

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE REQUEST OF
DOMINION ENERGY UTAH FOR
APPROVAL OF A VOLUNTARY
RESOURCE DECISION TO CONSTRUCT
AN LNG FACILITY

Docket No. 19-057-13

**REBUTTAL TESTIMONY OF WILLIAM F. SCHWARZENBACH
FOR DOMINION ENERGY UTAH**

September 12, 2019

DEU Exhibit 3.0R

1 **Q. Please state your name and business address.**

2 A. My name is William F. Schwarzenbach. My business address is 333 S. State, Salt Lake
3 City, UT.

4 **Q. Are you the same William F. Schwarzenbach that submitted prefiled direct**
5 **testimony in this docket?**

6 A. Yes.

7 **Q. What is the purpose of your rebuttal testimony?**

8 A. I rebut portions of the pre-filed direct testimonies of Douglas D. Wheelwright and Alex
9 Ware. Specifically, I address issues those witnesses raised related to Dominion Energy
10 Utah's (DEU's) short-term plans for providing supply reliability and suggestions that
11 additional use of Kern River Gas Transmission (KRGT) services would reduce risk and
12 provide access to additional gas storage. I also clarify some information that was
13 provided to Mr. Wheelwright in discovery.

14 **Q. In his direct testimony (Pre-filed Direct Testimony of Douglas D. Wheelwright**
15 **(Wheelwright Direct) at Lines 132-137), Mr. Wheelwright claims: "DEU does not**
16 **appear to be concerned and has not offered any discussions regarding current**
17 **mitigation efforts for exposure to this risk for the next few years." Do you agree?**

18 A. No. Mr. Wheelwright assumes because this docket has been focused on long-term
19 solutions, that DEU has not evaluated any options for short-term solutions.
20 Unfortunately, DEU has not found any currently available short-term solutions that
21 would meet the identified supply reliability needs. However, DEU plans to utilize all
22 available resources, including purchasing gas delivered to DEU's city gates and utilizing
23 existing transportation and storage resources, in order to minimize the impact of supply
24 shortfalls. These resources should only be considered temporary "stop-gap" solutions.

25 Mr. Wheelwright suggests that additional storage may satisfy the need. The Company
26 considered trying to obtain additional storage capacity at Clay Basin in the short-term,
27 however, on a Design Day, upstream capacity will likely be constrained. This would limit

28 the amount of withdrawal capacity that could be delivered to the Wasatch Front even if
29 DEU had the additional storage capacity.

30 **Q. Mr. Wheelwright suggests the risk of supply shortfalls could be reduced if DEU**
31 **were to obtain additional supply from KRGT rather than Dominion Energy**
32 **Questar Pipeline (DEQP) (Wheelwright Direct at Lines 183-191). Do you agree?**

33 A. No. As Mr. Wheelwright noted in his testimony, DEU has experienced fewer cuts
34 relating to supplies being transported on KRGT because DEU transports less gas on
35 KRGT than it does on DEQP. If this ratio were to change, the amount of cuts experienced
36 on KRGT would likely increase. In part, this increase would be due to exposure (i.e.
37 more gas being transported). An increase would also be likely because the additional gas
38 being sourced onto KRGT would have to come from an increased number of locations.
39 Many of these locations would be similar geographically to the gas being sourced to
40 DEQP resulting in similar risk and effectively negating any recognized benefit of
41 multiple KRGT supply sources.

42 It is also important to note that the KRGT pipeline (parallel 36-inch pipes) also crosses a
43 major fault along the Wasatch Front. This would make it subject to many of the same
44 risks that would be mitigated with an on-system LNG facility.

45 **Q. Mr. Wheelwright also states that “additional access points to the Kern River**
46 **Pipeline could potentially reduce the risk and exposure to cold weather events,**
47 **earthquakes, landslides, human error and third party damages to the system more**
48 **efficiently than the proposed LNG facility.” (Wheelwright Direct at Lines 251-254)**
49 **Do you agree?**

50 A. No. While there are several benefits of adding additional “access points” to KRGT, I do
51 not agree that this will reduce risk as Mr. Wheelwright suggests.

52 DEU is currently in the process of adding a new gate station for additional access to
53 KRGT. This will allow for additional supply to come from the KRGT system. While this
54 will provide for some diversity in the locations where supply is provided, it will not
55 mitigate the risks he describes.

