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 TINA M. FAUST

FOR DOMINION ENERGY UTAH

April 30, 2019

DEU Exhibit 2.0

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Tina M. Faust. My business address is 333 S. State, Salt Lake City, UT.

Q. By whom are you employed and what is your position?

A. I am employed by Dominion Energy Utah (DEU or Company) as the Director of Gas Supply and Commercial Support. My qualifications are included in DEU Exhibit 2.01.

Q. Have you testified before this Commission before?

A. Yes, I have previously testified in Dockets 13-057-05, 14-057-19 and 18-057-03. In addition, I have presented at technical conferences in matters before this Commission on numerous occasions.

Q. Attached to your written testimony are DEU Exhibits 2.01 through 2.15. Were these prepared by you or under your direction, or if not, are they true and correct copies of the documents you purport them to be?

A. Yes, except as otherwise stated, the exhibits were prepared by me or under my direction. The remaining exhibits are true and correct copies of what they purport to be.

Q. What is the purpose of your direct testimony?

A. I provide an overview of how natural gas is gathered from wells in remote production fields and transported to gate stations that connect with the DEU distribution system. I describe the risk of supply shortfalls associated with each step in that supply chain. I also discuss supply shortfalls the Company has experienced in recent years, as well as those experienced by other local distribution companies. Further, I explain the risks to DEU customers resulting from supply shortfalls, including the risk of loss of service on cold winter days.

II. NATURAL GAS: FROM WELLHEAD TO DEMAND CENTER

Q. How does natural gas typically flow from the wellhead to a local distribution company's (LDC's) system, like DEU's system?

A. Natural gas is produced in locations that are hundreds of miles away from DEU's demand center – its local distribution system that extends along the Wasatch Front, including Utah County, Salt Lake County, Davis County and Cache County. Most of the gas production that serves DEU customers comes from hundreds of wells in Utah, Wyoming and Colorado. A map showing producing basins where these wells are located, as well as the location of the interstate pipelines through which that gas is transported, is attached as DEU Exhibit 2.02. Producers extract natural gas from the gas wells and gather it through small-diameter lines to either processing plants or to interstate pipelines. The gas sent to processing plants typically has non-methane hydrocarbons and liquids that must be removed to obtain pipeline-quality natural gas that can be transported on interstate pipelines and ultimately used by end-use customers. The majority of processing plants that process gas for DEU are located in Wyoming. Once the wellhead gas has been gathered and processed, it is then transported by upstream interstate pipelines for delivery to DEU's distribution system. DEU Exhibit 2.03 shows the path natural gas takes from wellhead to demand center.

Q. Where along this natural gas path are supply disruptions likely to occur?

A. Supply disruptions can occur due to a variety of reasons as gas is transported from the wellhead to DEU's distribution system. The gas wells that ultimately supply the DEU system are typically producing in areas that experience much colder temperatures than the demand centers. It is not uncommon during cold weather for gas wells to "freeze off," meaning that water produced with the natural gas crystallizes, blocks the flow of gas and shuts down production of gas from the well. Since wells cannot produce gas during freeze offs, natural gas that would otherwise be produced does not flow into the system and cannot be transported to DEU's customers. Similarly, cold weather can cause processing plants to cease operation, causing supply shortfalls. Processing plants are vulnerable to compressor failures, power outages, and other disrupting events, particularly during cold weather periods. Icy roads and remote plant locations also

hamper the ability for workers to quickly remedy production and processing interruptions at wells and plants.

Supplies from interstate pipelines can be impacted by repair and maintenance on their facilities. Upstream pipelines are subject to third-party line damage, systemic failure due to age or corrosion, landslides, earthquakes, and other unanticipated events. Given the great distance pipelines traverse and the varying geography of the areas through which they pass, these risks must be considered. To compound problems, line damage from third parties, landslides and earthquakes can occur in remote areas, preventing repair crews from quickly addressing line damage.

There are many ways supply may be disrupted before it reaches DEU's distribution system. When these disruptions occur, DEU does not receive the natural gas it requires, and is at risk of being unable to provide service to firm sales customers.

