OCS – 1D Ware

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

DIRECT TESTIMONY

OF

ALEX WARE

FOR THE OFFICE OF CONSUMER SERVICES

August 15, 2019

PUBLIC REDACTED VERSION

INTRODUCTION

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Alex Ware. I am a Utility Analyst for the Office of Consumer Services (Office). My business address is 160 East 300 South, Salt Lake City, Utah 84111.

Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.

A. I earned a Masters of Public Policy and a B.S. in Economics from the University of Utah. I previously was employed as a Performance Auditor for the Utah Office of the Legislative Auditor General, where my duties involved conducting in-depth compliance, financial, and efficiency and effectiveness audits of various state funded agencies and programs. Those audits and associated recommendations were presented before the Legislative Audit Subcommittee. I have worked for the Office for over a year. I have completed a Utility Analyst training course from New Mexico State University. This is my second time submitting testimony before the Utah Public Service Commission (Commission).

Q. IN WHAT OTHER DOCKET HAVE YOU PRESENTED TESTIMONY BEFORE THE COMMISSION?

A. I previously submitted testimony in Docket No. 18-057-03: In the Matter of the Request of Dominion Energy Utah for Approval of a Voluntary Resource Decision to Construct an LNG Facility.

PURPOSE AND SUMMARY RECOMMENDATION

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS DOCKET?

A. The purpose of my testimony is to show that Dominion Energy Utah's (DEU or the Company) application to build and operate an on-system liquefied natural gas (LNG) facility, under consideration in this docket, fails to identify, describe, or justify its claimed supply reliability concerns or provide the robust analysis necessary to accurately determine the optimal remedy. As a note to the reader, all my references to DEU responses to data requests are itemized in the separate but accompanying OCS Exhibit No. 1.1.

I also introduce the Office's other witness in this docket Daniel J. Lawton, a consultant who has been retained by the Office to review certain financial issues related to DEU's quantitative analysis of the request for proposals (RFP) bids. I will incorporate his conclusions when I summarize the Office's position at the end of my testimony.

Q. WHAT IS THE OFFICE'S OVERALL RECOMMENDATION ON THE COMPANY'S REQUEST FOR VOLUNTARY RESOURCE DECISION APPROVAL?

A. The Office recommends that the Commission deny DEU's application for the LNG facility under consideration in this docket because the Company has not performed a robust evaluation of its claimed supply reliability problem or of the various possible solutions to the potential problem. As I discuss below, past guidance from the Commission requires utilities to perform such robust analyses in its resource decision process. Absent this

type of analysis, the Company's request does not and cannot meet the criteria to be found in the public interest as set forth in Utah Code Section 54-17-402.

COMMISSION GUIDANCE ON ROBUST RESOURCE ANALYSIS

Q. HAS THE COMMISSION PREVIOUSLY ISSUED ORDERS WITH GUIDANCE AND RECOMMENDATIONS TO UTAH'S REGULATED UTILITIES REGARDING ITS REQUIREMENTS FOR ROBUST ANALYSIS IN RESOURCE DECISION PLANNING?

A. Yes. The Commission has advised both of the two regulated investor-owned energy utilities in Utah, DEU and Rocky Mountain Power (RMP), regarding noted deficiencies and required improvements in resource-planning analysis.

Q. WHAT DID THE COMMISSION INSTRUCT THE UTILITIES REGARDING REQUIRED RESOURCE PLANNING ANALYSIS?

A. Based on IRP guidelines adopted by the Commission in Docket No. 08-057-02, the Company has certain responsibilities to inform its regulators and stakeholders of its resource decisions in annual IRP documents. In Section VIII of the guidelines, it states in part:

> Each IRP must detail the Company's intentions for the planning year(s) and **must also provide sufficient information and analyses to show how the Company reaches its resource selection conclusions as to the least-cost plan for providing energy services, including acquisition of natural gas and storage,** transportation, and distribution services,

> consistent with the Company's duties specified in Utah Code 54-3-1.[1] (emphasis added)

Also, Section IX of DEU's guidelines regarding Distribution Non-Gas (DNG) planning issues requires the Company to provide:

> C.2.b. A summary of the **analyses of alternatives** evaluated for each project, **including costs, benefits, and risks** associated with the alternatives, and the reason for their rejection.
>
> C.2.c. A comparison of each selected project with the next best alternative **including a discussion of cost and benefit, and evaluation of risk, and an analysis of tradeoffs** between such things as service quality, reliability, customer impact and the acquisition of the lowest cost resource.[2] (emphasis added)

Similarly, in RMP's IRP Docket No. 07-0235-01, the Commission outlined its expectations for an acceptable analysis. The Commission's order, which did not acknowledge the IRP that year, stated:

> "…this IRP has not adequately adhered to our guidelines **requiring consideration of all resources on a consistent and comparable basis**, a link to the strategic business plan to ensure customer benefits of IRP, **the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty**, and different resource acquisition paths for different economic circumstances with a decision mechanism to select among and modify these paths as the future unfolds."[3] (emphasis added)

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[1] Docket No. 08-057-02, Report and Order on Standards and Guidelines for Questar Gas Company, March 31, 2009, p.28: https://pscdocs.utah.gov/gas/08docs/0805702/0805702ROosagfggc.pdf

[2] Docket No. 08-057-02, Report and Order on Standards and Guidelines for Questar Gas Company, March 31, 2009, p.32

[3] Docket No. 07-2035-01, Report and Order – In the Matter of PacifiCorp 2006 Integrated Resource Plan, February 6, 2008, p.43: https://pscdocs.utah.gov/electric/07docs/07203501/07203501RO.pdf

From these statements, the Office notes there is a general consistency in the Commission's order guidelines to both DEU and RMP in reference to resource decision planning and analysis.

In addition, and of particular importance, the Office finds valuable insight regarding the Commission's general views of what constitutes an acceptably robust analysis. The Commission stated in the RMP IRP order:

> "Any resource plan resulting from a linear programming model…is optimal by definition for the specified set of input assumptions modeled. **A robust plan is one that performs well under a variety of input assumptions**, and is certainly a desirable outcome."[4] (emphasis added)

Q. WHAT RELEVANCE DO THE ABOVE REFERENCED ORDERS HAVE TO DEU'S APPLICATION TO BUILD AN LNG FACILITY?

A. Although these orders relate to specific requirements applicable to IRP filings, the Utah Energy Resource Procurement Act, under which DEU filed this docket, states the Commission shall reach a decision considering in part the same analytical elements the Commission itself requires during the resource planning process. Presumably, the Commission will be interested in similar factors and robust analysis for any resource selection process.

Q. WHAT ADDITIONAL RELEVANT GUIDANCE HAS THE COMMISSION PROVIDED?

A. In Docket No. 18-057-03, DEU's previous request for pre-approval to construct an LNG plant, the Commission denied the Company's request

[4] Docket No. 07-2035-01, Report and Order – In the Matter of PacifiCorp 2006 Integrated Resource Plan, February 6, 2008, p.40.

stating that "because we have an inadequate record on which to determine what, if any, cost-effective alternate options may exist to improve gas supply reliability by mitigating these risks, we cannot now determine the public interest in reducing those risks would be best served by construction of the LNG Facility."[5] Regarding the nature of the evidence that is required, the Commission examined the concept of an RFP. It stated, "We conclude that an RFP is not an absolute statutory requirement in this scenario, but we find that it is an industry standard method of providing the analysis the statute requires."[6] The Commission also references the "flaw in DEU's decision not to issue an RFP specific to supply reliability." It goes on to state, "Such an RFP could be crafted to evaluate and balance both costs and the ability of the proposals to mitigate the identified supply reliability risk."[7]

<u>BACKGROUND: INSUFFICIENT RESOURCE PLANNING PROCESS</u>

Q. DID DEU'S PLANNING PROCESS FOR ITS LNG RESOURCE CHOICE FOLLOW COMMISSION-ORDERED STANDARDS AND GUIDELINES DESCRIBED PREVIOUSLY?

A. No. DEU failed to adequately include its stakeholders in its planning process for an LNG facility by not providing a sufficient analysis with adequate and required detail. Also, the evolving reasoning by DEU for a

[5] Docket No. 18-057-03: In the Matter of the Request of Dominion Energy Utah for Approval of a Voluntary Resource Decision to Construct and LNG Facility, Order, October 22, 2018, p.18.
[6] Docket No. 18.057-03, Order, October 22, 2018, p.15.
[7] Docket No. 18-057-03, Order, October 22, 2018, p.16.

stated need for an LNG facility made it impossible for its stakeholders to accurately assess what problem DEU was planning to solve.

Above all, it must be clearly understood that DEU has been pursuing an LNG facility for various and changing purposes before its stated concern of supply reliability was ever conveyed to stakeholders during the IRP process. It appears to the Office that DEU has been eager to add an LNG facility to its resource portfolio before a relevant operational concern was identified that could justify it.

