#### 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. 18-057-03

## DIRECT TESTIMONY OF KELLY B MENDENHALL FOR DOMINION ENERGY UTAH

April 30, 2018

**DEU Exhibit 1.0** 

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1		I. INTRODUCTION
2	Q.	Please state your name and business address.
3	A.	My name is Kelly B Mendenhall. My business address is 333 South State Street, Salt
4		Lake City, Utah.
5	Q.	By whom are you employed and what is your position?
6	A.	I am employed by Dominion Energy Utah (DEU or Company) as the Director of
7		Regulatory and Pricing. I am responsible for state regulatory matters in Utah and
8		Wyoming. My qualifications are included in DEU Exhibit 1.01.
9	Q.	Attached to your written testimony are DEU Exhibits 1.01 through 1.09. Were these
10		prepared by you or under your direction?
11	A.	Yes.
12	Q.	What is the purpose of your testimony in this Docket?
13	A.	I am the Company's policy witness and I will provide an overview of the Company's
14		request for approval of a major resource decision and discuss why this request is in the
15		public interest. I will also introduce the witnesses who have provided testimony that
16		accompanies the Application. I will summarize the legal requirements set forth in the
17		Voluntary Resource Decision statute and accompanying regulations and identify where
18		the Company has provided the Utah Public Service Commission (Commission) with
19		evidence supporting each requirement. Finally, I will discuss the financial impacts each
20		potential supply reliability option would have on customers. I will also provide
21		information demonstrating adequate financial capability to implement the Company's
22		preferred resource decision.
23	Q.	Why did the Company file the Application in this matter?
24	A.	The Company has experienced supply shortfalls in recent years due to events outside its
25		control. If these events had occurred on a colder day or been of longer duration, they

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would have threatened DEU's ability to provide safe and reliable service to all of its customers and put customers at risk of supply curtailments. This would impact their health and safety, cause property damage, and/or cause businesses to lose productivity. In recent years, other natural gas utilities experienced supply shortfalls leading to curtailments and, in some cases, utilities have experienced significant outages. To ensure supply reliability in the future, the Company has been analyzing possible options. The Company believes that the best solution is the construction of an on-system Liquefied Natural Gas (LNG) storage facility centrally located in the heart of the Company's demand center. The Company's Application requests Commission approval under the Voluntary Request for Resource Decision Review statute, (Utah Code Ann. §54-17-402) and applicable Commission rules and regulations to approve its decision to construct an on-system LNG storage facility.

#### Q. Please introduce the witnesses for the Company in this Docket.

Christina Faust, Director of Gas Supply and Commercial Support, discusses the supply shortfalls experienced by DEU and the potential shortfalls that could occur in the future on the DEU system. Ms. Faust summarizes the need for additional resources to ensure gas supply reliability. Ms. Faust also discusses supply disruptions our system has experienced and what other utilities have experienced in recent years. In addition, in her testimony and accompanying exhibits, Ms. Faust discusses and describes the Company's analysis of available options and summarizes the benefits and risks associated with each option. Ms. Faust explains why the on-system LNG storage facility is the best solution to address the supply reliability risk identified by the Company. Further, she provides evidence that approval of the Company's Application in this docket is just, reasonable and in the public interest. DEU Exhibits 2.0 through 2.14 contain Ms. Faust's testimony and accompanying exhibits.

Michael L. Platt, Manager of Engineering, has conducted analysis and modeling to determine the probability of occurrence of a cold weather supply outage and its consequences. Mr. Platt's testimony provides his analysis. He also compares the on-

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54	system options to off-system options. Mr. Platt's testimony is included in DEU Exhibits
55	3.0 through 3.07.
56	Bruce Paskett, Senior Associate at Structural Integrity, Inc., has extensive experience with
57	on-system LNG facilities, as well as consulting the industry on issues such as pipeline
58	safety. In his testimony, Mr. Paskett discusses the supply-reliability risk and his
59	assessment of the reasonableness of the Company's analysis. Mr. Paskett's testimony is
60	included as DEU Exhibits 4.0 through 4.01.
61	Michael L. Gill, DEU Manager of Engineering, will describe the on-system LNG storage
62	facility and describe its proposed design and construction timeline. Mr. Gill will also
63	provide evidence relating to the anticipated cost of the proposed facilities. Mr. Gill's
64	testimony is provided in DEU Exhibits 5.0 through 5.08.

