

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

JOINT APPLICATION OF QUESTAR GAS
COMPANY, THE DIVISION OF PUBLIC
UTILITIES, AND UTAH CLEAN ENERGY FOR
THE APPROVAL OF THE CONSERVATION
ENABLING TARIFF ADJUSTMENT OPTION AND
ACCOUNTING ORDERS

DOCKET No. 05-057-T01
DPU EXHIBIT 1.0

Direct Testimony of

Dr. William A. Powell

Division of Public Utilities

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Artie Powell
Prefiled Direct Testimony
Division of Public Utilities
Docket No. 06-057-T01

Q: Please state your name, position, and employer for the record.

A: My name is Dr. William (Artie) Powell; I am the manager of the Energy Section in the Utah Division of Public Utilities (DPU or Division).

Q: On whose behalf are you testifying?

A: The Division.

Q: Please summarize your educational and professional experience.

A: I earned a doctorate degree in economics, with an emphasis in econometrics and microeconomic theory, from Texas A&M University. Since 1985 I have taught a variety of undergraduate and graduate courses in economics, econometrics, and statistics and currently teach as an adjunct professor in the department of economics at Weber State University. Since 1996, I have worked at the Division. While at the Division I have participated in a variety of energy and regulatory matters including electric deregulation and stranded costs, avoided cost pricing for qualifying facilities, company acquisition of new generation resources, and special contracts for large industrial electrical customers, as well as acting as the Division's cost of capital witness.

22 **Q: What is the purpose of your testimony?**

23 A: I will introduce the Division's witnesses, discuss the application and the
24 Division's position and reasoning for joining in the application and offer a few
25 general comments.

26 **Q: Who are the witnesses for the Division?**

27 A: In addition to my testimony, Dr. George Compton, Ms. Mary Cleveland, and Mr.
28 Dave Thompson are offering testimony on the Division's behalf.

29 Dr. Compton will discuss several alternatives investigated by the parties to the
30 stipulation meant to address the decline in per customer usage; Ms. Cleveland and
31 Mr. Thompson will explain the auditing procedures they followed to ensure that
32 the rates being proposed are just and reasonable.

33 **Q: Could you briefly explain the purpose of the Joint Application and why the**
34 **Division joined Questar and Utah Clean Energy in filing this application?**

35 A: Since the last Questar general rate case, the Division, Committee of Consumer
36 Services, Questar, and various other parties have discussed issues surrounding the
37 decline in per customer usage and the barriers of Questar's participation in
38 demand side management (DSM) programs. The Joint Application resolves these
39 issues. Specifically, the Joint Application requests that the Commission approve
40 a conservation enabling tariff (CET), on a pilot basis, which is meant to address
41 the problem of declining usage per customer and to remove the barrier of

42 Questar's participation in DSM. Additionally, the Joint Application requests that
43 the Commission enact a rate decrease of approximately \$10.2 million.

44 After careful consideration, the Division joined the Joint Application as being in
45 the public interest.

46 **Q: Why is the declining usage per customer an issue?**

47 A: When volumetric rates are used to recovery a utility's fixed costs, traditional rate
48 design ties a gas utility's profitability to the volume of natural gas it delivers to its
49 customers. When usage per customer declines, as it naturally does when
50 consumers practice conservation, even small reductions may significantly reduce
51 the utility's profitability. Thus, declining usage creates a strong financial
52 disincentive for gas utilities to aggressively promote energy efficiency or DSM.¹
53 The CET decouples Questar's allowed revenues from its sales removing the
54 disincentive to promote DSM.

55 **Q: Is decoupling the only way to remove the financial disincentive?**

56 A: No. In general, there are two approaches that utilities use: decoupling and lost
57 revenue adjustments. A lost revenue adjustment (LRA) calculates the revenue
58 lost due to DSM programs, and then increases the utility's revenues by that

¹ See, "Natural Gas Rate Round-Up," American Gas Association, November 2005; "Regulatory Reform: Removing the Disincentives to Utility Investment in Energy Efficiency," Regulatory Assistance Project Issues Letter, September 2005; "The Theory and Practice of Decoupling," Joseph Eto, Steven Stoft, and Timothy Belden, Energy and Environment Division, Lawrence Berkeley Laboratory, (LBL-34555, UC-350), January 1994.