I have attached a detailed description of potential supply risks, *See* DEU Exhibit 2.04.

Q. Do the North American Energy Standards Board (NAESB) cycles impact a distribution company's ability to quickly replace gas supply that is disrupted?

A. Yes, interstate pipelines must utilize the NAESB schedule to accept nominations for the receipt and delivery of natural gas. This schedule restricts the ability to replace gas supply quickly as there are time lags between when the gas is able to be purchased from a supplier, then able to be nominated to the interstate pipeline and then ultimately be allowed to flow on the interstate pipeline to a distribution company.

III. RISK OF SUPPLY SHORTFALLS

Q. Has DEU experienced supply disruptions like those you've described?

A. Yes. Unfortunately, disruptions in DEU's upstream supply chain have occurred in recent years, preventing gas supplies from reaching DEU's system even during non-Design

Days.[1] For example, on January 6, 2017, the Intermountain West experienced very cold temperatures. As is typical, temperatures in the gas production areas in Wyoming were significantly colder than in the Company's urban demand centers. For instance, the average daily temperature in Big Piney, Wyoming was -25° F. Early that morning, DEU became aware that processing plants were not delivering gas into Dominion Energy Questar Pipeline (DEQP). Through the nomination process DEQP notified DEU that supplies were not being delivered to the DEQP system as expected. In fact, multiple processing plants experienced disruptions, and remained off-line or severely under-producing for the remainder of the day. That same day, Kern River Gas Transmission Company (Kern River) also posted a notice that the Opal Processing Plant in Opal, Wyoming was experiencing a power outage. As a result of the upstream supply disruptions, DEU had inadequate supplies for its firm sales customers on that day and it was unclear how long the disruptions would last.

Q. Did this event result in a supply shortfall?

A. Yes. Fortunately, because of the relatively short duration of this event (approximately one day), DEU was able to utilize additional storage withdrawals and purchase incremental gas to replace the expected shortfalls, and was able to maintain service to its firm sales customers. However, it is important to note that this event occurred on a day when the average temperature at the Salt Lake City Airport was 6° F, well above DEU's Design Day temperature. Had temperatures been lower, the Company would likely have been withdrawing storage volumes at maximum contractual rates. This means that the availability of incremental storage withdrawals would likely have been non-existent. The Company was fortunate that the cold weather was not prolonged and that the disruptions were resolved within a relatively short period. If the supply disruptions had occurred on a Design Day, or if cold temperatures had persisted for a longer period of time, DEU almost certainly would have lost service to firm sales customers.

Q. Has DEU experienced other similar supply reliability issues?

[1] For reference, a Design Day is defined as an average daily temperature of -5 degrees F at the SLC Airport.

A. Yes. As shown in DEU Exhibit 2.05, supply issues have occurred multiple times for DEU during the last several years. As discussed by William Schwarzenbach in his direct testimony, these issues could have been resolved by the DEU-owned LNG Facility[2] that is the subject of this docket.

Q. Has DEU historically experienced other similar events?

A. Yes. At the end of 1990, DEU's system experienced a loss of supply during arctic weather that lasted from December 19, 1990 through January 2, 1991. The mean daily temperatures during this time period are shown in the table below.

Date (Noon to Noon)	Mean SLC Temperature (degrees Fahrenheit)
12-19 to 12-20	26
12-20 to 12-21	6
12-21 to 12-22	3
12-22 to 12-23	-4
12-23 to 12-24	1
12-24 to 12-25	9
12-25 to 12-26	12
12-26 to 12-27	13
12-27 to 12-28	17
12-28 to 12-29	20
12-29 to 12-30	3
12-30 to 12-31	8
12-31 to 1-1	13
1-1 to 1-2	12

December 22, 1990 was the last time the Company experienced weather near a Design Day temperature.