#### II. SUPPLY RELIABILITY EVIDENTIARY REQUIREMENTS

#### 66 Q. Please describe the requirements for a voluntary resource decision application.

The Company seeks the Commission's approval for the construction of an on-system 67 A. 68 LNG storage facility pursuant to the Voluntary Resource Decision Statute, Utah Code 69 Ann. §54-17-402 and applicable Commission rules and regulations. In reviewing an application for a voluntary resource decision, the Commission must consider whether 70 approval is in the public interest, taking into consideration: (i) whether it will most likely 71 72 result in the acquisition, production, and delivery of utility service at the lowest reasonable cost to the retail customers; (ii) long-term and short-term impacts; (iii) risk; 73 74 (iv) reliability; (v) financial impacts upon the utility; and (vi) other factors determined by 75 the Commission to be relevant. See Utah Code Ann. § 54-17-402(3).

#### 76 Q. What are the filing requirements for approval of a Voluntary Resource Decision?

77 A. Utah Admin. Code § R746-440-1 provides the filing requirements for a Voluntary 78 Resource Decision. These requirements include: (a) a description of the resource

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decision; (b) information to demonstrate that the utility has complied with applicable requirements; (c) the purpose and reasons for the resource decision; (d) projected costs and engineering studies, data, information and models used in the utility's analysis; (e) descriptions and comparisons of other resources or alternatives evaluated in lieu of the proposed resource decision; (f) sufficient data and information to support the proposed resource decision; (g) an analysis of the estimated effect on utility's revenue requirement; (h) financial information demonstrating adequate financial capability to implement the resource decision; (i) major contracts proposed for execution or use in connection with the resource decision; (i) information showing that the utility has or will obtain any required authorizations from the appropriate governmental bodies; and (k) other information as the Commission may require. Has the Company provided evidence relating to each of these requirements? Yes. I have attached as DEU Exhibit 1.02 a summary of the requirements of applicable statutes and regulations and identified where in the Application and accompanying testimony the Company has provided evidence that satisfies each requirement. As DEU Exhibit 1.02 shows, the Company has addressed each of these requirements in its direct testimony and accompanying exhibits. The Application in this matter, along with my direct testimony and the direct testimony of Ms. Faust, Mr. Platt, Mr. Paskett and Mr. Gill, provide the evidence the Commission requires to determine whether the proposed on-system LNG storage facility is in the public interest. The evidence provided shows that the Company's request for approval of its resource decision is just and

#### III. REVENUE REQUIREMENT IMPACT

Commission Rule R746-440-1(g) requires that the Company perform an analysis of 102 Q. the estimated effect that the resource decision will have on the utility's revenue requirement. Has the Company performed this analysis? 104

reasonable and in the public interest and therefore should be approved.

105 A. Yes. The revenue requirement calculation is based on a capital investment. The costs are summarized in the table below:

Cost Categories	Amount
Materials and Construction	
Land	
Internal Labor	
Allowance for Funds used during construction (AFUDC)	
Inflation	

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#### 108 Q. How were the construction, land, and other costs estimated?

The construction, land, and other costs were analyzed and modeled by two separate thirdparty engineering consultants retained by the Company. Mr. Gill explains the analysis and cost estimates in his testimony, DEU Exhibits 5.04 through 5.06.

#### 112 Q. How was the AFUDC calculated?

113 A. The Company estimates in AFUDC for the total project. A detailed
114 calculation is shown in DEU Confidential 1.03 attached to my testimony. The AFUDC
115 estimate is minimal in the first few years and increases until the majority of investment is
116 placed into service.