59 amount. A LRA limits itself to only those revenues resulting from a specific
60 DSM program. Generally, a decoupling mechanism applies to all changes in a
61 utility's sales and therefore removes the utility's incentive to increase its sales. A
62 LRA is incapable of removing the current incentives for a utility to increase its
63 sales. For this and other reasons, the Regulatory Assistance Project concludes,
64 "[decoupling does] a better job than the Lost Revenue Adjustments approach in
65 addressing important frailty of traditional utility regulation."²

66 **Q: I take it then, the CET is a decoupling mechanism or tariff?**

67 A: Yes, it is. The CET is a tariff mechanism that de-couples Questar's recovery of
68 its fixed distribution non-gas (DNG) costs from the volume of natural gas it
69 delivers to customers. Specifically, through a deferral account, the CET allows
70 Questar to recover, on a per customer basis, those revenues approved by the
71 Commission associated with its DNG costs.

72 **Q: Given your description, the CET appears to be a very simple mechanism.**
73 **Other states, such as Oregon, have adopted decoupling mechanisms that are**
74 **relatively more complicated than the CET. Why, in the Joint Application, is**
75 **the Division proposing such a simple mechanism?**

76 A: Your observation and comparison is correct: relative to Oregon's decoupling
77 mechanism, the CET is relatively simple. The Oregon approach adds at least two

² Regulatory Assistance Project Issues Letter, September 2005, p. 6.

78 complexities. First, the Oregon mechanism includes an elasticity adjustment for
79 the effects of how changes in retail tariff prices are expected to impact usage.
80 Second, a weather adjustment, based on heating degree days, is embedded in the
81 deferral component of the mechanism. An independent study of the Oregon
82 mechanism concludes, however, “[F]ull decoupling is easier to comprehend and
83 communicate than the [Oregon mechanism]. ... In addition, full decoupling
84 eliminates disputes over setting values about which reasonable people can
85 disagree: the price elasticity and normal weather (heating degree days).” The
86 report continues by stating, “[T]he total effect over time on customers bills is
87 largely the same with full decoupling as it would be under the [Oregon]
88 mechanisms.”³

89 Given these conclusions and the fact that as proposed in the Joint Application the
90 CET can be modified at any time, starting with a more complicated mechanism
91 appears dubious.

92 **Q: Did the Division or other parties consider any other mechanisms to address**
93 **the issues?**

94 A: Yes, there were several mechanism discussed by the parties. However, the parties
95 determined that the CET represented the best alternative to addressing the joint

³ Daniel G, Hansen and Steven D. Braithwaite, “A Review of Distribution Margin Normalization as Approved by the Oregon Public Utility Commission fro Northwest Natural,” Christensen Associates Energy Consulting, March 31, 2005, p. 65.

96 issues of declining usage and the disincentive to aggressively promote DSM. Dr.
97 Compton discusses these alternatives and the mechanics of the CET in more detail
98 in his testimony.

99 **Q: A recent report indicates that Connecticut regulators don't see much benefit**
100 **to decoupling. Are you familiar with that report?**

101 A: I am familiar with a report that was in a recent issue of "Restructuring Today."
102 The decoupling mechanism referred to in that report is a fixed or delivery charge.
103 Again, Dr. Compton discusses various alternatives in more detail.

104 **Q: If I understand correctly, the CET will remove the disincentive for Questar**
105 **to promote DSM, but it does not necessarily take the next step and create the**
106 **positive incentive for Questar to pursue aggressively DSM programs?**

107 A: Yes, you are correct in your observation. That is why the Joint Application seeks
108 the Commission's approval to transfer some research and development (R&D)
109 funds and to set up a DSM advisory board. The R&D funds, which are currently
110 collected in rates, would be transferred to the CET accrual account to ensure
111 immediate promotion of DSM. The advisory board would ensure that
112 aggressively pursues DSM in the future.

