of Return Analyst, Mr. Gregory was the primary representative of the Division in the area of cost of capital analysis for both electric and gas utilities. Mr. Gregory was responsible for supervision of all cost of service studies, many rate cases for electric, gas, and water utilities. All positions held at the Commission required that Mr. Gregory provide expert testimony and be able to defend it under cross-examination. Mr. Gregory managed the Division's Economic and Research Unit. Mr. Gregory was also very active in the supervision and training of others in my assigned areas of responsibility. Mr. Gregory worked closely with corporate representatives, exchanged information, methodologies, and negotiated settlements.

Listing of Experience of Glen Gregory Related to Capital Cost, Cost-of-Service, Rate Design, Pricing and Energy-Related Issues

Entergy Gulf States, 2008 (PUC Docket No. 34800, SOAH Docket No. 473-08-0334) – Performed analysis, research regarding various cost of service issues and on the utility’s overall revenue requirement concerning this Entergy Gulf States rate case heard before the Public Utility Commission of Texas on behalf of various Texas municipal cities.

Tucson Electric Power Company, 2008 (Docket No. E-01933A-07-402) – Participated as an expert witness on behalf of the residential customers before the Arizona Public Service Commission in this general rate case to address rate design and cost-of-service for the purpose of setting prospective cost-of-service based rates.

Rocky Mountain Power, 2008 (Docket No. 07-035-93) – Performed analysis, research regarding the utility’s overall revenue requirement concerning this Rocky Mountain Power rate case heard before the Public Utility Commission of Utah on behalf of the Utah Public Utility Division.

Entergy Arkansas, 2007 (Docket No. 06-101-U) – Participated as an expert witness on behalf of the commercial customers before the Arkansas Public Service Commission in this general rate case to address capital cost, rate design and jurisdictional issues for the purpose of setting prospective cost-of-service based rates.

Public Service Company of Oklahoma , 2006 (PUD 200600285 – Participated as an expert witness on behalf of the industrial consumers before the Oklahoma Corporation Commission in PSO’s general rate case application to address rate design and jurisdictional issues for the purpose of setting prospective cost-of-service based rates.

Southwestern Public Service Company, 2006 (PUCT 32766) – Performed analysis, research regarding shared services, jurisdictional allocation, and other revenue requirement matters concerning this SPS rate case to be heard before the Public Utility Commission of Texas on behalf of various Texas municipal cities.

ATMOS Energy - Mid-Tex Gas, 2006 (GUD 9676) – Performed analysis, research regarding shared services, jurisdictional allocation, and other revenue requirement matters concerning this rate case to be heard before the Railroad Commission of Texas on behalf of various Texas municipal cities.

Oklahoma Gas & Electric Co., 2005 (PUD 200500151) – Participated as an expert witness on behalf of the industrial consumers before the Oklahoma Corporation Commission in OG&E’s general rate case application to address capital cost, rate design and jurisdictional issues for the purpose of setting prospective cost-of-service based rates. Project completed in December 2005.

Oklahoma Natural Gas Company (“ONG”), 2005 (PUD 200300610) - Participated as an expert witness on behalf of the Attorney General of the State of Oklahoma before the Oklahoma Corporation Commission in this general rate case to address capital cost, rate design and jurisdictional issues for the purpose of setting prospective cost-of-service based rates. Project completed in August 2005.

Public Service Company of Oklahoma (“PSO”), 2004 (PUD 200300076 – Participated as an expert

witness on behalf of the Oklahoma Industrial Energy Consumers of the State of Oklahoma before the Oklahoma Corporation Commission in this general rate case to capital cost, rate design and jurisdictional issues for the purpose of setting prospective cost-of-service based rates. Project completed in July 2004.

CenterPoint Energy Arkla (“Arkla”), 2004 (PUD 200400187 – Participated as an expert witness on behalf of the Attorney General of the State of Oklahoma before the Oklahoma Corporation Commission in this general rate case to address capital cost, rate design and jurisdictional issues for the purpose of setting prospective cost-of-service based rates. Project completed in December 2004.

Oklahoma Gas & Electric Company (“OG&E”), 2004 (PUD 200300226 – Participated as an expert witness on behalf of the Oklahoma Industrial Energy Consumers before the OCC to address capital cost issues.

Oklahoma Natural Gas Company (“ONG”), 2003 (PUD 200300617) - Participated as an expert witness on behalf of the Staff of the State of Oklahoma before the OCC in this application of ONG to recover certain cost related to service lines, uncollectible accounts, etc.. Negotiate tariff and cost-of-service issues in settlement discussion.

Public Service Company of Oklahoma (“PSO”), 2003 (PUD 200200754) – Performed analysis, research and writing assistance to prepare written testimony on behalf of the Oklahoma Industrial Energy Consumers (OIEC) regarding a review of PSO’s Fuel Adjustment Clause for the year 2001.