#### 117 Q. How was inflation calculated?

118 A. The capital expenditures for this project will occur over a five year period, beginning in
119 2018 and ending in 2022. The capital expenditures by year were inflated using projected
120 CPI factors from IHS global insight. This calculation is attached as DEU Confidential

121		Exhibit 1.04.
122	Q.	What other costs are included in the revenue requirement?
123	A.	In addition to the capital costs mentioned above, the Company has included O&M costs,
124		property taxes and depreciation. The details of these expenses can be found in the
125		"Option 8 LNG on-system" tab of DEU Highly Confidential Exhibit 1.05. The calculation
126		assumes a facility, which Mr. Gill discusses in more detail in his
127		testimony. The levelized thirty-year revenue requirement amounts to \$24 million per
128		year.
129	Q.	How will the Company allocate this revenue requirement to customer classes?
130	A.	This facility would only be used to serve the needs of sales customers. Therefore, I have
131		allocated the revenue requirement to the GS, FS, IS and NGV classes, based on the cost-
132		of-service allocations approved in Docket No. 13-057-05.
133	Q.	What impact would this facility have on a typical customer?
134	A.	This results in an annual bill impact to a typical GS customer of \$18.75 or 2.64% per
135		year.
136	Q.	Historically, DEU has had some of the lowest rates in the nation. What impact
137		would this facility have on customer rates?
138	A.	DEU Exhibit 1.06 shows the non-gas rates for DEU, compared to the other natural gas
139		LDCs in the West. As the exhibit shows, DEU has among the lowest non-gas rate in the
140		Western states, and if this facility is approved and the investment in the LNG facility is
141		included, it will continue to have among the lowest rates.
142	Q.	What discount rate did you use to calculate the levelized revenue requirement?
143	A.	I used a 7.64% discount rate. This rate is the overall rate for return on capital that was
144		approved by the Commission in Docket 13-057-05.

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#### 145 Q. Have you calculated the revenue requirement for other potential options?

146 A. As Ms. Faust explains in her testimony, in addition to the proposed on-system LNG storage facility, the Company reviewed other options. For ease of reference, we have 147 148 combined them as follows: 1-Utilize Existing Resource options; 2-Demand Response 149 options; 3-Magnum options; 4-Ryckman Creek option; 5-Clay Basin option; 6-Jackson 150 Prairie option and 7-Aquifer storage options. I have summarized the estimated costs of each of these options in DEU Highly Confidential Exhibit 1.05. Each of these other 151 152 options rely on the capability of third parties to supply DEU with supplies to meet our 153 supply reliability requirements. Each option was analyzed assuming it would be expensed to customers and would be recovered through the Company's semi-annual pass 154 through proceedings. In addition, other options would require the Company to build or 155 acquire additional facilities that would be included in rate base and recovered in a general 156 rate case or other proceeding. Some of the options require a combination of capital 157 investment from the Company and procurement of third-party contracts. I summarized 158 all options on an "apples-to-apples" basis so that the customer impacts can be easily 159 160 reviewed and compared in a meaningful way.

#### O. Please explain DEU Highly Confidential Exhibit 1.05.

- 162 In order to provide a fair comparison among all alternatives, I calculated the annual cost A. of each option, as well as the average customer's annual bill dollar and percentage 163 increase. For options requiring capital investment by the Company, these amounts are 164 shown in Column A. The associated levelized revenue requirement for these capital 165 166 expenditures is shown in column B. In Column C the annual contracted costs are shown. Column D sums the distribution non-gas and supplier-gas costs to calculate a total 167 annual cost for each option. Columns E and F provide the corresponding dollar and 168 percentage increase for a typical general service customer using 80 Dths per year. 169
- 170 Q. Why did you use a levelized revenue requirement to calculate the annual costs?

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171	A.	I used a levelized revenue requirement for all of the facilities because it allows for a better
172		comparison with the options that have long term contracts.
173	Q.	How were the supplier non-gas costs calculated for each option?
174	A.	For the services offered by Ryckman Creek, I used the rate that DEU currently pays for
175		service. For Kern River pipeline rates, I assumed that the negotiated rate would be equal
176		to the 25-year period 2 shipper rate. For Dominion Energy Questar Pipeline (DEQP), I
177		used rates proposed by DEQP. The Magnum proposals were
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181	Q.	Do the Ryckman Creek, Kern River, and Dominion Energy Pipeline costs include
182		any estimates of potential rate increases over the next thirty years?
183	Α.	No. It is very difficult to predict the timing of pipeline rate cases and the potential rate
184		impacts that those rate cases would have as it relates to Kern River or Dominion Energy
185		Pipeline. Additionally, some upstream service providers have negotiated rates that cannot
186		be accurately predicted. For this reason, the long-term costs for these options are likely to
187		be understated.
188	Q.	Is the LNG storage facility the best option when considering cost, safety and
189		reliability?
190	Α.	Yes. The statute requires the Commission to consider several factors including cost, risk
191		and reliability. While the cost of the proposed LNG facility is more than the cost of
192		certain alternatives analyzed, when all other factors are weighed and analyzed, the on-
193		system LNG storage facility is the best option. While the LNG facility is more costly

