BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE PASSTHROUGH APPLICATION OF DOMINION ENERGY UTAH FOR AN ADJUSTMENT IN RATES AND CHARGES FOR NATURAL GAS SERVICE IN UTAH

Docket No. 17-057-20

REBUTTAL TESTIMONY OF MICHAEL L. PLATT FOR DOMINION ENERGY UTAH

May 9, 2018

DEU Exhibit 2.0R

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LAKE SIDE DEMAND AND THE UNSTEADY-STATE MODEL	1
III.	THE JOINT OPERATIONS AGREEMENT RESULTS	4
IV.	SYSTEM ENHANCEMENTS IN PLACE OF FIRM PEAKING SERVICES	6
V.	REQUIRED PEAK HOUR VOLUMES	7
VI.	OTHER CLARIFICATIONS	8

I. INTRODUCTION

- 2 Q. Please state your name and business address.
- 3 A. My name is Michael L. Platt. My business address is 1140 West 200 South, Salt Lake
- 4 City, UT 84104.

1

15

19

- 5 Q. Did you file direct testimony in this proceeding?
- 6 A. Yes. My direct testimony was filed as DEU Exhibit 2.0.
- 7 Q. What is the purpose of your rebuttal testimony?
- 8 A. The purpose of my rebuttal testimony is to clarify why I included the full contracted
- 9 volumes for the Lake Side Power Generation Facility (Lake Side) in the unsteady-state
- model. I also discuss the 2015-2016 Joint Operations Agreement process. In addition, I
- review potential system improvements that others allege could reduce the need for Firm
- Peaking Service. I further explain the amount of Firm Peaking Service required. Lastly,
- I discuss other misunderstandings that were present in the direct testimony provided by
- the Division of Public Utilities and Office of Consumer Services.

II. LAKE SIDE DEMAND AND THE UNSTEADY-STATE MODEL

- 16 Q. Mr. Wheelwright expresses concern about the fact that you have included the full
- 17 contract amount for Lake Side instead of an estimate of actual usage. Can you explain
- why you have chosen to take this approach?
- 20 A. Yes. It is appropriate to include the full contract amount for Lake Side for a number of
- 21 reasons. First, the agreements governing service at Lake Side require that delivered
- volumes be burned evenly throughout the day. We call the even delivery and use of
- volumes "steady state." Though Lake Side has not used the entire contracted amount in a
- single day in the past, the Company must have the ability to deliver that volume, should
- Lake Side choose to utilize its full contract amount because Lakeside has paid for this

45

26	cap	pacity on the system. The reasons the Company chooses to model Lake Side as it does
27	are	
28	1.	The Lake Side contract(s) states that the Daily Contract Limit (DCL) must be burned
29		on a steady-state basis.
30	2.	The facility's total undiversified connected demand is equal to the DCL. This means
31		that all the existing equipment at the Lake Side facility is only capable of using the
32		DCL, if everything burns all day.
33	3.	Lake Side has never used more than the contractual firm requirement.
34	4.	Lake Side is required to use only the amount of gas flowing into the system intended
35		for their use at any given moment.
36	5.	The Company has the ability to flow control volumes under the second Lake Side
37		agreement. This is the gas that comes from the DEQP system through FL26, to the
38		Lake Side plant.
39	6.	Demand swings, at the Lake Side plant, are typically supplied from the Saratoga Tap
40		from Kern River on the FL104 feed into Lake Side.
41	7.	Lake Side's peak hour usually does not coincide with the General Service customer
42		peak hour.
43	8.	Lake Side's demand has historically been lowest during heating season.

9. The Company is not contractually obligated to serve more than the DCL on a rate

basis, but must plan to serve up to the DCL on a Design-Peak Day.