56 Kern River Gas Transmission's pipeline begins in Opal, Wyoming. Therefore, the
57 supplies that will be transported on KRGT will generally still come from the same supply
58 basins or interstate pipelines that serve the DEQP pipeline. The supplies into this pipeline
59 will likely be subject to the same weather events as the supplies into DEQP. In some
60 instances, the supplies may actually even be transported on the DEQP pipeline before
61 being transported on KRGT.

62 The KRGT pipelines also cross a major fault line in the Wasatch Front prior to delivering
63 into the DEU system. The fact that both 36-inch pipelines run in parallel, compared to
64 multiple DEQP pipelines in different areas, may actually result in increased risk for
65 supplies being transported on KRGT.

66 As a final point, Kern River did not respond to DEU's Request for Proposal.

67 **Q. The Office of Consumer Service witness, Alex Ware, also argues that there are**
68 **“valid planning scenarios that remain unanalyzed at this time.” (Pre-filed Direct**
69 **Testimony of Alex Ware (Ware Direct) at Lines 344-389). Do you agree?**

70 A. No. Mr. Ware provides examples such as utilizing “gas storage deliveries from the south”
71 and the use of no-notice transportation service on KRGT as “potential solutions” that
72 were allegedly overlooked. These alternatives were not considered in the evaluation
73 because they do not exist and were not proposed by any company in response to the
74 Supply Reliability RFP.

75 **Q. Does KRGT have existing storage on its system south of the DEU demand center?**

76 A. No. KRGT does not have access to any existing storage on its system to the south of the
77 DEU demand center.

78 **Q. Did DEU complete an analysis of the four proposed storage solutions that were**
79 **proposed for south of the DEU demand center?**

80 A. Yes. The Company evaluated the options that included storage solutions south of the
81 DEU demand center and included the results in the evaluation summary provided in my
82 direct testimony as DEU Exhibit 3.03 Supply Reliability Evaluation.

83 **Q. Did any other storage providers propose storage options in response to the Supply**
84 **Reliability RFP?**

85 A. No.

86 **Q. Did KRGT receive a copy of the Supply Reliability RFP?**

87 A. Yes. Additionally KRGT was a participant in the Supply Reliability Bidders Conference.

88 **Q. Did KRGT provide a proposal in response to the Supply Reliability RFP?**

89 A. No.

90 **Q. Mr. Ware also suggests that no-notice transportation service (NNT) on KRGT**
91 **would “provide the benefit of additional gas supply not being subject to the NAESB**
92 **scheduling cycle”. (Ware Direct at Line 356-371) Is this a viable alternative?**

93 A. No. No-notice transportation on KRGT does not currently exist and without a variable
94 gas supply source the service may not provide any additional supply.

95 **Q. Was an evaluation of NNT service on KRGT completed in the analysis of any of the**
96 **proposals?**

97 A. Yes. One proposal included a need for NNT service on KRGT. Since this service does
98 not currently exist, and the proposal did not include any estimate for the cost or details of
99 such a service, DEU reached out to KRGT to determine the viability of such a service
100 and develop an estimated cost. KRGT indicated that a service does not currently exist and
101 that pricing for such a service was not available.

102 **Q. Did Mr. Wheelwright or Mr. Ware present any viable options that DEU failed to**
103 **evaluate.**

104 A. No.

105 **Q. Do you have any additional clarifications to present?**

106 A. Yes. Mr. Wheelwright states “the identified schedule for completion of the LNG facility
107 does not meet the stated in service requirement as outlined in the RFP.” This was based
108 on a data request response that he received from the company (DPU 3.17). Based on the
109 Rebuttal testimony provided by Mr. Gill, I have updated DPU 3.17 to show the LNG

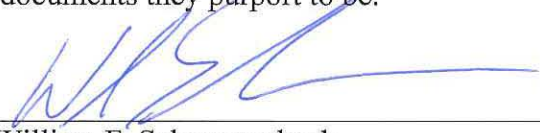
110 facility fill schedule beginning in September 2022. This is provided as DEU Exhibit
111 3.01R.

112 **Q. Does this conclude your testimony?**

113 **A. Yes.**

State of Utah)
) ss.
County of Salt Lake)

I, William F. Schwarzenbach, 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.



William F. Schwarzenbach

SUBSCRIBED AND SWORN TO this 12 day of September, 2019.





