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Counsel for Utah Association of Energy Users

## **BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

In the Matter of the Application of Questar Gas Company to Make Tariff Modifications to Charge Transportation Customers for Peak Hour Services	Docket No. 17-057-09

## PREFILED SURREBUTTAL TESTIMONY OF NEAL TOWNSEND

The Utah Association of Energy Users (UAE) hereby submits the Prefiled Surrebuttal

Testimony of Neal Townsend in this docket.

DATED this 19<sup>th</sup> day of September 2017.

HATCH, JAMES & DODGE

/s/ <u>Phillip J. Russell</u> Gary A. Dodge Phillip J. Russell Attorneys for UAE

# Certificate of Service Docket No. 17-057-09

I hereby certify that a true and correct copy of the foregoing Prefiled Direct Testimony and Exhibit of Neal Townsend was served by email this 19<sup>th</sup> day of September 2017 on the following:

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/s/ Phillip J. Russell

# **BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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In the Matter of the Application of Questar Gas ) Company to Make Tariff Modifications to ) Charge Transportation Customers for Peak ) Hour Services

Docket No. 17-057-09

#### Surrebuttal Testimony of Neal Townsend

#### On Behalf of

#### **Utah Association of Energy Users**

September 19, 2017

1		I. INTRODUCTION AND SUMMARY
2	Q.	Please state your name and business address.
3	A.	My name is Neal Townsend. My business address is 215 South State Street, Suite
4		200, Salt Lake City, Utah, 84111.
5	Q.	By whom are you employed and in what capacity?
6	A.	I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a
7		private consulting firm specializing in economic and policy analysis applicable to energy
8		production, transportation, and consumption.
9	Q.	Are you the same Neal Townsend who provided Direct Testimony, on July 26, 2017,
10		and Rebuttal Testimony on August 25, 2017, on behalf of the Utah Association of
11		Energy Users ("UAE") in this docket?
12	A.	Yes, I am.
13	Q.	What is the purpose of your surrebuttal testimony?
14	A.	My surrebuttal testimony responds to the rebuttal testimony of Dominion Energy
15		Utah (DEU) witness Kelly B. Mendenhall and Office of Consumer Services (OCS)
16		witness Jerome D. Mierzwa regarding the allocation of costs for the new firm hourly
17		peaking service proposed by DEU.
18	Q.	Please summarize your primary conclusions and recommendations.
19	A.	There has not been a demonstration in this case that firm Transportation
20		customers have a significant hourly variance in their usage on a peak day. Further, the
21		mere existence of hourly variance on a peak day for Transportation customers would not
22		by itself show that Transportation customers contribute toward the alleged need for
23		DEU's proposed firm hourly peaking service. Transportation customers are not the

24		cause of Dominion/QGC's alleged need for this firm peaking service, must make their
25		own upstream transportation arrangements, have not requested this upstream service, and
26		should not be forced to accept it.
27		If the Commission were to determine that the costs of the Kern River contract
28		should be allocated to Transportation customers, it should be allocated on the basis of
29		hourly variance relative to upstream contract capacity, because it is the supposed lack of
30		upstream capacity that drives the need for this service.
31		
32		II. RESPONSE TO MR. MENDENHALL
33	Q.	Does DEU Witness Kelly B. Mendenhall propose that interruptible customers and
34		volumes should be utilized to allocate the costs of a peak hour service.
35	A.	No. Mr. Mendenhall explains that if interruptible customers continue to burn gas
36		on a peak day, that those customers will be charged a penalty, and that those charges will
37		be returned to other customers. The implication is that these charges would recover the
38		appropriate costs.
39	Q.	Do you agree with Mr. Mendenhall that interruptible volumes should not be
40		charged for a peak hour service?
41	A.	Yes, I do. As I describe in my rebuttal testimony, and for the reasons Mr.
42		Mendenhall provides, it would be completely inappropriate to allocate costs for a firm
43		hourly peaking service based on interruptible volumes.
44	Q.	Does Mr. Mendenhall demonstrate that the hourly demand for firm Transportation
45		customers is not evenly distributed across the peak day?