46	Q.	Mr. Wheelwright suggests that the Company should include Lake Side usage patterns
47		in your model, rather than modeling it on a steady-state basis at its full contracted
48		capacity. Would doing so affect the Peak Hour estimate?
49	A.	Yes, it would. If the Company modeled the Lake Side plant with a peak hour above its
50		maximum contractual limit and coincident with the sales customer peak hour, the
51		Company would require considerably more Firm Peaking Service. If I applied the hourly
52		fluctuation outlined in Mr. Wheelwright's testimony to the daily contract limit for Lake
53		Side in my model, the Company would need an additional 170,000 Dth/day Firm Peaking
54		Service to meet the Peak-Hour demand of sales customers, and of the hypothetical Lake
55		Side usage. Again, as I mentioned above, on a Design-Peak Day, Lake Side would not be
56		permitted to exceed the hourly average of its maximum daily contract limit and,
57		therefore, Mr. Wheelwright's theory is strictly hypothetical.
58	Q.	Is it reasonable to assume that the Lake Side power plant would exceed contractual
59		limits on a Design-Peak Day when they have never done so during non-peak
60		conditions?
61	A.	No. Lake Side has given the Company no indication that it would exceed its maximum
62		contract limit under any circumstances. In fact, if Lake Side wanted to use more than the
63		contracted maximum volumes, the Company would need to redesign the meter set and
64		ensure that all facilities and pipes were capable of delivering the additional gas.
65	Q.	Would deliveries in excess of the maximum contractual limit at Lake Side cause
66		problems on the DEUWI system?
67	A.	No. The Company has a control valve on the Feeder Line leading from the Dominion
68		Energy Questar Pipeline (DEQP) system to the Lake Side meter set, and could control
69		deliveries to Lake Side using the valve. The pipe connecting the Lake Side plant to the
70		Kern River Gas Transmission Company (Kern River) pipeline is isolated from the

86

87

88

89

90

91

92

93

94

95

96

73	Q.	Has the Company used the control valve on the FL26 feed to Lake Side?
72		on the DEUWI system.
71		majority DEU's customers and increased flows to that point would not impact pressures

- 74 A. Yes. The Company's Gas Control department utilizes this valve almost daily to ensure 75 that flow to Lake Side matches flow from DEQP onto the DEUWI system.
- Q. Mr. Lubow indicates, at Lines 432-436 of his testimony, that the Lake Side plant has never been subjected to flow control. Is this correct?
- A. It is, but it is necessary to explain further to clear up some apparent confusion. The
 Company has never curtailed Lake Side by forcing it to reduce total flow to the plant.
 However, there is a valve on the pipeline upstream from Lake Side that can be utilized to
 control the flow for operational purposes. The Company has utilized this upstream valve
 to manage its system, but it has never used the valve to curtail deliveries to Lake Side.

Q. Mr. Wheelwright suggests that modeling the Lake Side usage in the fashion he describes would somehow reduce the need for Peak Hour Services. Do you agree?

A. No. I agree with the Division's own experts who say that the Lake Side usage does not impact the Peak-Hour need. Mr. DiPalma states that "the Lake Side Peak Hour does not coincide with the DEU system Peak Hour and therefore does not directly impact the Company's Peak-Hour need." DiPalma Direct at Line 497. Mr. Lubow agrees. He states that the Lake Side Peak-Hour "does not impact the Company's Peak-Hour need." Lubow Direct at Line 176. Further, as I mentioned previously, when I conducted modeling using Mr. Wheelwright's theory, the result was a substantial *increase* in need for Firm Peaking Services. I do not recommend purchasing Firm Peaking Services at that level because, from a system design perspective, the Lake Side plant does not contribute to the peak hour.

III. THE JOINT OPERATIONS AGREEMENT RESULTS

- 97 Q. Mr. Orton is under the impression that the 2015 Joint Operations Agreement (JOA) 98 did not result in an acceptable operating plan for the heating season, Orton Direct at 99 line 58. Is this a correct conclusion?
- 100 No. When DEU and DEQP completed the JOA discussions, DEU planned that, on a A. 101 Design-Peak Day, it would purchase additional supply, have it delivered at Goshen and then backhauled to the DEU Payson gate station. "Backhauling" is transporting gas on 102 103 an interruptible basis in the opposite direction of primary flow. Additionally, this 104 solution is contingent upon supplies being available for purchase at Goshen. On a 105 Design-Peak Day, there is risk that there would be no supply available for purchase at 106 Goshen. Therefore, as Mr. Schwarzenbach discusses in his Direct Testimony, this was an 107 adequate short-term solution, but the Company required a more reliable, firm, cost-108 effective, longer-term solution.

109 Q. Did DEQP propose backhaul as a solution to meet peak hour demand?

- 110 A. No. DEU determined that the only viable way to meet our customers' needs was to
 111 backhaul from Goshen to Payson. DEQP verified that the Payson gate had capacity and
 112 could be used to make up the difference. This was determined by iterating through more
 113 modeling steps.
- 114 Q. Why did the Company choose to explore options other than the short-term solution 115 described above to provide firm service to customers during the peak hour?
- 116 A. The backhaul option was interruptible and is also subject to cost risk. The Firm Peaking
 117 Service contracts provide a better solution because they provide firm service at a stable
 118 cost. DEU Exhibit 3.8 compares the options of backhaul and Firm Peaking Services.