Notary Public

Annual Demand 120,576,300

Month	Daily Firm Sales (Dth)	Daily Service Production (Dth)	Daily Demand and Storage (Dth)	Required Purchases or (Cuts) (Dth)	Daily Purchased Gas (Dth)	Daily Required Cuts (Dth)	Daily LNG Liquefaction (Injection) (Dth)	Daily LNG Vaporization (Withdrawal) (Dth)	Daily LNG (Dth)	Daily Clay Basin Injection (Dth)	Daily Clay Basin Withdrawal (Dth)	Daily Clay Basin storage (Dth)	Daily Aquifer Injection (Dth)	Daily Aquifer Withdrawal (Dth)	Daily Aquifer Storage (Dth)	Total Daily Storage (Dth)
September	98,180	149,433	186,378	36,945	36,945	0	(8,528)		(8,528)	(72,929)		(72,929)	(6,740)		(6,740)	(88,197)
October	220,890	150,396	311,348	160,951	160,951	0	(8,528)		(8,528)	(72,929)		(72,929)	(9,000)		(9,000)	(90,457)
November	421,104	155,595	447,557	291,982	291,982	0	(8,528)		(8,528)	0	0	0	(17,925)		(17,925)	(26,453)
December	640,019	156,558	529,118	372,560	372,560	0	0		0	110,901	110,901	0	0		0	110,901
January	682,460	157,758	581,560	423,802	423,802	0	0		0	110,901	110,901	0	0		0	110,901
February	648,799	154,285	528,899	374,614	374,614	0	0		0	110,901	110,901	0	0	9,000	9,000	119,901
March	463,833	151,281	334,933	183,652	183,652	0	0		0	110,901	110,901	0	0	18,000	18,000	128,901
April	317,775	148,617	317,775	169,158	169,158	0	0		0	0	0	0	0	0	0	0
May	189,586	146,220	255,776	109,556	109,556	0	0	(72,929)		(72,929)		(72,929)		6,740	6,740	(66,189)
June	117,326	144,017	198,783	54,766	54,766	0	(8,528)		(8,528)	(72,929)		(72,929)			0	(81,457)
July	90,306	141,990	171,525	29,535	29,535	0	(8,290)		(8,290)	(72,929)		(72,929)			0	(81,219)
August	82,852	140,071	155,781	15,711	15,711	0	0		0	(72,929)		(72,929)			0	(72,929)

Month	Monthly Firm Sales (Dth)	Monthly WexPro Production (Dth)	Monthly Demand and Storage (Dth)	Monthly Required Purchases (Dth)	Monthly Required Cuts (Dth)	Monthly LNG (Dth)	Monthly Clay Basin (Dth)	Monthly Spire (Dth)	Monthly Aquifer (Dth)	Monthly Storage (Dth)
September	2,945,414	4,482,997	5,591,334	1,108,337	0	(255,840)	(2,187,880)	0	(202,200)	(2,645,920)
October	6,847,599	4,682,289	9,651,777	4,989,488	0	(264,368)	(2,260,810)	0	(279,000)	(2,804,178)
November	12,633,130	4,667,859	13,426,710	8,758,851	0	(255,840)	0	0	(537,740)	(793,580)
December	19,840,579	4,853,292	16,402,653	11,549,361	0	0	3,437,926	0	0	3,437,926
January	21,466,274	4,890,490	18,028,348	13,137,858	0	0	3,437,926	0	0	3,437,926
February	18,166,382	4,319,973	14,809,159	10,489,186	0	0	3,105,223	0	252,000	3,357,223
March	14,378,838	4,689,698	10,382,912	5,693,215	0	0	3,437,926	0	558,000	3,995,926
April	9,533,250	4,458,508	9,533,250	5,074,742	0	0	0	0	0	0
May	5,877,175	4,532,816	7,929,045	3,396,229	0	0	(2,260,810)	0	208,940	(2,051,870)
June	3,519,766	4,320,504	5,963,486	1,642,982	0	(255,840)	(2,187,880)	0	0	(2,443,720)
July	2,799,479	4,401,678	5,317,273	915,595	0	(256,984)	(2,260,810)	0	0	(2,517,794)
August	2,568,414	4,342,192	4,829,224	487,032	0	0	(2,260,810)	0	0	(2,260,810)
Yearly Total	120,576,300	54,622,296	121,865,172	67,242,876	0	(1,288,872)	0	0	(0)	(1,288,872)
		45.3%		55.8%						

	Leroy	Coalville	Chalk Creek
Winter	836,000	692,000	256,000
Pre Test	627,000	346,000	0
Summer	418,000	346,000	0

	mil gallons	mrcf(mmcf)	Dth(Dth/d)
LNG Storage	15	1,239	1,288,872
LNG 30%	5	372	386,662
LNG Liquefaction		8.2	8,528

2022-2023 Gas Supply Management Plan - LNG Year 1