2 The DEU-owned LNG Facility has the meaning defined in the Application in this docket.

Q. Please describe the supply shortfalls caused by those extended cold temperatures.

A. There were several weather-related shortfalls during that period. DEQP's predecessor, Mountain Fuel Resources, experienced mechanical problems at a compressor station from December 19, 1990 through December 22, 1990, resulting in a supply shortfall of 30,000 to 40,000 Dth/d of production. The mechanical problems included vibration-induced shut down, oil cooling, fuel valve problems and seal oil regulator failure. Additionally, Mountain Fuel Resources experienced frozen turbines at two different compressor stations causing the units' oil to become so viscous that fluid would not flow through the unit's coolers, resulting in unit shutdown. The cold weather also increased demand for Clay Basin storage, resulting in increased pressures on Mountain Fuel Resources' ML 58 which, in turn, caused its Frontier compressor unit to shut down on high discharge pressure. This resulted in an additional loss of production of 13,000 Dth/d. Finally, there were four plant failures in the Overthrust area resulting in a shortfall in deliveries to the Mountain Fuel Resources system of 126,000 Dth/d from December 19 - 20, 1990. The combination of events resulted in a supply shortfall on the DEU system.

Q. Did DEU customers lose service as a result of the supply shortfall in 1990?

A. Fortunately, no. DEU was able to maintain service at the time using a number of mechanisms that no longer exist. At the time, all gas supply functions were performed by the upstream pipeline, Mountain Fuel Resources. As a result, Mountain Fuel Resources had flexibility in how storage was deployed and gas was delivered for DEU without any NAESB scheduling constraints. Additionally, transportation customers at that time were able to be interrupted by Mountain Fuel Resources and 100% of these supplies automatically went to DEU's sales customers during this cold weather event. In fact, almost 50% of DEU's supply on December 22, 1990 was supplied from either existing storage or gas supplies that were originally delivered for transportation customers. Under the terms of the then-existing Tariff, these supplies were diverted by Mountain Fuel Resources for use by the Company to serve its firm sales customers.

Q. Why couldn't the Company manage a supply disruption the same way today?

A. Prior to FERC Order 636 in 1992, pipelines bought natural gas from producers and sold it to customers. "Bundled" rates existed that included charges for the commodity and services such as transportation and storage. Order 636 required that pipelines could no longer offer gas sales and instead could only offer unbundled transportation and storage services. Customers (like DEU) who transport on upstream interstate pipelines are now obligated to nominate under NAESB cycles. If the capacity is fully allocated on the pipeline or from the storage facilities, any new nominations (in later cycles) are not allowed to flow for that gas day. On December 22, 1990, storage sources were able to provide the Company 36% of its supply. Today, the Company's contracts for storage only guarantee deliveries for approximately 20% of the Company's Design Day demand.

In addition, it is very important to note that DEU's system - and its Design Day demand – both have grown significantly over the past three decades and are projected to continue to grow. Also, DEU can no longer depend on interrupting transportation customers to help replace supply shortfalls for its firm sales customers, as many of the same risks that could impact DEU supplies, would also likely impact the supply being delivered for its transportation customers.

Q. How has DEU responded to supply shortfalls in the past?

A. Historically, DEU has been able to manage supply disruptions on days that are not Design Days by purchasing additional supplies and utilizing available storage. As mentioned previously, on a Design Day, all storage resources will be fully utilized. The Company's plan for a Design Day also assumes that all of its contracted supplies will be available, even though history shows that there is a high probability that it will experience some level of supply disruption. While relying on purchasing additional supplies on short notice is theoretically viable for at least some supply disruptions, many of these supplies could also be disrupted, fail to materialize as gas supply for the Company, and may not be available in the quantities needed, if at all, during a supply shortfall. In addition, the cost of purchasing supplies on the spot market in such a circumstance are likely to spike during supply shortfalls and/or cold weather events. Given that we are on notice that supply disruptions have happened on our system and on

other LDC systems, I am concerned that the Company's reliance on historical practices described above will be insufficient to maintain safe and reliable service to DEU customers in the future. The Company has been fortunate that past disruptions have been of a relatively short duration and did not take place during Design Day conditions. It is not wise to rely on good fortune to plan for supply reliability for our increasing customer demand. An on-system storage facility will significantly improve our ability to prudently plan for supply disruptions in the future. This is a critical layer of resilience we need to add to our portfolio.