Arkansas Louisiana Gas Company (“Arkla”), 2002 (PUD 200200166) – Participated as an expert witness on behalf of the PUD before the OCC in this general rate case application to address capital cost. Oversaw the work of outside consultants regarding various revenue requirement and rate design issues for the purpose of setting prospective cost-of-service based rates. Negotiated tariff and cost-of-service issues in settlement discussion.

The Empire District Electric Company., 2003 (PUD 200300121) – Supervised the work of OCC staff filing testimony on behalf of the PUD before the OCC in this general rate case application regarding various revenue requirement and rate design issues for the purpose of setting prospective cost-of-service based rates. Negotiated tariff and cost-of-service issues in settlement discussion.

Lawton Cogeneration L.L.C., 2002 (PUD 200200038) - Performed analysis, research and writing assistance to prepare written testimony on behalf of the PUD regarding a review of avoided cost as required by Federal law and the Power Sale Agreement submitted by Lawton for OCC approval.

Arkansas Louisiana Gas Company., 2002 (PUD 200100586) – Participated as an expert witness on behalf of the PUD before the OCC regarding this application for approval of a transfer of Oklahoma assets as part of a corporate restructuring plan..

Enogex, Inc., 2001 (PUD 200000339) – Participated as an expert witness on behalf of the PUD before the OCC in this cause filed by Enogex seeking a determination from the OCC regarding the evaluation of ONG’s competitive bid process.

Oklahoma Gas & Electric Co., 2000 (PUD 200000022) – Participated as an expert witness on behalf of

the PUD before the OCC concerning OG&E's recovery of natural gas transportation cost from its affiliate Enogex, Inc.

Oklahoma Gas & Electric Co., 2002 (PUD 2001000455) – Participated as an expert witness on behalf of the PUD before the OCC in this general rate case application to address capital cost and rate design. Supervised and oversaw the work of PUD staff involved in various revenue requirement and rate design issues for the purpose of setting prospective cost-of-service based rates. Negotiate tariff and cost-of-service issues in settlement discussion.

Oklahoma Gas and Electric Company, 1996 (PUD 960000116) – Participated as an expert witness on behalf of the PUD before the OCC regarding capital cost and capital structure. Oversaw and supervised the work of the PUD witness regarding revenue, rate design, cost of service matters and tariffs. Sponsored testimony on OG&E's proposed Generation Efficiency Performance Rider (GEPR). Recommended modifications to the Company's proposed GEPR to bring it within the boundaries of an acceptable alternative ratemaking formula.

Oklahoma Gas and Electric Company, 1999 (PUD 990000417) – OG&E request for implementation of a performance based incentive plan. Participated as an expert witness and supervised other OCC staff filing testimony on behalf of the PUD before the OCC. Prepared information to inform the Commissioners in OCC Deliberations of matters regarding the application.

Oklahoma Natural Gas Company, 1998 – Participated as an expert witness in ONG's unbundling proceedings before the OCC. Sponsored written and oral testimony on behalf of the PUD to address the cost of ONG's unbundled upstream gas services.

Public Service Company of Oklahoma, 1997 (PUD 960000214) - Sponsored testimony before the OCC on behalf of the PUD regarding cost of capital and capital structure.

Oklahoma Natural Gas /Western Resources Merger, 1997 - Oversaw and supervised the work of the PUD witness assigned on behalf of the PUD before the OCC regarding the appropriateness of OCC approval of the merger and setting certain parameters to safeguard ratepayers from negative effects of the merger.

Oklahoma Gas and Electric Co., 1996 (CN PUD 960000116) - Sponsored testimony on behalf of the PUD for the purpose of determining the Company's cost of capital and capital structure. Oversaw and supervised the work of the PUD witness regarding revenue, rate design, cost of service matters and tariffs.

Arkansas Oklahoma Gas Company, 1997 (CN PUD 960000408) - Sponsored testimony before the OCC on behalf of the PUD regarding cost of capital and capital structure. Oversaw and supervised the work of the PUD witness regarding revenue, rate design, cost of service matters and tariffs.

Empire District Electric Company, 1994 (940000343) - Sponsored testimony before the OCC on behalf of the PUD regarding cost of capital and capital structure. Sponsored testimony before the OCC on behalf of the PUD regarding revenue, rate design, cost of service matters and tariffs.

Arkansas Louisiana Gas Company, 1993 (920001217) - Sponsored testimony before the OCC on

behalf of the PUD regarding cost of capital and capital structure. Supervised the preparation of PUD testimony regarding revenue, rate design, cost of service matters and tariffs.

Oklahoma Natural Gas Company, 1993 - Sponsored and or supervised testimony of PUD staff before the OCC on behalf of the PUD regarding capital cost, revenue, rate design, cost of service matters and tariffs.

Oklahoma Gas and Electric Company, 1992 - Sponsored and or supervised testimony of PUD staff testimony before the OCC on behalf of the PUD regarding capital cost, revenue, rate design, cost of service matters and tariffs.