BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF QUESTAR GAS COMPANY TO MAKE TARIFF MODIFICATIONS TO CHARGE TRANSPORTATION CUSTOMERS FOR PEAK HOUR SERVICES	))))))))))	**DOCKET NO. 17-057-09** **DPU Exhibit 1.0 DIR** **Direct Testimony** **Douglas D. Wheelwright**

FOR THE DIVISION OF PUBLIC UTILITIES
DEPARTMENT OF COMMERCE
STATE OF UTAH

Direct Testimony of

Douglas D. Wheelwright

July 26, 2017

INTRODUCTION AND SUMMARY

Q: Please state your name, business address and title.

A: My name is Douglas D. Wheelwright; my business address is 160 East 300 South, Salt Lake City, Utah 84114. I am a Technical Consultant with the Division of Public Utilities (Division).

Q: On whose behalf are you testifying?

A: The Division.

Q: Please describe your position and duties with the Division.

A: As a technical consultant, I examine public utility financial data and review filings for compliance with existing programs as well as applications for rate increases. I research, analyze, document, and establish regulatory positions on a variety of regulatory matters. I review operations reports and evaluate the compliance with the laws and regulations. I provide written and sworn testimony in hearings before the Utah Public Service Commission (Commission) and assist in the case preparation and analysis of testimony.

OVERVIEW

Q: What is the purpose of your testimony in this matter?

A: I will provide comments on the application and will introduce the other Division witness. I will not attempt to discuss all of the individual details of the application but I will address specific issues and concerns within the filing. However, the fact that I do not address a specific detail or issue should not be construed as acceptance.

Q: Please identify the Division's witnesses for this docket.

A: In addition to my testimony, the Division is sponsoring the testimony of Mr. Howard Lubow from Overland Consulting. Mr. Lubow will be providing testimony and perspective concerning the issue of a peak hour requirement.

Q: What is the Company seeking?

A: According to its application, the Company is seeking to charge transportation customers for their use of Firm Peaking Services provided by Kern River Natural Gas Transmission Company (Kern River).[1] Under this firm peaking services contract, Kern River would provide the Company with 100,000 Dth of Firm Peaking Service during the 2017/2018 winter heating season. Separately, the Company has entered into a Precedent Agreement with Dominion Questar Pipeline for 250,000 Dth of additional Firm Peaking Service subject to FERC approval.[2] The FERC application and its relationship to this application pertaining to the Kern River contract are discussed below.

Q: What is the Division's position and recommendation?

A: The Division is not convinced the peak hour contracts are necessary and in the public interest. Therefore, based upon the information that the Division has at this time, the Division cannot recommend that transportation customers pay a portion of the costs associated with the Kern River contract. However, if the contracts are found to be in the public interest, transportation customers should pay a share as discussed in Mr. Lubow's testimony.

Q: Since the initial filing of this Docket, Questar Gas Company (also called the Company) has notified the Commission that it is officially doing business under the name Dominion Energy Utah. In order to avoid confusion, what name will you be using to refer to the Company in this testimony?

A: Effective June 1, 2017, Questar Gas is officially referred to as Dominion Energy Utah, its dba. While the initial application in this Docket was filed under the name Questar Gas, the Tariff and Company correspondence has been changed to Dominion Energy. In my testimony, I will be referring to the applicant as Dominion or the Company. Any references to Questar Gas or Questar Pipeline are the same as Dominion Energy Utah and Dominion Energy Questar Pipeline, respectively.

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[1] Application, May 1, 2017, page 3, line 63.
[2] Docket No. 17-057-12, Dominion Energy Utah Integrated Resource Plan, page 8-4.

Q: Please briefly summarize the work and investigation that has been performed in this case.

A: The Division has reviewed the filed testimony of Dominion witness Mr. Kelly Mendenhall along with the attachments and exhibits. In addition, the Division and its consultants have submitted data requests to the Company and conducted interviews with company representatives concerning the transportation contracts and relating to peak day and peak hour planning. The Company has provided additional information in response to the formal data requests and during the interview process to help with the Division's review and analysis.

Q: Please explain the reason for this application and the issues relating to the peak day and peak hour within the peak day as you understand it.

A: The issue of a peak hour transportation contract is being addressed in this Docket and has been included in the Integrated Resource Planning (IRP), Docket No. 17-057-12, and the 191 Pass-Through, Docket No. 17-057-07. Exhibit 1.3 of this filing refers to an estimated peak hour forecast within the 2016/2017 IRP peak day forecast model. The model shows the expected usage by hour for all firm sales and transportation customers on an extremely cold winter day. The model is used for planning purposes and includes a number of assumptions about the temperature, wind speed, and the estimated usage of the sales and transportation customers during extreme cold weather conditions.