than certain of the alternatives considered, it is by far the best option in terms of

reliability, system flexibility, and risk-minimization. As other witnesses will explain

further, if the Company selected one of those lower-cost options, it would be accepting an

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alternative that did not adequately solve the supply reliability issues or address the other factors and concerns facing the Company and its customers. Those options are also short-term options at best and don't solve the problem in the long term.

As Ms. Faust will testify, over the last five years, the Company has experienced several supply shortfalls during non-peak periods that have had an impact on the Company's operations. If similar disruptions were to occur on a Design-Peak Day or for an extended period of normal cold days, the Company's ability and obligation to provide safe and reliable service would be compromised. Other natural gas utilities have experienced supply shortfalls that resulted in the significant loss of gas service to customers resulting in serious impacts to customers. Production facilities, compression equipment, meters and gauges, and other mechanical equipment will see higher failure rates as temperatures drop to cold temperatures. Furthermore, on cold weather days, when temperatures drop to below freezing along the Wasatch front in Utah, temperatures in Wyoming (where many of the gas wells and processing facilities are located that bring gas to our system) will be even lower. We know that these events occur on a fairly regular basis, and that they are more likely to happen during cold weather. Selection of a lower cost option that does not mitigate these risks would not be prudent and could result in significant costs resulting from supply shortfalls without a commensurate benefit for customers.

## Q. How would the on-system LNG storage facility increase supply reliability during these cold weather events you described?

217 A. The on-system LNG storage facility effectively mitigates the supply-disruption risk by
218 placing a reliable back-up supply source directly in the demand center of the Company's
219 distribution system. This type of resource is used by many natural gas utilities in North
220 America. The on-system LNG storage facility would be available on a moment's notice
221 if (or when) the upstream supply is disrupted. This on demand availability makes it the
222 most reasonable and prudent option. As Ms. Faust will explain, no other alternative can
223 provide the same flexibility and reliability as an on-system LNG storage facility.

224		IV. FINANCIAL CAPABILITY
225	Q.	Commission Rule R746-440-1(h) requires that the Company provide financial
226		information demonstrating adequate financial capability to implement the Resource
227		decision. Does the Company have this financial capability?
228	A.	Yes. While the LNG facility will be a large investment for DEU, it is comparatively
229		small when compared to the \$2.9 billion in assets that the Company currently has on its
230		balance sheet. For the last few years, the Company has spent over \$200 million per year
231		in capital investment. Even with these large levels of capital investment, the rating
232		agencies still give Dominion Energy Utah an investment grade credit rating.
233	Q.	What are the agencies' current credit ratings for DEU?
234	A.	On May 3, 2017, Fitch affirmed an A- rating for Questar Gas doing business as DEU.
235		This credit opinion is attached as DEU Exhibit 1.07. On December 6, 2017, Standard and
236		Poor's (S&P) issued a credit rating for Questar Gas Company. This credit opinion is
237		attached as DEU Exhibit 1.08. In the issuance, S&P gave Dominion Energy a Corporate
238		Credit Rating of BBB+/Stable/A-2 with stand-alone credit profile of "a" for Questar Gas.
239		On December 22, 2017, Moody's issued a credit opinion on Questar Gas and gave the
240		Company a rating of A2 stable. This opinion is attached as DEU Exhibit 1.09. The
241		ratings offered by the ratings agencies reflect market confidence that the Company will be
242		financially capable of implementing the decision proposed in this docket.
243	Q.	Has DEU recently acquired debt?
244	A.	Yes. Within the last year, DEU has issued over \$250,000,000 in debt, with due dates
245		ranging between 2030 and 2047. This debt was issued in the private placement market to
246		nine different investors.