Q. PLEASE SUMMARIZE DEU'S PLANNING PROCESS LEADING UP TO THE CURRENT APPLICATION.

A. DEU first presented the idea of an LNG facility for peak-shaving purposes in its 2014 IRP.[8] The Company's 2015 IRP also described how DEU continued to review LNG for peak shaving but that it had decided it was not in the best interests of customers based on operational and cost evaluations.[9] Yet, in its 2016 IRP, DEU continued to assess LNG for peak shaving purposes despite its stated intention to abandon the idea the prior year. In fact, the 2016 IRP describes how the company moved forward with pre-engineering studies on the development and construction of an LNG facility.[10]

Then, in its 2017 IRP, DEU altered its reasoning for LNG by stating while it could be primarily used to address peak-hour demand, an ancillary

[8] Docket No. 14-057-15, Questar 2014 IRP, Exhibit 7, p.7-12
[9] Docket No. 15-057-07, Questar 2015 IRP, Exhibit 7, p.7-13 to 7-14
[10] Docket No. 16-057-08, Questar 2016 IRP, Section 7, p.7-8

benefit could be to minimize supply reliability concerns.[11] This is the first time DEU presented a concern regarding its gas supply reliability in an IRP. That year the Company briefly described its assessment of six long-term potential remedies to supply reliability issues, but the IRP did not include any substantial analysis of expected costs, benefits, and risks as required by the IRP guidelines and standards nor did it contain a substantive description of its supply reliability concerns. By the time DEU filed its 2018 IRP, the Company had solved its peak-hour issues through the use of peak-hour supply contracts with Dominion Energy Questar Pipeline (DEQP) and Kern River Gas Transmission Company pipeline (KRGT or Kern River)[12], but an LNG facility remained its favored solution (out of eight considered) to its asserted supply reliability concerns first presented the prior year.[13] While the Company described the eight options considered, the IRP again did not include any analysis of expected costs, benefits, and risks, or of the tradeoffs between these options as required by its planning standards and guidelines. In fact, DEU's 2018 IRP had not even been filed with the Commission and therefore was unavailable to the Office and other stakeholders at the time the Company pushed forward with its first application to build an LNG facility in Docket No. 18-057-03 (First LNG Application).

[11] Docket No. 17-057-12, DEU 2017 IRP, Section 8, p.8-2
[12] Dockets No. 17-057-09 & 17-057-20
[13] Docket No. 18-057-01, DEU 2018 IRP, Section 11, p.11-1 to 11-6

The Office also notes, as verified by the evidence found in DEU's IRPs and First LNG Application, that the Company's favored option of a self-built and owned on-system LNG facility has been the only option to receive the in-depth consideration of pre-engineering studies (by hired external consultants), and this work began as early as 2014[14] prior to the first time DEU mentioned any supply reliability issue in Commission filings. Based on this evidence, DEU clearly did not assess all potential supply reliability solutions on an equal and unbiased basis.

The Office also asserts that since DEU did not adequately include its stakeholders in its internal planning to construct an LNG facility and assessment of supply reliability concerns until its First LNG Application, the Commission, the Office, the Division of Public Utilities (DPU), and other stakeholders have been severely disadvantaged in the assessment of this major and costly resource decision. Until DEU indicated its intention to file its First LNG Application, there was no reason for any of its stakeholders to reasonably assume that a supply reliability problem existed or that an LNG facility was needed.

REQUIREMENTS FOR APPROVAL OF VOLUNTARY REQUEST FOR RESOURCE DECISION REVIEW

Q. WHAT IS THE STATUTORY BASIS FOR DEU's CURRENT FILING?

[14] Docket No. 14-057-15, Questar 2014 IRP, Exhibit 7, p.7-12

A. In its written application, DEU stated this case is filed pursuant to Utah Code Section 54-17-401: Voluntary Request for Resource Decision Review; under Part 4 of the Energy Resource Procurement Act.[15]

Q. WHAT ARE THE REQUIREMENTS OF A VOLUNTARY REQUEST FOR RESOURCE DECISION APPROVAL?

A. The requirements for a voluntary request for resource decision approval are itemized in Utah Code Section 54-17-402[16], which states:

> (3) In ruling on a request for approval of a resource decision, the commission shall determine whether the decision:
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> (a) is reached in compliance with this chapter and rules made in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act; and
>
> (b) is in the public interest, taking into consideration:
>
> (i) whether it will most likely result in the acquisition, production, and delivery of utility services at the lowest reasonable cost to the retail customers of an energy utility located in this state;
>
> (ii) long-term and short-term impacts;
>
> (iii) risk;
>
> (iv) reliability;
>
> (v) financial impacts on the energy utility; and
>
> (vi) other factors determined by the commission to be relevant.