On a daily basis, natural gas usage is estimated and brought to the distribution system through a natural gas nomination process. This daily nomination process assumes that the gas will be delivered by the appropriate upstream pipeline evenly throughout a 24-hour period. The Company has represented that in actual practice, General Service (GS) as well as transportation customers do not consume gas evenly throughout the day and that there are certain hours of the day when the consumption exceeds the average daily delivery expected from the pipeline. For planning purposes, it designated this high use period as the peak hour of consumption. The Company has estimated that during the peak hour, the actual usage may be as much as 17% above average amount nominated for that day. According to the current contract with Dominion Energy Utah Pipeline (formerly known as Questar Pipeline), the actual hourly usage amount that is above the average daily amount will be delivered by Dominion Energy Questar Pipeline on an interruptible or best efforts basis and not on a firm delivery basis. The Company explains that on an average day, this will probably not be a problem but it could potentially be a problem during a high demand or peak usage day.

While we have not experienced a peak weather event for many years, the Company states that it is concerned that if we were to have a peak day event with extreme weather conditions, there may not be sufficient pressures in the pipeline systems to provide the necessary gas during the peak hours. This issue appears to be only a problem for Dominion Questar Pipeline deliveries and not for Kern River deliveries because Kern River is set up with flow controls which do not allow the Company to withdraw more gas from the Kern River pipeline than the contracted average daily amount.

Q: Do you believe that this Docket should address whether the peak hour contract is appropriate or should this Docket only address the allocation of the cost for the peak hour contract?

A: There are two issues that need to be addressed in this Docket. The first is whether the contract with Kern River is necessary and in the public interest. If the contract is determined to be appropriate, then the second question is whether a portion of this cost should be allocated to the transportation customers that could benefit from the service.

Q: Do you have any general concerns with the application and the information that has been provided?

A: I have several concerns. First, The Company analysis has excluded the natural gas volume for the Lake Side facility in Exhibit 1.5 while the peak day and peak hour analysis on Exhibit 1.2 and 1.3 include the Lake Side volume. The Company analysis is incomplete and inconsistent and could lead to an incorrect finding and conclusion.

Second, the justification for the peak hour contract is based on the estimated peak day usage forecast generated for the IRP planning process. The IRP planning model assumes extremely cold weather conditions and estimates the usage of general service (GS) customers and firm transportation customers for the peak planning day. The IRP model attempts to forecast customer usage, however the model does not forecast the Lake Side contract in the same way. This one customer represents [redacted][3] of the total transportation volume in the coldest winter months. Instead of including an estimate of the usage during cold weather conditions and following the historical usage pattern, the Company assumes that this facility will [redacted]. This assumption is incorrect as will be demonstrated later in my testimony. An incorrect forecast for this single large use customer could have a significant impact on the accuracy of the forecast. An inaccurate estimate of the hourly and the total daily volume can also have an impact on the cause and potential need for a peak hour contract.

My third concern is also related to the information that has been provided. The peak day planning model assumes a high volume send-out day for all customers, but the Company has not provided historical information to show how the actual hourly volumes compare to the daily nomination amounts. Exhibits 1.3 and 1.5 represent that on an average day and on a peak usage day, the peak hourly requirement will exceed the daily nomination amount by 17%. There has been no historical information presented to verify or validate the amount of gas consumed during the peak hours of a high send-out day. This type of information would be helpful to determine if the actual send-out amounts during peak hours are significantly higher than the daily nomination amounts. The Division has requested that the daily nomination amounts be added to the historical high send-out days for the last several years but the Company has been unable to provide this information.

Q: Can you explain why including the Lake Side facility in the analysis is important?

A: Yes. On a daily basis, the Lake Side electric generation facility [redacted]the 17% amount identified for the transportation customers but it has not been included or considered in the

[3] Three year average of the Lake Side volume for December, January & February.

analysis. While the Company has estimated a 17% swing from the average to the peak, the Lake Side facility [redacted] swing from the average to the peak. The actual usage data for Lake Side and for all customers is considered confidential, however due to the large volume of this customer and the potential impact to the system, it is important to understand the historical usage and how the nomination cycles are being used by this customer.

In recent years, the Federal Energy Regulatory Commission (FERC) changed the natural gas nomination cycle to accommodate better coordination between electric generation and gas distribution but no analysis has been included to see if large use customers or electric generation facilities are using the inter-day nomination cycles to reduce the impact to the distribution system. Requiring high usage customers to utilize inter-day nominations could possibly reduce or eliminate the need for peak hour contracts.