- 120 Mr. Lubow indicates, "LDCs generally rely upon upstream pipelines to continue to 120 provide service, whether they are contractually obligated to do so or not." Lubow 121 Direct at line 479. Would it be wise to operate in this manner given that DEQP 122 notified the Company that it could not meet the Company's Design-Peak Day 123 requirements on a firm basis and Kern River has issued similar warnings?
- 124 A. Absolutely not. The Company should not find comfort in the fact that it has not 125 experienced a Peak Hour shortfall, and fail to take steps to prevent one. I liken this to 126 driving without a seatbelt or texting while driving. Though some people may drive 127 without a seatbelt, or text while driving without suffering an accident, it is absolutely not 128 safe to do so. Relying on short-term solutions with significant reliability risk would also 129 not be wise. Mr. Lubow may be inclined to deploy risky solutions from his position as a 130 third-party consultant, but as one of the people responsible to ensure that our customers 131 continue to receive safe and reliable service on the coldest of days, I am not comfortable 132 taking that risk.

IV. SYSTEM ENHANCEMENTS IN PLACE OF FIRM PEAKING SERVICES

- Q. Mr. Orton believes that the Company could install compressor stations to increase system pressures during the peak hour. Do you agree?
- A. While Mr. Orton is correct that compressors are often used to increase pressures on pipelines, the use of compressors for this purpose isn't a viable option. First, adding compression would mean that upstream pipelines would have to deliver more volumes to the DEUWI system. In order for that to occur, DEU would need to purchase additional upstream transportation at additional cost. Additionally, the DEUWI system would need to be uprated to take full advantage of compression.

Q. Will the FL23 replacement eliminate the need for Firm-Peaking Service?

A. No. The Company will still need Firm Peaking Service. While the replacement of FL23 will increase the flows and pressures on the DEUWI system, without transportation service to increase the amount of gas received into the system, there will be no change in the overall system result. The replacement will increase the usable Firm-Peaking Service, as it increases the take-away capacity from the Hyrum gate. It is not likely to provide enough Firm-Peaking Service to meet all the customers' needs on a Design-Peak Day.

V. REQUIRED PEAK HOUR VOLUMES

Q. How much Firm Peaking Service is required to reliably operate on a Design-Peak Day?

A. The answer to this question is not as easy to determine as solving the unsteady-state model and finding the number required. While the model in this case indicated that 340,375 Dth/day is needed, the models solve with a set of initial conditions and variables that may or may not be accurate on an actual Design-Peak Day. Furthermore, when the System Planning and Analysis group determines a set of operating conditions, the engineer may run as many simulations as needed to come to an acceptable solution. If the Company experiences a Design-Peak Day in the real world, Gas Control will have one shot to get it right. While our 2017-2018 Joint Operations Agreement analysis solved with 340,375 Dth/day of Firm Peaking Service on the second iteration, the initial line pack in the system may be lower which would mean the system would require additional Firm Peaking Service. The amount the Company reserved is within a reasonable range based upon an objective assessment of system peak hourly requirements.

166	Q.	Mr. Mierzwa has suggested that the Company should have planned for a lower
167		Design-Peak Day demand and as a result, the Company requires 44,000 Dth/day less
168		of Firm Peaking Services. Mierzwa Direct at lines 281 through 284, and 341-344. Do
169		you agree?
170	A.	If the Company were to reduce its Design-Peak Day demand, the Company would not
171		need as much Firm Peaking Service. When I reduce the 2017-2018 unsteady-state model
172		to reflect Mr. Mierzwa's adjusted Design-Peak Day estimate, it solves with 300,380
173		Dth/day of peak-hour volumes. This is about 40,000 Dth/day less than the 340,375
174		Dth/day requirement provided in my direct testimony.
175	Q.	On line 348 of his testimony, Mr. Mierzwa suggests that the Company has not
176		adequately explored the use of line pack to serve the peak hour demands. Do you
177		agree with Mr. Mierzwa?
178	A.	No. As I explained in my direct testimony, the Company already uses all the line pack on
179		its system that can reasonably be used and the unsteady state model assumes maximum
180		line peak usage when calculating system pressures. Peak hour demands cannot be
181		calculated using simple addition and subtraction, as Mr. Mierzwa suggests. A system
182		model must be used to calculate how much available pack may be used to meet customer
183		needs. The Company's system differs from an upstream pipeline because Interstate
184		pipeline companies typically have more line pack available due to their system operation
185		and customer composition. To the extent Mr. Mierzwa believes that the Company should
186		utilize the line pack on the upstream pipeline, the Company does so as part of the Firm
187		Peaking Service. Without the service, the Company cannot utilize the upstream pipelines
188		in that fashion on a firm basis.