113 **Q: Is the joint application asking that Questar's R&D funds collected in rates be**
114 **used for DSM?**

115 A: No. Questar currently collects in rates an amount for R&D. Currently, there is a

116 positive balance of approximately \$1.4 million for this purpose. The Joint
117 Application is asking the Commission to approve a one-time transfer of these
118 funds to the CET accrual account for the purpose of jump-starting DSM. If
119 approved by the Commission, amortization of the CET account will not begin
120 until these funds are spent. Using the DSM study conducted by GDS Associates,
121 the advisory board will make recommendations about which DSM programs the
122 Commission should approve.

123 **Q: Am I correct in assuming that the DSM study you are referring to is the one**
124 **conducted by GDS Associates on behalf of the DSM Advisory Group that**
125 **came from the last Questar general rate case, Docket No. 02-057-02?**

126 A: Yes, that is correct. That DSM Advisory Group included representatives from,
127 among others, the Division, the Committee of Consumer Services, and Questar.

128 **Q: If I remember correctly, the DSM Advisory Group reached a number of**
129 **conclusions. Were these conclusions considered by the parties in formulating**
130 **the joint Application?**

131 A: Yes, in fact, the Joint Application is intended to meet or implement the eight
132 recommendations made by that Advisory Group. In brief, the Advisory Group
133 recommends that the GDS study form the basis of further study and specific
134 recommendations on DSM programs that are available for residential and
135 commercial natural gas customers. A detailed discussion of these

136 recommendations can be found in the report provided the Commission by the
137 Advisory Group.

138 The Joint Application is requesting that this Advisory Group be authorized by the
139 Commission to carry out these recommendations, that is, to study the DSM
140 programs suggested by GDS' study and formulate specific recommendations to
141 the Commission. Other aspects of the Joint Application, such as the CET and the
142 pilot program are in response to specific recommendations made by the original
143 DSM Advisory Group.

144 **Q: The Joint Application also requests that the Commission implement a**
145 **modest rate decrease. Can you explain the origins of this rate decrease?**

146 A: The rate decrease being proposed at this time is approximately \$10.2 million. For
147 a typical GS-1 customer using 115 Dth per year, the annual rate decrease will be
148 approximately \$13.93 or a little over \$1 per month.

149 The rate decrease is the result of several adjustments including, a change in the
150 depreciation methodology, refinancing and a reduction in the rate of return used
151 to calculate rates. These adjustments, which lower Questar's revenue
152 requirement, were netted against several other adjustments which increase
153 Questar's revenue requirement. These latter adjustments include amortization of
154 pipeline integrity costs and rolling in the GSS extension area charges. In all, I
155 believe there are a dozen or so adjustments that netted together add to the \$10.2

156 million.

157 **Q: Has the Division audited the adjustments in any way to ensure the accuracy**
158 **of the rate reduction?**

159 A: Yes, as explained by Division witnesses, Ms. Cleveland and Mr. Thompson,
160 Division auditors have reviewed Questar's books to ensure that all Commission
161 ordered adjustments have been made. Based on this audit, the Division is
162 confident that the proposed rate reduction is reasonable and, though modest, is in
163 the public interest.

164 **Q: Why does the Joint Application tie the two issues – the rate decrease and the**
165 **CET – together?**

166 A: That is a very good question. The simple answer is that the two are dependent on
167 each other. Specifically, while it may be reasonable to enact the CET
168 independently of the rate decrease, it would not be reasonable to enact the rate
169 decrease on either an interim or permanent basis on its own. Let me explain.