46	A.	No, rather Mr. Mendenhall points to Exhibit DEU 1.9R, which shows that DEU's
47		estimated hourly demand for Sales and Transportation customers will not be distributed
48		evenly throughout the peak day. Mr. Mendenhall describes three flat lines in the exhibit
49		representing firm upstream capacity of all Sales customers, the assumed firm upstream
50		capacity of all Transportation customers, and the firm upstream capacity for the special
51		contract customer. The blue line on the graph represents DEU's projected actual gas
52		demand on the system by all customers combined—Sales and Transportation customers.
53		Mr. Mendenhall claims that, without firm peaking service, the upstream pipelines can
54		only provide the actual projected volumes above the firm contract capacities on an
55		operationally available basis on the peak design day. <sup>1</sup> These volumes are labeled in the
56		chart in Exhibit DEU 1.9R as "Interruptible Capacity."

## 57 Q. What is your assessment of Exhibit DEU 1.9R?

58 A. I have concerns with Mr. Mendenhall's suggestion that DEU 1.9R provides 59 evidence that the hourly demand for firm Transportation customers would not be evenly distributed throughout a peak day. The blue line that is used to represent the estimated 60 61 hourly usage includes all Transportation and Sales customers. Indeed, the volume under 62 the blue line and above the firm upstream capacity level is labeled "Interruptible 63 Capacity" and appears to also include interruptible volumes. One cannot determine from this exhibit whether the variation being shown comes from Sales customers, interruptible 64 65 volumes, or firm Transportation customers. 66 I have further concerns with the area labeled "Interruptible Capacity," which

67 purportedly represents hourly variable demand that could only be served operationally on

<sup>&</sup>lt;sup>1</sup> Mendenhall Rebuttal, DEU 1.0R, pp. 10.

68		an "as available" basis without firm peaking service. Interruptible volumes that would be
69		curtailed on a peak day should not be included in this analysis. Those who do not curtail
70		would be charged a substantial penalty, which would likely more than offset any
71		associated costs for other customers. Interruptible transportation volumes do not
72		contribute to the alleged need for a peak hour service, in that they would be curtailed or
73		significantly penalized. DEU 1.9R does not provide evidence of variation in firm
74		transportation volumes on the peak day, nor does it provide evidence that non-
75		interruptible volumes exceed upstream capacity on a peak day.
76	Q.	Does Mr. Mendenhall provide any usage data for firm Transportation customers
77		that excludes sales customers and interruptible volumes?
78	A.	Yes. Mr. Mendenhall provides some such data in DEU 1.10RC.
79	Q.	Do you have any comments on DEU 1.10RC?
80	A.	I would note that the Exhibit shows firm Transportation customers' average
81		hourly and daily usage over a three-month time period last winter. It does not purport to
82		reflect projected usage on a peak design day.
83	Q.	Even if the exhibit were relevant to peak day usage, how does the usage data for
84		firm Transportation customers in DEU 1.10RC compare to the usage of
85		interruptible volumes and firm sales customers?
86	A.	Exhibit DEU 1.10RC shows the Transportation customers average firm hourly
87		and daily usage. The variation in average hourly peak compared to average daily use is
88		roughly 7 percent. <sup>2</sup> This is less than half of the percentage variation in Transportation
89		

 $<sup>^{2}</sup>$  6978/6501-1 = 7.3%.

90		volumes. Moreover, heating load typically has 35 percent more volume flowing during
91		the peak hour, which is about a 5 times greater percentage variation than firm
92		Transportation customers. The vast majority of Sales customers are heating load. <sup>3</sup>
93	Q.	The data in DEU 1.10RC shows the variation in average hourly consumption
94		compared to the average daily usage during the winter. Is this usage data
95		representative of the conditions on a peak day when the firm hourly peaking service
96		would allegedly be needed?
97	A.	I do not find any evidence in this docket that purports to show any relationship
98		between average hourly variation compared to the estimated hourly variation that would
99		occur on a peak day. Mr. Mendenhall provides Exhibit DEU 1.3 that purports to show
100		the estimated overall system peak hour differential of 17% on the peak day. However,
101		remember that most Sales customers, constituting 86.1% of peak day usage, <sup>4</sup> are heating
102		load which typically has 35% more flow during the peak hour. <sup>5</sup> Firm Transportation
103		customers, which constitute 13.9% of peak day usage, <sup>6</sup> are claimed to have an <i>average</i>
104		hourly variation of only about 7%. <sup>7</sup> One cannot reasonably draw any definitive
105		conclusions about the composition or contribution to peak day variance from average
106		hourly usage information. In fact, the projected overall system peak hour differential on