OTHER CLARIFICATIONS

VI.

190	Q.	In Doug Wheelwright's testimony, on lines 61-63, he states that Exhibit 2.4 assumes
191		that Clay Basin, the Aquifers, and every other option for market purchases were
192		ignored. Is this a true statement?
193	A.	No. In the Design-Peak Day unsteady-state model, the Company assumes that the
194		Aquifers and Clay Basin are fully utilized. The model already assumes that every
195		resource is functioning properly and that all nominated volumes from storage and
196		elsewhere are arriving as planned. Even when the Company calls upon all of its
197		resources, it will not be able to exceed its RDC on the Peak Hour of the Design-Peak
198		Day.
199		Moreover, we know from recent experience that, on cold days, our supplies do not
200		always arrive. As, Mr. Schwarzenbach explains in his testimony, on line 358: "During
201		cold weather periods, supplies are more scarce and, if available, more expensive." It is
202		possible that the Company would have no recourse if gas that has been historically
203		delivered, was not operationally available when needed.
204	Q.	On line 103 of his testimony, Mr. Lubow claims that the Company "fails to follow
205		industry practices in a number of ways relevant to peak-period planning". Is this
206		statement accurate?
207	A.	No. Mr. Lubow's colleague, Mr. DiPalma accurately assesses the Company's adherence
208		to industry practice. Mr. DiPalma is an engineer with significant operations experience.
209		At line 367 of his testimony, Mr. DiPalma states: "The Company utilizes state-of-the-art
210		hydraulic network analysis models, appropriately engages a variety of model inputs and
211		employs a skilled workforce. And based on the verification results of the steady-state
212		and unsteady state models, the models are accurate to be used for their intended purpose.'
213		Mr. DiPalma also states the Company is using industry best practices in terms of the
214		software and annual model build process. DiPalma Direct at Lines 284-313.

215		During my ten years of employment at DEU, I have observed and participated in
216		discussions and efforts to improve the accuracy and overall quality of many work
217		products including the Company's Design-Peak Day model and other relevant planning
218		tools.
219	Q.	Mr. Lubow states that the Company has never lost a firm sales customer due to an
220		event such as the one presented in your direct testimony. Is this evidence that the
221		Company should not take action to solve a known problem?
222	A.	No. Using historic actual usage as an upper limit to plan for rare, extreme future events
223		is imprudent and inconsistent with industry practice. On the other hand, using historical
224		temperatures with up-to-date demand data is an industry best practice and should be used
225		to forecast these future extreme events. If the Company failed to prepare for an extreme
226		event, and to take actions that could prevent loss of service during such an event,
227		customers could lose service at a time when they are least able to manage without it. The
228		Company takes its mandate to provide safe and reliable service, even on the coldest of
229		days, very seriously. As a prudent company, DEU should work to prevent such a
230		catastrophe from happening.
231	Q.	Mr. Lubow refers to Magnum Energy's (Magnum) proposal for storage to support
232		DEU's Peak-Hour demands as an "on-system" solution. Do you consider the
233		Magnum proposal to be "on-system"?
234	A.	No. The Magnum facility is more than 70 miles away from the DEUWI system. I would
235		consider an "on-system" storage option to be one that is coincident, or very near to the
236		DEUWI system. I do not consider the Magnum facility to be on-system.

A.

Yes.

237	Ų.	At times 415 through 419 of his testimony, Mr. Ludow states that DEO could interrupt
238		its largest 13 customers (excluding Lake Side) and have access to combined volumes
239		of 193,470 Dth, thereby offsetting any need for Firm Peaking Services. Is his
240		calculation correct?
241	A.	No. Mr. Lubow mistakenly assumes that these maximum flows are all firm. The
242		volumes he identifies include significant interruptible volumes that would already be
243		curtailed during a Design-Peak Day and, for that reason, have been excluded from the
244		Company's Design Day demand estimate. Additionally, the load profiles of some of
245		these customers occur at different times of the day, and interrupting their loads would not
246		have as large of a contribution towards reducing peak day.
247	Q.	Does this conclude your testimony?

State of Utah)
) ss
County of Salt Lake)

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

Michael L. Platt

SUBSCRIBED AND SWORN TO this 9th day of May, 2018.

Notary Public