Q. Have other LDCs experienced similar supply disruptions?

A. Yes. In February of 2011, New Mexico Gas Company and Southwest Gas Company experienced loss of gas service to more than 40,000 customers in New Mexico and Arizona. At that time, the Southwest United States was experiencing record-setting cold weather. Many customers were without heat for a full week, while crews worked to restore service. DEU Confidential Exhibit 2.06 is an American Gas Association (AGA) SOS inquiry where a number of respondents shared past experiences with supply reliability problems. In February of 2018, ATCO Gas Distribution lost supply to its gate stations due to hydrates in the transmission system resulting in a freeze-off of transmission system control facilities that in turn supplied ATCO Gas Distribution.

Q. Please describe the events that impacted Southwest Gas in 2011 and resulted in a shortfall of supply to customers?

A. I provided this testimony in our prior application in Docket NO. 18-057-03. However, for ease of reference I will provide again. According to Bill Moody, Vice President of Gas Supply for Southwest Gas, its Arizona customers receive natural gas supply from three basins that lost 1,000,000 Dth/day during the event. On March 2, 2011, the Arizona Corporation Commission held an open meeting for the purpose of discussing the loss of service to over 20,000 Arizona customers that resulted from the supply shortfall. I have attached, as DEU Exhibit 2.07, a transcript of that meeting. In addition, I provided DEU Exhibit 2.08, which is a copy of Bill Moody's PowerPoint that accompanied his

presentation during that meeting.

In explaining the events, Mr. Moody stated, "[W]e don't know until afterwards when we go out to purchase that gas and perhaps even the sellers of that gas to us are not certain whether or not that gas will show up," *See* DEU Exhibit 2.07, pages 22-28. The day of the supply shortfall was "*a one in sixty year weather event*." *Id.* (emphasis added). In fact, in the days leading up to the event, Southwest Gas employees reported that they watched the weather forecast, had received "critical operating condition emergency" notifications from the upstream pipelines that they were "experiencing major difficulties", and had purchased gas to meet their anticipated demand. *Id.* Southwest Gas also had an emergency plan, which it followed, and complied with its winter operations guide. Notwithstanding those preparations, Southwest Gas employees watched as the system pressures dropped on the morning of February 2, 2011. Southwest Gas began to prepare for curtailment, in the event that pressures continued to drop. Southwest Gas sent field personnel out to critical facilities starting at 10:00 p.m. to monitor and ensure that no mechanical issues occurred due to the cold weather. On February 3, 2011, the first alarm occurred showing pressures were dropping to the point where customers were losing service. *Id.*

Q. If DEU experienced a disruption similar to Southwest Gas (or the other LDCs identified above), how would that impact DEU's customers?

A. If DEU's system experienced a similar supply disruption, and its customers lost service for a week, the consequences likely would be more catastrophic than in Arizona. On April 6-7, 2011, the Arizona Corporation Commission held Open Meetings to allow customers to discuss the consequences of the outage. DEU Exhibits 2.09 and 2.10 are copies of the transcripts of those open meetings. During the meetings, customers in Arizona reported significant difficulties resulting from the outage. For instance, customers described the loss of heat in residences, including where elderly people lived. They reported significant health risks to others. One 86-year-old man spent days in his living room chair under blankets near a space heater *See* DEU Exhibit 2.09, page 32. Because Utah winters are substantially colder than the temperatures that existed in

Arizona in 2011 when the service disruption occurred, I would expect the consequences of a shortfall for customers in Utah to be far more serious. Customers in Utah have to experience much colder temperatures and, by extension, risk far more severe consequences to their health and safety.

Additionally, if DEU experienced a similar outage to Arizona, I would expect significant property damage. During the 2011 outage, Arizona residents reported "living out of a suitcase" over 3 months after the outage because homes had been "destroyed" by burst pipes, *See* DEU Exhibit 2.10, page 23. As temperatures in Utah are far colder, I would anticipate water pipe and home damage to be much more extensive.