Q: If we have not had a peak weather event for some time, why is the peak hour now a concern and why has the Company purchased the Kern River peak hour contract?

A: If the Company were to experience a peak day event, transportation contracts on upstream interstate natural gas pipelines or alternate plans must be in place in order to meet the peak day requirement. The peak hour contract has been purchased to provide additional firm transportation during the peak usage hours of the peak usage day. In prior years, Pipeline has allowed the Company to draw the additional gas during peak hours without a formal contract agreement.

In addition to meeting the transportation needs during extreme cold weather conditions, it is the Division's understanding that the Kern River peak hour contract was used during the last heating season under normal operating conditions. While the maximum amount of firm transportation is set by the contract limit, the daily amount of firm transportation is reduced to the nomination amount on any given day. Even though the Company may have firm transportation contracts for 1.74 BCF for a peak planning day, when weather conditions are not extreme and daily nominations are lower than the maximum amount, the firm transportation amount is reduced to the nominated amount. Any fluctuation or additional gas that is withdrawn during peak hours of the day are delivered on a best efforts basis and would not have firm delivery rights. During normal weather conditions, it is unclear to the Division why a peak hour contract would be necessary since there would likely be excess capacity available from the pipeline.

Q: Are you convinced that the Company's solution to the peak hour issue is the best choice and that this issue has been adequately reviewed?

A: No. As addressed by Mr. Lubow, the Division is not aware of another gas distribution company utilizing peak hour contracts. In other words, it appears that Dominion's adoption of peak hour contracts is unique in the industry. In addition to the Kern River Contract, the Company has entered into a Precedent Agreement with Dominion Questar Pipeline for additional peak hour service and the tariff application is in front of FERC at this time. However, both the Kern River peak hour tariff and the Dominion Questar Pipeline tariff were created at the request of Dominion Energy (Questar Gas) with no other pipeline customers requesting this type of service.

The cost for the peak hour transportation contract with Kern River was included in the Company's last 191 Pass-Through filing[4] but the peak hour contract and the associated costs have not been thoroughly reviewed. The most recent 191 Pass-Through filing that included the Kern River peak hour contract was approved by the Commission on an interim basis and is subject to further Division review and audit. The Division is not convinced that this is a valid expense or that this cost should be paid by ratepayers. If the proposed Dominion Questar Pipeline tariff provisions are approved by FERC, it is anticipated that the Company would include the cost of this additional contract in future 191 Pass-Through filings and would request that a portion of these costs be passed on to transportation customers.

It is unclear to the Division how or why the Company is pursuing an additional contract with Dominion Questar Pipeline to solve the "peak hour problem" when the source of the "problem" appears to be Dominion Questar Pipeline's inability to provide firm delivery to meet the hourly demand. The Kern River peak hour contract along with the pending future

[4] Docket No. 17-057-07, Pass-Through Filing.

contract with Dominion Energy Questar Pipeline should be carefully reviewed and understood by all parties.

Q: Has the Company identified other options that could be available to address a portion of this problem?

A: Yes. In Docket No. 14-057-31, Company witness Mr. William Schwarzenbach indicated that transportation customers should adjust their daily nomination amounts using the inter-day cycles to accommodate changes in the actual usage:

> **Q. In addition to adjusting nominations daily, do TS Customers and their agents have the ability to change their nominations during the day to match unexpected changes?**
>
> A. Yes. While most TS Customers and Agents do not nominate daily, they currently have 4 cycles per day to adjust nominations to match customer usage. This includes two cycles during the day when TS Customers or their Agents can update their nominations for that day (intraday cycles). The Federal Energy Regulatory Commission (FERC) has also approved the addition of another intraday cycle starting in April 2016. In the event customer usage is different than the nomination **for the day**, the TS Customer or their Agent has multiple opportunities to adjust the nomination **during the day** to more closely match the customer's usage.
>
> **Q. Why did the FERC add a cycle?**
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> A. The FERC added a cycle to allow customers to better match their supplies to usage **throughout the day**. **As customer demand changes from hour-to-hour through the day, customers can change their nominations on the pipeline to match the changing demands**. Notably, this is much more frequent nominating than the daily adjustments that the Company hopes to achieve with the charges proposed in this docket.[5]

If the Company expects the transportation customers to make inter-day adjustments using the nomination cycles, the same process may be able to work for the Company during extreme weather conditions. The Division is not convinced that the Kern River and Dominion Questar Pipeline contracts represent the most cost-effective way to address the Company's concern, if that concern is ripe for addressing at all.