Q. DOES DEU'S REQUEST MEET THE REQUIREMENTS FOR APPROVAL?

A. No. DEU has not adequately defined its claimed gas supply reliability problem. Without a clear definition of a problem that needs to be solved, it is difficult to assess potential solutions or make the appropriate showing that a new resource is in the public interest. The Commission addressed this

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[15] Utah Code 54-17-401: https://le.utah.gov/xcode/Title54/Chapter17/54-17-S401.html
[16] Utah Code 54-17-402: https://le.utah.gov/xcode/Title54/Chapter17/54-17-S402.html

question of need in its order in the First LNG Application by saying: "while some parties have examined the proposed LNG Facility from the standpoint of resource need, we view it as supply disruption risk mitigation, because DEU has already provided for the totality of customer gas requirements through its existing gas supply contracts."[17] While this may not be a "typical" resource need, if the supply disruption risk is not explained and defined then a solution to such risk cannot be found to be in the public interest because it would not be knowable whether it would "most likely result in the acquisition, production, and delivery of utility services at the lowest reasonable cost."[18]

Even if the Company had sufficiently defined a supply reliability problem, the Company has not appropriately conducted scenario analysis evaluating a range of risks and the relative performance of potential reliability solutions. Thus, the Office asserts that not only has DEU not demonstrated its proposal to be the lowest reasonable cost, it also has not appropriately evaluated risks. A robust risk analysis is necessary to accurately assess the relative magnitude of tradeoffs between costs and risks associated with potential solutions evaluated in the context of different scenarios. For these reasons, DEU's application does not meet the criteria for approval under Utah Code Section 54-17-402 (3).

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[17] Docket No. 18-057-03, Order for Request of Dominion Energy Utah for Approval of a Voluntary Resource Decision to Construct a Liquefied Natural Gas (LNG) Facility, p.11

[18] Utah Code 54-17-402: https://le.utah.gov/xcode/Title54/Chapter17/54-17-S402.html

INADEQUATE DEFINITION OF PROBLEM AND RISKS PREVENTS DETERMINATION OF LOWEST REASONABLE COST

Q. PLEASE DESCRIBE THE INFORMATION DEU HAS SUBMITTED TO SHOW A SUPPLY RELIABILITY PROBLEM?

A. DEU has presented data in this case which shows it has experienced various instances of supply disruptions. The Company claims that if such disruptions had occurred on a design peak day (average temperatures at or below negative five degrees Fahrenheit) that its current gas supply stack would be exhausted which would result in service outages.[19]

Q. WHAT CAPABILITIES DOES DEU SAY A SOLUTION MUST HAVE TO PREVENT A SERVICE OUTAGE DUE TO A SUPPLY SHORTAGE ON A DESIGN PEAK DAY?

A. DEU claims in its application that in the event of a supply shortage on a design peak day, an outage might be prevented with a replacement gas supply of 150,000 Dth/day over a period of 8 days.[20]

Q. HOW DID DEU COME TO THE CONCLUSION THAT 150,000 DTH/DAY FOR 8 DAYS IS THE CORRECT SUPPLY REPLACEMENT LEVEL AND DURATION?

A. The Company provides two reasons for this level of supply replacement. First, DEU plotted its recent years' supply shortages on the DEQP pipeline

[19] Docket No. 19-057-13, Platt Direct Testimony, p.4
[20] Docket No. 19-057-13, Platt Direct Testimony, p.12

as compared to average temperature in the Salt Lake Valley. The chart includes a shortage event of about 120,000 Dth at a temperature just above 10 degrees Fahrenheit.[21] It appears the Company then arbitrarily set a solution level at 150,000 Dth/day based on the chart. However, there appears to be no justification as to why DEU selected an eight-day duration for supply replacement. Second, DEU states that at its preferred location for an LNG facility, 150,000 Dth/day is all that can reasonably be taken on to its distribution system.[22] Further, DEU's analysis is inadequate to demonstrate whether the solution is robust when considering a range of costs, benefits, and risks.

Q. DID DEU PROVIDE THE NECESSARY ANALYSIS TO DEFINE THE MAGNITUDE OF DEU'S CLAIMED GAS RELIABILITY ISSUE OR TO JUSTIFY ITS SELECTION OF A SELF-BUILD LNG FACILITY?

A. No. DEU's analysis of potential supply reliability problems is extremely simplistic and lacks the integrity of a solution born of multiple analysis inputs across various levels of scenario analysis. Particularly, the Company's analysis simply brings up more questions, such as these scenarios:

- What types of risks are remedied with resource portfolio scenarios experiencing shortages less than 150,000 Dth/day, and are there other more cost-effective solutions?

[21] Docket No. 19-057-13, DEU Tech Conference, June 19, 2019, p.11.
[22] DEU response to DPU data request 1.17.

- What types of risks are remedied with resource portfolio scenarios experiencing shortages of more than 150,000 Dth/day, and would the use or deployment of other options provide better solutions?
- What types of risks are remedied with resource portfolio scenarios needing a supply replacement duration shorter than eight days, and would other options be more cost-effective?
- What types of risks are remedied with resource portfolio scenarios needing a supply replacement duration greater than eight days, and would the use of other back-up contracts for gas supply be more cost effective?
- What is the likelihood that various types of risks could result in a very large (300,000 to 500,000+ Dth) supply disruption, and what actions would the Company take in response?
- What would be the result of supply reliability solutions at locations across DEU's distribution system that are different from the Company's preferred location?