Further, one would also expect businesses to suffer significant damage, as well as consequential losses, such as the loss of product and sales. For instance, Loews Ventana Canyon Resort in Arizona reported that, during the 2011 outage, it was unable to provide heat or hot water for its guests during the entire outage. The resort reported that the outage cost it at least $200,000; *See* DEU Exhibit 2.10, page 10. When DEU has directed its Transportation Service Firm (TSF) customers to limit usage to match the supply being delivered on their behalf, in response to their own upstream supply disruptions, many customers have expressed concern about lost product, business losses, and damaged equipment.

If a significant supply shortfall resulted in a loss of service, DEU's firm sales customers could face severe losses. In addition to the foregoing, in DEU Exhibit 4.0, Direct Testimony of Michael L. Platt details the anticipated costs DEU would suffer, if such an outage occurred. He estimates the cost of relighting customers and discusses the economic impact such an outage would have on the State of Utah. The cost of an outage for customers, the Company and Utah collectively would be significant.

Q. How did regulators in Arizona respond to the public at the April 2011 public meetings?

A. The Arizona Commission recognized the seriousness of the outage. Commissioner Stump stated: "This obviously is a matter of public health and often survival. We heard many stories last night and, of course, today in which that was very much the case. And

there is really nothing more serious than matters relating to public health and survival." *See* DEU Exhibit 2.10, page 34.

Q. Did regulators take any action after the outages in the Southwest in February 2011?

A. Yes. The Federal Energy Regulatory Commission (FERC), the New Mexico Public Regulation Commission (NMPRC) and the Arizona Corporation Commission (ACC) all launched investigations into this event.

Q. Please describe the FERC inquiry.

A. FERC initiated an inquiry into the gas outage and service disruptions on February 14, 2011. Its objectives were to identify the causes of the disruptions and to determine how to prevent a recurrence. On May 9, 2011, FERC and the North American Electric Reliability Corporation (NERC) announced that they would create a joint task force, and in August 2011, the task force published a joint report on the findings ("FERC/NERC Report").

Q. What did the task force conclude regarding the cause of the 2011 natural gas outage?

A. The FERC/NERC Report stated that "the difficulties encountered by LDCs in trying to meet customer demand stemmed principally from supply declines in the basins, and secondarily from problems encountered at processing plants." *See* DEU Exhibit 2.11.1, page 4. In addition, the FERC found that, "a substantial number of wells in the affected basins suffered freeze-offs, which had a significant effect on production during the February cold weather event." *Id.*, page 6. The report estimated that the total U.S. natural gas supply during the event was reduced 9.4% per day due to cold weather. This was comparable to previous production shut-ins associated with interruptions caused by hurricanes, *See* DEU Exhibit 2.11.2, page 5. Production declined 21% in the basins in Texas and New Mexico and "[t]he declines in these basins, together with the large increases in demand, were almost exclusively responsible for the gas curtailments in Texas, New Mexico and Arizona." *Id.*, page 6

In summary, the FERC concluded that cold weather resulted in "widespread wellhead, gathering system and processing plant freeze-offs and hampered repair and restoration efforts" and that the "prolonged cold caused production shortfalls in the San Juan and Permian Basins, the main supply areas for the LDCs that eventually curtailed service to customers in New Mexico, Arizona and Texas." *See* DEU Exhibit 2.11.3, page 4.

Q. Did the FERC/NERC Report discuss storage as a solution to the 2011 natural gas outage?

A. Yes. The FERC/NERC Report stated:

> Additional gas storage capacity in Arizona and New Mexico could have prevented many of the outages that occurred by making additional supply available during the periods of peak demand. Natural gas storage is a key component of the natural gas grid that helps maintain reliability of gas supplies during periods of high demand. Storage can help LDCs maintain adequate supply during periods of heavy demand by supplementing pipeline capacity, and can serve as backup supply in case of interruptions in wellhead production. *Additional gas storage capacity in the downstream market areas closer to demand centers in Arizona and New Mexico could have prevented most of the outages that occurred by making additional supply available in a more timely manner during peak demand periods*.

See DEU Exhibit 2.11.3, pages 5 and 6 (emphasis added).