[5] Docket No. 14-057-31, Direct Testimony of William F. Schwarzenbach, page 8, line 188. (emphasis added)

Q: Are there other contracts or services in place to address fluctuations from the daily nomination amounts?

A: The Company already has no-notice transportation service in place for 203,542 Dth. This contract is included in the 191 filing and a portion of the cost is shared with transportation customers through the transportation imbalance charge. In Docket No. 14-057-31, Company witness Mr. Kelly Mendenhall identified the purpose of the no-notice transportation contract as follows:

> The No-Notice Transportation service gives the Company the flexibility to deliver gas to or from the system in between normal nomination cycles. This service is being used when load does not match nominations at the QGC/QPC gate stations. This includes imbalances for transportation customers. This service is paid for on a monthly basis by sales customers whether it is used or not.

It is unclear to the Division why there is a need for both no-notice service and the peak hour service when the no notice service and the peak hour service appear to be providing the same or similar services. The Company has not provided sufficient information concerning the difference between these services or why both are needed.

Q: Do you agree with the way that the cost for the Kern River contract has been allocated to the transportation customers?

A: No. In allocating the cost of the Kern River contract, the Company has included only the sales and firm transportation customers and has excluded the impact of the Lake Side contract, which represents [redacted]. Even after excluding the Lake Side contract, the remaining transportation customers represent an average of 20.6%[6] of the total volume during the winter months. If the Commission finds that the peak hour contract is in the public interest, it would be more appropriate to allocate a portion of the cost to transportation customers using a 3 or 5 year average amount. It appears that the 13.9% allocation identified in Mr. Mendenhall's testimony has been calculated using only 2016 volume information and excludes interruptible transportation customers.

[6] Three year average of the total monthly volume for December, January & February for all transportation customers excluding Lake Side.

Q: You mentioned that the Lake Side power plant [redacted]. Do you have specific information to show how gas is consumed on an hourly basis by the Lake Side facility?

A: Yes. Chart 1 below is a summary of the hourly usage for the period from November 15, 2016 through February 15, 2017. This is the same time period that was used by the Company in QGC Exhibit 1.5 and represents the winter months covered by the Kern River contract. As shown in the chart, the Lake Side facility [redacted] While the Company has chosen to exclude the Lake Side plant from the analysis, including the usage pattern from this customer is important in order to understand how the Dominion distribution system is being used.

Chart 1

[redacted]

The usage pattern for this customer is quite different than the information presented in QGC Exhibit 1.5 and represents large transportation volumes. There has been no analysis or information included with this filing to determine if the actual usage for this customer is impacting the Dominion system or if this or if any of the customers are using the inter-day nominating cycles. As noted above, creating additional nominating cycles was intended to improve the coordination of natural gas and the electric markets. Encouraging this one customer or any of the other large use transportation customers to better utilize the nomination process could possibly reduce the need for the peak hour contracts.

Q: Has there been [redacted] at the Lake Side plant and [redacted]

A: It is possible that the [redacted] in the peak hour usage. Chart 2 below is a comparison of the average hourly usage for the Lake Side plant for the month of January 2015, 2016 and 2017. Note that the usage pattern for this facility does not match the flat burn pattern used to create the IRP forecast.

Chart 2

[redacted]

[redacted] The Lake Side 2 facility became operational in June 2014 and both the Lake Side 1 and the Lake Side 2 facilities [redacted]

Q: The IRP model assumes the full [redacted] the Lake Side plant with a flat utilization rate. Do you have any additional information to show that the utilization rate for this facility for an extended period of time?

A: Yes. Chart 3 below shows the actual daily Dth usage for the Lake Side facility from January 1, 2016 through March 31, 2017. This information shows that [redacted] during the winter heating season.

Chart 3

[redacted]

[redacted]While this chart includes only the last 15 months, it clearly shows the fluctuation in the natural gas usage and how increases or decreases could impact the Dominion system. Without including a better understanding of the hourly, daily and seasonal usage of this and other large use transportation customers, a more detailed analysis of the need for peak hour contracts cannot be determined.

CONCLUSIONS AND RECOMMENDATIONS

Q: What conclusions have you reached concerning the peak hour contract and the allocation of a portion of the contract cost to transportation customers?

A: Based on information that has been provided, the Division is not convinced the peak hour contracts are necessary and in the public interest. Therefore, based upon our investigation and the information that the Division has at this time, the Division cannot recommend that transportation customers pay a portion of the costs associated with the Kern River contract.

However, if the contracts are found to be in the public interest, transportation customers should pay a share as discussed in Mr. Lubow’s testimony.

Q: Does this conclude your testimony?

A: Yes.