Q. PLEASE SUMMARIZE THE OFFICE'S CONCERNS ABOUT DEU's DEFINITION OF SUPPLY RELIABILITY RISK.

A. In sum, while the Office recognizes that DEU has experienced some instances of supply shortfalls, its history shows that it has never experienced a resulting service outage on its Wasatch Front distribution system. The Company's determination of a supply replacement level and

duration is extremely simplistic, as it does not present the pros and cons of such a solution across multiple possible risk scenarios. In addition, DEU's shifting rationale of need for an on-system LNG facility is problematic, as it appears that a preferred solution drove the analysis of the problem instead of a fully documented and analyzed problem driving the search for an optimal solution. The Office asserts that DEU is presenting the outcome of an RFP without presenting evidence that the RFP would yield the best outcome overall for customers.

DEU's UNJUSTIFIED, NARROW DEFINITION OF THE PROBLEM BIASED THE SELECTION OF A SOLUTION AND OVERLOOKED OTHER POTENTIAL SOLUTIONS

Q. HOW WAS SELECTION OF A SOLUTION BIASED?

A. DEU's request for proposal (RFP) has biased the selection of a solution by giving preference to on-system solutions and requiring delivery to a specific gas location and within a certain capability requirement. This is in direct conflict with the guidance given by the Commission in its Order in the First LNG Application: "Such an RFP could be crafted to evaluate and balance both costs and the ability of the proposals to mitigate the identified supply reliability risk."[23] The Office takes particular issue with the mandates for an on-system solution and 150,000 Dth/day over eight days of replacement as

[23] Docket No. 18-057-03, Order, p.16.

DEU's analysis has not justified setting such specific parameters and doing so biases the outcome. By having an RFP with such a narrow focus, DEU's analysis fails to consider and compare other possible solutions.

Q. WHAT POTENTIAL SOLUTIONS HAVE BEEN OVERLOOKED?

A. DEU has not considered solutions that could potentially provide DEU with supply diversity coming from south of the Company's demand center. Currently, all of DEU's contracted gas storage facilities are located to the north of its demand center – relying on delivery primarily through the DEQP pipeline system.[24] It is important to note that on a design peak day, the Company states that about 80 percent of its supply is delivered through the DEQP pipeline system and only 20 percent through Kern River.[25] If DEU were to diversify its gas storage deliveries from the south, with potential delivery through the Kern River pipeline, this diversity of storage delivery might supply the additional diversity of gas supply and redundancy of upstream delivery facilities needed to cover any real reliability concern.

Q. IS THERE EVIDENCE IN THIS DOCKET INDICATING THAT DEU MAY BE ABLE TO SECURE GAS SUPPLY SERVICES THROUGH THE KERN RIVER PIPELINE?

A. Yes. **HIGHLY CONFIDENTIAL INFORMATION BEGINS** [redacted]

[redacted]

[24] DEU response to OCS data request 2.02 & Confidential Attachment 2.
[25] DEU response to DPU data request 3.09.

[redacted]

[26] Docket No. 19-057-13, DEU Highly Confidential Exhibit 1.05, p.3.

[27] DEU Highly Confidential response to OCS data request 2.13.

[redacted]

[redacted] **HIGHLY CONFIDENTIAL**

INFORMATON ENDS These are valid planning scenarios that remain unanalyzed at this time. The Commission cannot determine that DEU's proposal is lowest reasonable cost with potential solutions left out of the analysis.

Q. ARE THERE ANY OTHER RESOURCES THAT ARE WIDELY USED IN THE INDUSTRY TO ADDRESS SUPPLY RELIABILITY ISSUES THAT DEU DID NOT EVALUATE IN ITS RESOURCE SELECTION?

A. Yes, DEU submitted survey responses from member utilities of the American Gas Association (AGA).[30] This survey assessed current industry practices that are used to address system reliability concerns. The AGA survey results show there are other resource options LDCs employ at a greater rate than LNG storage to address supply shortages.[31] The Office finds it significant that less than half of the LDCs responding have on-system LNG facilities in place to address their supply reliability concerns.[32] This Commission ought to require a robust analysis of all options and

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[28] Docket No. 19-057-13, Platt Highly Confidential Direct Testimony, p.16.
[29] Docket No. 19-057-13, Gill Direct Testimony, p.5.
[30] Docket No. 19-057-13, DEU Confidential Exhibit 2.06 (The Office conferred with DEU and verified that the aggregate summary information is properly presented as public information).
[31] Docket No. 19-057-13, DEU Confidential Exhibit 2.06, p.2.
[32] Docket No. 19-057-13, DEU Confidential Exhibit 2.06, p.2.

alternatives, particularly those options being relied upon by the majority of LDCs before it endorses an approach being used by a minority of the LDCs responding to the survey.