170 The Division tracks the earnings of Questar as well as other utilities. The
171 Division's internal analysis indicates that the Company has earned close to but not
172 over its 11.2% allowed rate of return. The basis for the Division's analysis
173 consisted of historical data. Under the recently passed statute (Utah 54-4-4), the
174 Company could file a rate case with a forecasted test year. Given this discrepancy
175 in information, the Division did not believe it had enough evidence to support or

176 meet the burden of a show cause order. Similarly, the rate decrease proposed in
177 the Joint Application is constructed from historical information and not a test year
178 that perhaps better reflects the rate effective period. Thus, if the rate decrease
179 were enacted on its own, the Company would not have a reasonable opportunity
180 to earn its allowed rate of return.

181 **Q: If the rate decrease were enacted on an interim basis, subject to refund or**
182 **surcharge, then isn't true that the Company would have a chance of earnings**
183 **its allowed return?**

184 A: While I would agree, at least in a limited sense, that the Company may be able to
185 earn its allowed return under those circumstances, what you are really suggesting,
186 I believe, is for the Company or some other party to request a rate case. As I
187 explained earlier, in the Division's opinion, based on the evidence at hand, there
188 is not enough evidence to meet the burden of a show cause order.

189 I would add that, while not expressed in the Joint Application, the Division and
190 Questar have an agreement that Questar will provide its forecasted results of
191 operations for 2006 with its 2005 year end results in April. This will better able
192 the Division to determine if the Company is indeed likely to over earn in 2006, to
193 monitor the pilot program, and, if appropriate, file for a rate case.

194 **Q: If the CET and the rate decrease were both enacted, is the Company likely to**
195 **over earn in 2006?**

196 A: I believe it would be highly unlikely. The rate decrease, as you may recall, is
197 calculated using a 10.5% rate of return as opposed to Questar's current 11.2%
198 allowed return. Furthermore, the CET is designed to allow Questar the
199 opportunity to recover only those DNG revenues allowed by tariff.

200 **Q: Yes, but in today's environment, isn't 10.5% an excessively high rate of**
201 **return for a gas distribution company?**

202 A: I'm not sure I would characterize it as excessively high. Let me answer your
203 question this way.

204 While it may be true that the Division would argue in a rate case for a lower rate
205 of return than Questar's currently allowed return of 11.2%, the outcome of a rate
206 case, that is, what the Commission would ultimately order, is highly uncertain.
207 The Commission could in all likelihood order a rate above 10.5% or even greater
208 than 11.2%. This is one of the benefits and reasons why the Division was willing
209 to join Questar in this application – a known outcome in the form of an acceptable
210 ROE as opposed to the uncertain outcome of a rate case.

211 Additionally, while not overly convincing, there is some evidence that 10.5% is in
212 a range of reasonableness. For example, a recent *Public Utility Fortnightly* article
213 reports allowed rates of return for gas utilities ranging from 10% to 11.5%. And
214 the December 2005 AUS report indicates recent awards ranging from 9.7%
215 (November 2005) to 10.51% (September 2005).

216 Finally, the Division, as well as any other party, can audit the Company's books
217 and if warranted recommend to the Commission a different ROE on a prospective
218 basis.

219 **Q: But isn't it true that Questar's total usage or sales is increasing and,**
220 **therefore, the CET is not needed in order for Questar to have a reasonable**
221 **opportunity to earn its allowed rate of return?**

222 A: If, by total usage, you mean the total sales of natural gas then I believe you may
223 be right: total usage is higher. However, it does not logically follow that the CET
224 is not needed.

225 Let's assume for argument sake that total usage or sales is higher than in the past.
226 This fact is irrelevant, however. Economic theory teaches that total revenues are
227 irrelevant to economic decisions; what matters are the marginal conditions.
228 According to economic theory, economic agents, firms or consumers, will engage
229 in an activity up to the point where the marginal (or additional) benefits just equal
230 or are greater than the marginal costs associated with the activity. For example,
231 according to economic theory, the firm will produce up to the point where the
232 marginal revenue is just equal to the marginal cost of producing one more unit.