<sup>&</sup>lt;sup>3</sup> DEU Data Response to OCS 4.03(a): "The vast majority of Sales customers are heating load. Heating load typically has approximately 35% more volume flowing during the peak-hour."
<sup>4</sup> Mendenhall Direct Exhibit QGC 1.0C, pp 5.
<sup>5</sup> DEU Data Response to OCS 4.03(a).
<sup>6</sup> Mendenhall Direct Exhibit QGC 1.0C, pp 5.
<sup>7</sup> Exhibit DEU 1.10RC.

107 a *peak day* is substantially less than the weighted average of the *average* peak hour
 108 variation of firm Sales *and* Transportation customers.<sup>8</sup>

109 Q. What other evidence does Mr. Mendenhall offer to suggest that Transportation

- 110 customers contribute to the alleged peak hour need?
- A. Mr. Mendenhall states that the number of Transportation customers on the system continues to grow each year and that the percentage of these customers using natural gas primarily for space and water heat is growing as a percentage of the total Transportation customer base. Also, manufacturing loads and the electric generation customer loads (excluding Lakeside) of Transportation customers have variability. Mr. Mendenhall claims that this is evidence that Transportation customers do, in fact, contribute to the need for peak hour service.<sup>9</sup>
- 118 **Q.** How do you respond to these arguments?

119 A. While I agree with Mr. Mendenhall that heating load contributes more to hourly

120 variance than some other types of loads, his claims about past growth in the number of

121 Transportation customers and his assertions about the current variability in firm

122 Transportation loads do not make a persuasive case that Transportation customers

123 contribute to the alleged need for an hourly *firm peaking* service.

124

<sup>&</sup>lt;sup>8</sup> Weighted average =  $(13.9\% \times 7\%) + (86.1\% \times 35\%) = 31.1\%$ ; assumes firm Sales customers demand is the same as heating load which typically has 35% more volume flowing during the peak hour.

<sup>&</sup>lt;sup>9</sup> Mendenhall Rebuttal Exhibit DEU 1.0R, pp 11.

125

#### III. RESPONSE TO MR. MIERZWA

- 126 Q. OCS Witness Jerome D. Mierzwa states that Transportation customers are
- 127 contributing to hourly fluctuations in usage. What evidence does Mr. Mierzwa rely
  128 on to make this claim?
- 129 Mr. Mierzwa states that occasions on which firm Transportation customers usage A. 130 is limited to the daily firm contract limit are not common, nor are the design peak days 131 for which DEU claims it is necessary to purchase firm peaking service. Given this lack 132 of data, Mr. Mierzwa states that it is reasonable to assume that the hourly fluctuations 133 shown in Exhibit QGC 1.5 are representative of those that would exist if customers were 134 limited to their daily firm contract limit under design peak day conditions. Mr. Mierzwa 135 also states that I have not provided evidence to show that Exhibit QGC 1.5 is not representative.<sup>10</sup> 136
- 137

**O**.

## How do you respond to Mr. Mierzwa?

138A.In my view, the burden of proof should be to provide evidence that any given data139is representative of a given circumstance, not the other way around. It is more difficult to140prove a negative. I do agree with Mr. Mierzwa that DEU has not provided sufficient data141to demonstrate fluctuations in the hourly demands of *firm* Transportation customers on a142*peak day*. However, I disagree that QGC Exhibit 1.5 has been shown by anyone to be143representative of expected fluctuations in hourly demands of *firm* Transportation144customers on a *peak day*.

145 Q. Please elaborate.

<sup>&</sup>lt;sup>10</sup> Rebuttal Testimony of Jerome D. Mierzwa; OCS-1R, pp 7-8.