Q. Did the New Mexico Public Regulation Commission find a cause for the February 2011 outage?

A. The NMPRC concluded in December 2012 that "the February 2011 system emergencies were caused by a combination of a failure of upstream industry segments to supply and deliver scheduled gas to NMGC because of a severe winter storm affecting the southwestern U.S., weather-driven freeze-offs and rolling electrical blackouts in Texas, and high weather-driven demand for gas by NMGC customers." *See* DEU Exhibit 2.12, page 20**.**

Q. Did the Arizona Corporation Commission comment on the February 2011 outage?

A. Yes. On March 2, 2011, the ACC held an Open Meeting regarding the outage. Attached as DEU Exhibit 2.07 is a copy of the transcript of that meeting. During the meeting, Arizona Commissioner Kennedy stated: "When outages like this occur, *human health and safety is really put at risk and significant financial losses to businesses.* And I am concerned about that." *Id.*, page 79 (emphasis added). He added, "I don't want the past to occur in the future. *What we do here in Arizona might be able to assist other providers around the United States so they don't fall into the same shoes as we did here today*." *Id.*, page 80 (emphasis added).

Q. Did Southwest Gas take any steps to prevent future outages?

A. Yes. After the event, Southwest Gas sought Commission pre-approval of an on-system LNG Facility for the purpose of ensuring supply reliability. The Arizona Corporation Commission approved the construction of the proposed facility, and it is now under construction and is expected to be complete in 2019. Further information can be found at https://www.swgas.com/en/lng.

Q. What can be learned from the Southwest Gas incident?

A. It is imperative that the Company have additional supply available in a timely manner during supply shortfalls. Natural gas utilities need to have supply reliability resources in place prior to an inevitable event causing supply shortfalls.

Q. Have there been more recent events where LDCs have been impacted by supply shortfalls?

A. Yes. On October 9, 2018, a 36-inch Enbridge transmission pipeline ruptured. This resulted in a massive fire and evacuation north of Prince George, British Columbia. The transmission pipeline and an adjacent 30-inch transmission pipeline had to be shut down, resulting in a 1.3 Bcf/day supply shortage that impacted Canada and the northwest United States. These two pipelines deliver the primary natural gas supplies to customers in

Vancouver, BC as well as to Washington, Oregon and Idaho. In fact, FortisBC, the LDC serving the Vancouver, BC area, issued a press release on October 22, 2018 that stated their regional gas supply was limited to 50 – 80% of normal levels. The Enbridge transmission pipeline rupture put the reliability of service to approximately 700,000 FortisBC customers at risk. *See* DEU Exhibit 2.13. FortisBC was able to avoid a catastrophic customer outage in part by utilizing the on-system LNG facilities. This shortage in supply impacted pricing in the West during the 2018-2019 winter season and the pipeline is still conducting integrity work that continues to impact supply.

Q. Has the Company experienced any other events that could have resulted in supply and service disruptions?

A. Yes. In January of 2005, St. George, Utah experienced significant flooding that washed away 28 homes, resulting in approximately $200 million of damage. In addition, the Company sustained critical damage to its infrastructure. The Company had to close block valves to isolate portions of its feeder lines, leaving some customers without service. Also, on August 5, 2014, a large landslide impacted a hillside in upper North Salt Lake, adjacent to DEU's feeder line and a Kern River transmission pipeline. The landslide destroyed homes and property and, for a period of time, put DEU and Kern River Gas Transmission Company facilities at risk. Again, the Company was able to maintain safe and reliable service to the customers who were not directly impacted by the landslide by isolating its feeder line. Both events are examples of flooding and landslide events that could have had far more serious impacts had the circumstances played out differently. Had lines been more seriously damaged, additional service disruptions would have resulted.

Q. Are you aware of any other recent weather events that have occurred and impacted customers?

A. Yes. In late January 2019, the polar vortex in the Midwest and Mid-Atlantic impacted natural gas customers for multiple days. One night, approximately 150 customers in Princeton, Minnesota lost natural gas service at 10:30 p.m. Due to subzero temperatures

and the expectation gas would not be restored for over 2 days, Xcel Energy, the LDC, offered hotel rooms to impacted customers. *See* DEU Exhibit 2.14.