233 **Q: I'm not sure I understand the significance of your response. What has**
234 **marginal revenue or marginal cost to do with the CET?**

235 A: All costs of production are what we refer to as opportunity costs, which includes a

236 fair market return on investment. Thus, if a firm's marginal revenue is at least
237 equal to its marginal cost of production, the firm has an opportunity to earn at
238 least that return by producing one more unit – when the marginal revenue is just
239 equal to the marginal cost, then the firm earns exactly that return which the
240 market determines is appropriate for the investment.

241 In the case of a regulated utility, such as Questar, the Commission determines the
242 “market” or appropriate return, which is reflected (or embedded) in its tariff rates.
243 An annual average usage level is also embedded in those rates. When Questar
244 adds a customer to its system, both revenues and costs are added to its balance
245 sheet. If the additional or marginal revenue being added equals the costs then
246 Questar will have a reasonable opportunity to earn its allowed return.

247 **Q: What if those additional costs exceed the additional revenue from adding**
248 **customers to the system?**

249 A: Provided Questar is unable to lower costs in other areas, Questar would have little
250 or no chance to earn its allowed rate of return.

251 **Q: If rates are set at a level to allow Questar an opportunity to recover its costs,**
252 **then by enacting or adopting the CET isn't the Commission guaranteeing**
253 **Questar's rate of return?**

254 A: No, not at all. The design of the CET allows Questar to collect only those DNG
255 revenues that the Commission determines are appropriate. For Questar to earn its

256 allowed rate of return, Questar must control its costs. In other words, Questar is
257 still at risk for its DNG costs and, therefore, has the same incentive to control
258 those costs as it would under traditional ratemaking.

259 **Q: Earlier you indicated that the outcome of a rate case is uncertain. Could you**
260 **explain in more detail how this uncertainty relates the Division's decision to**
261 **join in the Joint Application?**

262 A: The Division's knowledge of Questar's earnings comes from Questar's adjusted
263 historical results of operations. However, under current Utah statutes, Questar is
264 entitled to file, and the Commission can choose, a forecasted test year. If Questar
265 were to file such a rate case, based on the Division's understanding of the recent,
266 as well as historical, change in usage per customer, Questar would likely seek a
267 rate increase. Given the discrepancy in information, that is, the difference
268 between the historical information we have in hand and the range of future
269 possibilities, the outcome of a rate case is uncertain, but could likely result in a
270 rate increase.

271 The Division believes that a certain small rate decrease at this time is far more
272 beneficial than the uncertainty of the outcome to a future rate case. As the old
273 saying goes, "A bird in the hand is worth two in the bush." Furthermore, the Joint
274 Application is seeking the implementation of the CET and establishment of a
275 (new) DSM Advisory Group that combined removes the disincentive to Questar
276 of promoting DSM and ensures that Questar will aggressively pursue cost

277 effective DSM in the future.

278 **Q: If the Commission adopts the Joint Application as filed, how will the Division**
279 **monitor the performance of the CET tariff and Questar's DSM**
280 **performance?**

281 A: To a great extent, the DSM Advisory Group will monitor and report on Questar's
282 DSM performance. The Advisory Group will be reviewing the GDS DSM report
283 and making recommendations to the Commission on DSM programs that Questar
284 should be pursuing.

285 In addition to the Advisory Group's monitoring, the Division will monitor the
286 CET tariff and deferral account. The Joint Application proposes that the Division
287 provide the Commission periodic reports on the pilot program. As I mentioned
288 earlier, Questar has agreed to file with its 2005 results of operations its forecasted
289 results for 2006. Given this information, the Division can monitor and report
290 Questar's earnings to ensure that it is not earning more than the allowed rate of
291 11.2%. The Division can also randomly audit customer's bills and the CET
292 accounts to ensure that the tariff mechanism is working in a manner consistent
293 with the intent outlined in the Joint Application. Likewise, the Division can used
294 the results of operations information to assess the impact of the CET pilot on the
295 variability of Questar's revenues and, thus, the degree to which the CET removes
296 the Questar's barrier to promote DSM.

297 **Q: Does this conclude your testimony?**

298 **A:** Yes, it does. Thank you.