Q. WHAT TYPES OF SUPPLY RELIABILITY SOLUTIONS WERE SHOWN TO BE MORE PREVALENT IN THE INDUSTRY BASED ON THE RESPONSES TO THE AGA SURVEY?

A. Alternate transportation arrangements, short-term gas supply or peaking contracts, and upstream storage facilities were all reported to be used more frequently than LNG facilities.

The results show that 77 percent (34 out of 44 responding LDCs) or a significant majority of the responding LDCs indicated that they had alternate upstream transportation contracts, such as enhanced transportation or no-notice transportation services in place to respond to reliability issues.[33] With the significant majority of the LDCs responding to the AGA survey indicating that they rely upon alternative transportation arrangements to secure gas supplies needed to respond to reliability issues, at a minimum, DEU should study and analyze similar gas supply arrangements with one or another of its connecting pipelines as possible options to deal with reliability issues.

Also, 70 percent (31 out of 44 responding LDCs) or a majority of the LDCs responding rely upon short-term gas supply or peaking contracts to

[33] Docket No. 19-057-13, DEU Confidential Exhibit 2.06, p.2.

provide deliveries to their city gates in order to respond to reliability issues.[34] This would suggest that DEU should seriously consider securing peaking contracts that could be used in connection with any response to reliability concerns. The Office notes that in response to OCS data request 3.01, DEU stated that it has not entered into any short-term gas supply contracts specifically intended to address supply reliability issues.[35] However, the Office also notes that the LNG plant was originally proposed to meet peak day needs but peaking contracts were found to be more economical.[36] At a minimum, this Commission ought to require DEU to study and analyze the costs and adequacy of gas supply peaking contracts as part of a robust analysis to meet reliability needs.

Finally, a significant majority of the responding LDCs (37 out of 44 responding LDCs) indicated that they rely upon upstream storage facilities to manage supply disruptions.[37] While DEU contracts with six upstream storage facilities accessed through the DEQP pipeline, the Company's response to OCS data request 3.03 indicated that no gas supply contained in these storage facilities is specifically reserved to address supply reliability concerns.[38] At a minimum, DEU should study and analyze the potential

[34] Docket No. 19-057-13, DEU Confidential Exhibit 2.06, p.2.
[35] DEU response to OCS data request 3.01.
[36] DEU response to DPU data request 1.20.
[37] Docket No. 19-057-13, DEU Confidential Exhibit 2.06, p.2.
[38] DEU response to OCS data request 3.03.

costs and risks to expand storage options specifically for supply reliability use.

Q. HOW DO THESE OPTIONS FOR SUPPLY RELIABILITY RELATE TO THE CURRENT DOCKET?

A. By defining potential solutions too narrowly, the supply reliability options used by a majority of other LDCs have not been considered in robust analysis by DEU. Consequently, DEU has not met the statutory requirements to demonstrate that its request is in the public interest. Without additional study of alternate transportation arrangements, short-term gas supply or peaking contracts, and upstream storage facilities, DEU's proposal cannot be found to be the lowest reasonable cost solution.

Q. DO YOU HAVE ANY ADDITIONAL OBSERVATIONS FROM THE AGA SURVEY RESULTS?

A. Yes. It should also be noted that 92 percent (46 out of 50 responding LDCs) responded that they had not experienced any supply disruptions in the past 10 years.[39] From the Office's assessment, DEU's own experience would seem comparable to the majority of LDCs that responded to the inquiry as the Company's own data shows they have never experienced a Wasatch Front outage due to a supply shortage issue. At a minimum, that would suggest that DEU ought to include as part of its studies and analysis in this proceeding the careful consideration that its current system may be fully

[39] Docket No. 19-057-13, DEU Confidential Exhibit 2.06, p.1.

adequate, at least as compared to the industry responses presented in the AGA survey results.

DEU's PROPOSAL DOESN'T ADEQUATELY EVALUATE RISKS AS REQUIRED BY UTAH CODE SECTION 54-17-402

Q. DOES DEU'S ANALYSIS OF ITS SUPPLY RELIABILITY CONCERNS ATTEMPT TO QUANTIFY THE ASSOCIATED RISKS AND PROBABILITIES?

A. Not adequately. DEU calculates that the occurrence of near design peak day temperatures of three degrees Fahrenheit, based on historical weather records, has the probability of occurring once every 16 years.[40] Beyond that, DEU does not provide any quantitative probability risk analysis regarding any of its stated potential causes of supply shortages – such as well freeze-offs, processing plant and pipeline failures, and various rare natural disasters.[41] All the Company's stakeholders in this docket have to rely upon is DEU's assertion that a solution is required because any of these events could happen at some future time. No modeling or scenarios have been run to assess how a solution would perform in the face of most of the risks the Company lists. That presents a very difficult and nebulous position upon which to conduct proper analysis and resource selection.