<ul><li>247</li><li>248</li><li>249</li></ul>	Q.	This project has a rather significant lead time with a material amount of costs. In addition to the long-term capital markets, does the Company have access to other means of cash for working capital needs?
250	A.	Yes. In addition to access to long-term capital markets, DEU has access to a \$250
251		million revolving credit line and \$750 million of capacity available through short-term
252		intercompany borrowings from Dominion Energy Inc. This is typically used for short-
253		term working capital needs, but it could be used to help bridge the gap between
254		construction schedules and long-term debt issuances.
255	Q.	Does the Company generate any cash through retained earnings?
256	A.	Yes. Before the merger with Dominion Resources, a large portion of retained earnings
257		were passed to the corporate parent through dividends. For example, dividend payments
258		in 2016, 2015, 2014 and 2013 were \$30 million, \$47 million, \$27 million and \$35.5
259		million, respectively. In 2017, these retained earnings were kept at DEU to enable the
260		Company to keep its merger commitment to keep its equity level between 48% and 55%.
261	Q.	Assuming the Company has the ability to access the capital markets, are there
262		potential risks that could inhibit the Company's ability to manage this project from
263		a financial perspective?
264	A.	The two largest risks would be regulatory uncertainty and the timing of cost recovery.
265		Either of these risks could cause financial impairment to the Company. I will discuss
266		each risk and the remedies in place to reduce these risks.
267	Q.	Please discuss the risk factor of regulatory uncertainty.
268	A,	Due to the size and scope of this proposed LNG facility, there could be a negative impact
269		to the Company's credit metrics and rating if the Commission determined that the capital
270		expenditures were imprudent after the facility was constructed. Approval of this
271		Application under the Voluntary Resource Decision statute would help reduce this risk

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considerably. In fact, this is one of the reasons the Company is seeking pre-approval of the construction of the facility. This preapproval process will allow the project to be fully vetted before large expenditures are made. Commission preapproval will not only reduce the regulatory uncertainty considerably, but mechanisms like the preapproval process give the credit rating agencies additional confidence.

#### 277 Q. Please discuss the risk of cost recovery.

- A. Because this project requires a significant capital outlay, the amount of regulatory lag between the cost expenditures and their recovery could have a negative impact on cash flow and credit metrics. Currently, as Mr. Gill explains, the facility, if approved, would be in service in 2022. Because the anticipated timeline of this project is a few years into the future, it will give the Company adequate time to plan for debt issuances and equity infusions to maintain the correct debt/equity levels. The anticipated construction timeline will also coincide with the Company's planned general rate case in 2022 which will allow for cost recovery to be addressed by the Commission in a timely manner. The Company is currently on a three-year filing cycle and it will likely file a rate case in mid-2022 with rates effective the first quarter of 2023. The timing of general rate case filings will result in timely cost recovery of the proposed resource decision.
- Q. Are there other remedies available to the Company to reduce regulatory lag if the project and general rate case schedules don't align?
- 291 A. Yes. Another option would be to file for cost recovery under Utah Code Ann. §54-7-13.4 292 "alternative cost recovery for major plant addition."

#### V. RECOMMENDATIONS

#### 294 Q. Can you summarize your recommendations?

Yes. Based on the supply reliability issues experienced on our system in Utah, and the Company's demand forecasts and when compared to the experiences of other natural gas

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Application in this matter and find that the proposed LNG facility is just, reasonable and in the public interest.
the Application, the Company requests that the Commission approve the Company's
of a supply shortfall. Therefore, based upon the testimony and evidence provided with
DEU's firm customers will continue to receive safe and reliable service, even in the event
described in the Application and accompanying testimony, is the best means of ensuring
service. DEU's proposal to build an on-system LNG storage facility with liquefaction, as
cold weather days. Supply shortfalls have and will result in customers losing natural gas
utilities in North America, the Company continues to be at risk for supply shortfalls on

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

Yes. 307 A.

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State of Utah	)	
	) ss	
County of Salt Lake	)	

I, Kelly B Mendenhall, 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.

Kelly B Mendenhall

SUBSCRIBED AND SWORN TO this 301 day of April, 2018.

GINGER JOHNSON
Notary Public State of Utah
My Commission Expires on:
August 4, 2019
Comm. Number: 684539

Notary Public