146	A.	As noted above, it is completely inappropriate to allocate costs for an alleged peak
147		service need based on <i>interruptible</i> volumes; therefore, QGC 1.5—which includes
148		interruptible volumes—is not a representative data set. DEU 1.10RC actually provides
149		the same average hourly and daily usage of firm Transportation customers, but it
150		excludes interruptible volumes. The hourly variation shown in that exhibit is 7%
151		compared to 17% variation in the dataset that includes interruptible volumes. Further, as
152		indicated above, no one has demonstrated that average data is indicative of peak day
153		usage; no definitive conclusions can be reached. At the very least, the usage data in DEU
154		1.10RC that excludes interruptible volumes is superior to the data in QGC 1.5.
155	Q.	Mr. Mierzwa states that while he agrees that the use of the system during a peak
156		hour does not by itself justify an assignment of costs, since Transportation
157		customers are contributing to hourly fluctuations in usage he claims that justifies an
158		assignment of costs for the allegedly needed firm hourly peaking service. <sup>11</sup> How do
158 159		assignment of costs for the allegedly needed firm hourly peaking service. <sup>11</sup> How do you respond?
	A.	
159	A.	you respond?
159 160	A.	you respond? DEU's proposed firm hourly peaking service is a form of upstream capacity that
159 160 161	A.	you respond? DEU's proposed firm hourly peaking service is a form of upstream capacity that DEU claims is needed to meet peak day needs. In other words, it is claiming that there is
159 160 161 162	A.	you respond? DEU's proposed firm hourly peaking service is a form of upstream capacity that DEU claims is needed to meet peak day needs. In other words, it is claiming that there is insufficient upstream capacity on a peak day relative to the hourly fluctuations in overall
159 160 161 162 163	A.	you respond? DEU's proposed firm hourly peaking service is a form of upstream capacity that DEU claims is needed to meet peak day needs. In other words, it is claiming that there is insufficient upstream capacity on a peak day relative to the hourly fluctuations in overall system demand. Fluctuations in average usage are not the problem that DEU is

167		Transportation customers are responsible to purchase their own upstream capacity
168		from suppliers the same way DEU is responsible to purchase upstream capacity for its
169		Sales customers. While firm Transportation customers may have relatively minor
170		average hourly usage fluctuations (5 times less than typical heating loads), there is no
171		evidence to show that Transportation customers have not or will not secure sufficient
172		upstream capacity on a peak day.
173		
174		IV. CONCLUSION
175	Q.	What does the data provided in this case tell you about the variation in hourly
176		demand on DEU's system?
177	A.	Exhibit QGC 1.3 shows that the projected hourly variance on a projected peak day
178		for the overall system is 17 percent. DEU 1.10RC shows that firm Transportation
179		customer average hourly variance during the last winter was only about 7 percent. DEU
180		Sales customers, which are primarily heating load, generally have an hourly variance of
181		35 percent. Although no data shows firm Transportation customers' projected hourly
182		variance on a peak day, it is apparent that Transportation customers have significantly
183		less hourly variance on average than heating load customers.
184	Q.	What is your recommendation to the Commission?
185	A.	I maintain that DEU has not demonstrated a need for its proposed firm hourly
186		peaking service. If the Commission nevertheless approves such a service, I recommend
187		that the Commission reject DEU's proposal to allocate any portion of the firm hourly
188		peaking costs to Transportation customers. There is no evidence that firm Transportation
189		customers lack sufficient upstream capacity to accommodate hourly variations on a peak

190day and would thus contribute to the need for a firm hourly peaking service. No data191provided in this docket shows the amount of variance firm Transportation customers are192projected to have on a *peak day*. However, the evidence clearly shows that firm193Transportation customers have minimal *average* hourly variance compare to the rest of194DEU's system.

Further, it is inappropriate at this time for DEU to "step into the shoes" of upstream service relationships for Transportation customers the first time this alleged need is announced. To the extent that some solution is shown to be needed to meet peak hour needs, there should be an opportunity for Transportation customers to make other upstream arrangements to accommodate the same. Transportation customers do not currently look to DEU for upstream services and should not be forced to do so here. At the very least, if the Commission concludes that firm hourly peaking service

202 costs should be allocated to Transportation customers, they should be allocated based on 203 hourly demand variance, not total volumes. The alleged need for this service is driven by 204 the hourly variance in usage relative to upstream capacity, so it would be appropriate to 205 allocate its costs on the same basis to align costs with causation.

#### 206 Q. Does this conclude your surrebuttal testimony?

Yes.

207 A.