[40] Docket No. 19-057-13, DEU Exhibit 2.04, p.2.
[41] Docket No. 19-057-13, DEU Exhibit 2.04, p.3 to 11.

Q. IS THERE THE POSSIBILITY THAT A DEU ON-SYSTEM LNG FACILITY WOULD BE INEFFECTIVE AT PREVENTING A SUPPLY OUTAGE?

A. Yes. It is important to note that the capacity of DEU's designed LNG facility would equate to about 10 percent of the company's supply stack on a design peak day.[42] Therefore, any supply shortfall beyond minor reductions due to sporadic well freeze-offs could potentially surpass the facility's ability to successfully prevent a demand center outage.

Q. DOES THE OFFICE HAVE OTHER CONCERNS REGARDING AN ON-SYSTEM LNG FACILITY CHOSEN AS THE OPTIMAL SOLUTON FOR SYSTEM RELIABILITY?

A. Yes. The Office asserts there are other risks DEU has not considered in its analyses in this docket. Risks such as:

- What is the public opinion of an on-system LNG facility near the Company's demand center and associated residential areas? (The Office notes DEU's preferred location for its planned facility is unknown to the public at this time.)
- With the recent trends toward electrification of systems that burn fossil fuels, is there risk of building an LNG facility that will become obsolete before the end of its useful life? Would it be a benefit to the Company and its customers to have a

[42] Docket No. 19-057-13, Platt Direct Testimony, p.7.

more flexible solution and to not own such an expensive and fixed-capability asset?

- The effectiveness of the proposed on-system LNG facility being a solution to a significant gas supply outage may diminish as population booms across the Wasatch Front, as is forecasted. In this sense, is an LNG facility simply a short-term solution to greater issues? What is next – as population grows will DEU seek approval to build additional costly LNG facilities?
- The Company states that its operational efficiencies and potential selection of a reliability solution are hampered due to a bifurcated maximum allowable pressure (MAOP) differential on its distribution system – 471 psig to the north of Salt Lake City and 354 psig to the south of Salt Lake City. This is a major issue and the Office does not believe there has been enough consideration of a solution to this problem presented in the analyses of this docket, including how its solution interplays with the supply reliability problem.
- Since DEU has not provided an assessment of the risks of potentially larger supply shortages (such as from a large natural disaster), nor an assessment of how a potential solution might perform in such a scenario, the Office is concerned that the Company may return to request additional

resources later instead of working to determine the best long-term solution today.

Q. SHOULD THIS COMMISSION BE CONCERNED ABOUT DEU'S OVERALL RISK PROFILE?

A. Not necessarily. While any utility faces operational risks, without a detailed analysis of DEU's risks, including an assessment of likelihood and potential impacts across its various claimed risks, no conclusions can be drawn at this time. The facts are that the Company has never experienced a service outage across the Wasatch Front resulting from a supply shortfall. DEU's experiences are similar to 92% of AGA survey respondents that indicated they had not experienced supply reliability problems in the past 10 years. In fact, evidence in this docket exists that shows DEU has a robust and diversified gas supply.

Q. IN WHAT WAYS DOES DEU HAVE A ROBUST AND DIVERSE GAS SUPPLY?

A. DEU provided the following facts regarding its gas supply and distribution system:

- DEU is supplied by seven different gate stations (excluding smaller stations and farm taps) which are operated by two different pipeline companies – DEQP and Kern River. DEQP has five gate station connections with DEU while Kern River has two.[43]

[43] DEU response to OCS data request 2.02 – Confidential Attachment 1b, p.2 (The Office conferred with DEU and verified that the summary data is properly presented as

- DEU is interconnected with and has contracted for gas storage at five different gas storage locations accessed through the DEQP pipeline.[44]
- DEU purchases gas supplies from the outlet of ten different processing plants. Eight of the plants are connected to the DEQP system and two are connected to Kern River. In reference to cost-of-service gas, Wexpro gas is processed at three of the above referenced plants as well as three other plants.[45]
- The DEQP system also interconnects with other supply sources, such as: Colorado Interstate Gas Co, Dominion Energy Overthrust Pipeline, Kern River, Northwest Pipeline, South Star Central Gas Pipeline, and White River Hub.[46]
- DEU currently has 18 different gas supply contracts upon which it relies. 13 contracts deliver gas through DEQP and five are delivered through Kern River.[47]
- There are a total of 34 different gas-producing fields that supply Wexpro cost-of-service gas to DEU.[48]

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public information. More detailed information is found in the confidential attachment in OCS Exhibit No. 1.1).