In addition, in Michigan, the January 2019 polar vortex was a contributor to the fire, compressor shutdown, and loss of Consumers Energy's major underground storage supply. Consumers Energy conducted a two-month review of the event and found that a safety venting system led to a fireball erupting above its Macomb County compressor stations, taking down the company's major storage supply. "The complicated series of events that led to the fire 'was a perfect storm of things that never happened before that all happened at the same time,' said Consumers Energy spokeswoman Katie Carey. A ground fault that interrupted the signal to the plant's fire gate control system caused a station to release gas, Carey said. But because of the extreme cold, the gas did not disperse as expected and instead hovered above the station until high winds carried it over a second station. Over the second station, 'extremely hot equipment' ignited the natural gas, creating a fire ball and subsequent issues at other facilities on site. The fires crippled the Macomb County facility, which has the capacity to distribute 64% of the company's natural gas, and led to a loss of service to some large industrial users." *See* DEU Exhibit 2.15.

Q. Are you aware of any other recent extreme weather events that demonstrate how unpredictable circumstances could affect the Company?

A. Yes. In March 2019, the Denver area experienced a bomb cyclone that was Colorado's strongest storm on record and caused power outages that lasted for multiple days and closures of major interstate highways in the area. The storm did not directly impact natural gas supplies, but is evidence that extreme weather impacts utility service to customers. Utilities, including the Company, should plan for such unpredictable events.

Q. Given that DEU and other utilities have experienced these types of supply shortfalls, do you believe a prudent utility should plan for such events in the future?

A. Yes. Utilities have an obligation to provide safe and reliable service, even on the coldest

of days. A prudent natural gas utility should plan for supply shortfalls. In fact, Mr. Allen Neale for the Division of Public Utilities in Docket No. 18-057-03 aptly noted: "And in defense of Ms. Faust, and as a former gas supply guy, the fact that real low temperature occurred just once is enough to settle the debate about probability because if it happened once, it certainly can happened again." Allen R. Neale, Hearing Transcript, Vol. 2, page 381, Docket 18-057-03.

Q. Given the supply shortfalls and disruptions that DEU has experienced during cold weather, how confident are you that DEU will be able to avoid supply disruptions and related loss of service in the future with the Company's existing resources?

A. I have serious concerns. Extreme weather and the resulting lack of gas supply reliability are unpredictable and unforeseeable events. Weather forecasts can change quickly and extreme cold can last longer than predicted. Shortfalls in supply are even less predictable. Supply shortfalls have occurred historically and will continue to occur, and I do not believe it is wise for the Company to simply hope that it will be fortunate in avoiding a more major supply shortfall. Presently, DEU relies on all of its current supply options to perform on a Design Day, yet DEU has seen in recent years that weather-related supply shortfalls can happen even when temperatures are moderately cold. While DEU has been able to manage supplies with its current supply portfolio and manage limited supply disruptions and with minimal consequences, none of the supply shortfall events occurred when the temperatures were approaching Design Day temperatures. Similar to its peers in the industry, DEU must have plans in place to address supply shortfalls in the event of more serious supply disruptions to ensure that its firm service customers do not lose natural gas service.

Q. Can you summarize your recommendation?

A. Yes. Based on historical and recent events on the DEU system and in other areas near DEU's system, and on events impacting the reliability of supplies to other LDCs, DEU is keenly aware of the risk of future supply disruptions. There is a risk that during a cold weather event, or during other unpredictable supply disruptions, a significant portion of

DEU's gas supply will be disrupted. The Company must have a plan in place to address such shortfalls and my recommendation is that the DEU-owned LNG Facility is the best solution to ensure supply reliability just as Messrs. Mendenhall, Schwarzenbach, Platt, Gill and Paskett have testified.

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

A. Yes.

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

I, Tina M. Faust, 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.

Tina M. Faust

SUBSCRIBED AND SWORN TO this 30th day of April, 2019.

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

Notary Public