[44] DEU response to OCS data request 2.02 & Confidential Attachment 2.

[45] DEU response to OCS data request 2.02 (OCS data request 2.18 from Docket No. 18-057-03 is unchanged).

[46] DEU response to OCS data request 2.02 (OCS data request 2.06 from Docket No. 18-057-03 is unchanged).

[47] DEU response to OCS data request 2.02 (OCS 2.02 Confidential Attachment 1).

[48] DEU response to OCS data request 2.02 (OCS data request 2.18 from Docket No. 18-057-03 is unchanged).

- It also appears that DEU purchases market gas from a wide range of different wells.

Q. YOU HAVE PROVIDED EVIDENCE ABOUT DEU'S SYSTEM CAPABILITIES. DOES THIS LEAD TO AN OFFICE CONCLUSION THAT DEU DOES NOT HAVE ANY SUPPLY RELIABILITY RISK?

A. Not necessarily. The Office simply asserts that DEU has a robust system and has not specifically identified and defined a problem that needs to be solved. Further, DEU has not provided any meaningful risk evaluation encompassing multiple scenarios that could demonstrate that LNG is a robust solution across the Company's full profile of risks. The Office takes supply reliability risk seriously and believes the Commission should do the same. Customers expect reliable service. However, the Commission must also hold DEU to its burden of proof to justify its system investments.

CONCLUSIONS AND RECOMMENDATIONS

Q. PLEASE SUMMARIZE THE OFFICE'S POSITION.

A. My testimony shows that DEU has not met the statutory standards for the Commission to find its request to be in the public interest. To be specific, the Company has not demonstrated that its proposal will most likely result in the acquisition, production, and delivery of utility services at the lowest reasonable cost to the retail customers nor has it adequately evaluated risk.

Although the Company responded to the Commission's statement that an RFP was industry standard for compiling the requisite evidence for

a case such as the current request, the specific analysis and composition of DEU's RFP cannot be found to be up to the task. The Commission envisioned an RFP "crafted to evaluate and balance both costs and the ability of the proposals to mitigate the identified supply reliability risk."[49] The evidence DEU provides in this docket including the RFP results come up short on several counts.

First, the supply reliability risk claimed by DEU has never been well defined. The full portfolio of risks were never defined and studied as part of the process. Potential solutions were not studied in the context of a variety of risk scenarios. Thus, this proposed solution cannot meet the robustness preferred by the Commission when it stated that, "a robust plan is one that performs well under a variety of input assumptions."[50] The proposed solution also cannot be found to have adequately considered risk, as required by Utah Code Section 54-17-402 (3)(i)(C). Also, absent a more comprehensive evaluation, the delivery of utility services at the lowest reasonable cost, required by Utah Code Section 54-17-402 (3)((i)A), cannot be determined within any confidence.

Second, even if the Commission determines to overlook the lack of robustness, the solutions evaluated by DEU (i.e. the definition of parameters in the RFP) were so narrow that the ultimate resource selection was biased, did not adequately evaluate and balance costs and ability to

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[49] Docket No. 18-057-03, Order, p.16.
[50] Docket No. 07-2035-01, Report and Order – In the Matter of PacifiCorp 2006 Integrated Resource Plan, February 6, 2008, p.40.

mitigate risk as recommended by the Commission, and resulted in significant potentially viable alternatives being overlooked.[51] This, too, undermines any claims about the delivery of utility services at the lowest reasonable cost.

Finally, even if the Commission determines to accept the flawed underlying analysis and the flawed RFP definition, the RFP evaluation itself is fatally flawed and must be rejected. As Mr. Lawton demonstrates, the Financial Accounting Standards Board (FASB) rules on leases do not create revenue requirement cost adders for the RFP bids; and therefore, the Commission should remove the Company's imputed debt cost adder from the RFP quantitative analysis. When this cost adder is removed, the Company's self-build LNG facility is no longer the lowest cost resource option.[52]

Q. IN LIGHT OF YOUR TESTIMONY, WHAT ARE THE OFFICE'S RECOMMENDATIONS TO THE COMMISSION CONCERNING DEU'S APPLICATION TO BUILD A LNG FACILITY?

A. The Office recommends that the Commission take the following actions:

1. Deny DEU's application at issue to build an on-system LNG facility.
2. Before any resource is approved for reliability purposes, require DEU to present a more comprehensive analysis of its asserted supply

[51] Docket No. 18-057-03, Order, p.16.
[52] Docket No. 19-057-13, OCS Direct Testimony Lawton 2D, 8-15-2019.

reliability problem and to evaluate a wider range of resource options across multiple scenarios, including short-term and long-term analyses. This could be done as part of DEU's IRP process or under the framework of a separate docket.

Q. DOES THIS CONCLUDE YOU TESTIMONY?

A. Yes it does.