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To: The Public Service Commission of Utah

From: The Office of Consumer Services

Michele Beck, Director  
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Date: August 31, 2017

Subject: Docket 17-057-12

**In the Matter of:** Dominion Energy Utah's Integrated Resource Plan (IRP)  
for Plan Year: June 1, 2017 to May 31, 2018

## INTRODUCTION

On June 14, 2017, Dominion Energy - Utah (Dominion or Company) filed its 2017 Integrated Resource Plan (IRP) for the planning period June 1, 2017 to May 31, 2018. On June 28, 2017, the Utah Public Service Commission (Commission) issued a scheduling order which set a deadline of August 31, 2017 for parties to file initial comments and October 10, 2017 for reply comments on the IRP in this proceeding.

The Office of Consumer Services (Office) submits these comments to the Commission regarding the Company's 2017 IRP. The Office will provide comments on the following topics:

- Peak-hour Demand
- Other issues including concerns about the Interruptible Service Class and the Sendout Model
- Evaluation of whether the IRP meets the requirements of the Commission's guidelines.

## PEAK-HOUR DEMAND

One of the issues highlighted by Dominion in its 2018 IRP filing, is Dominion's concern over the demand for natural gas during the peak hour of a design day (section 8, Peak

Hour Demand and Reliability). Dominion believes that while it can meet the daily expectations of a design day scenario, it cannot reliably meet the hourly requirements imposed by peak hour gas consumption within the design day. Currently Dominion is seeking to meet peak hour demands through special peak hour service contracts with local pipeline companies, which it describes in section 8 under “Long-Term Remedies”. These are at issue in Dockets 17-057-09 and 17-057-07.

Beginning on page 8-3 of the 2018 IRP, the Long-Term Remedies subsection outlines various solutions to the peak hour demand issue. These solutions are listed as follows:

- Demand Response
- Excess Firm Upstream Transportation Capacity and Supply Purchases
- Excess Firm Upstream Transportation Capacity and Additional Off-system Storage
- Facility Improvements
- Upstream Hourly Firm Peaking Services
- On-System Storage

*Demand Response and Meeting Peak-Hour Demand*

In the Commission’s order from Docket 16-057-08, the Commission directed the DSM Advisory Group to collaborate with the Company in order to explore whether opportunities exist for one or more DSM pilot programs that might alleviate peak demand.<sup>1</sup>

For its analysis of the 2018 IRP, the Office issued a data request to assess the Company’s investigation of DSM programs that would alleviate the peak-hour issue, including all information, data, and communication materials supporting the collaboration. In response to OCS 1.2, the Company indicated the following:

“Following the Utah Public Service Commission’s Order in Docket No. 16-057-08 which was issued on December 1, 2016. To date (July 27,2017), the Company has found that demand response programs for natural gas generally revolve around four options: 1) interruptible rates; 2) fuel switching; 3) time of use rates; and 4) direct load control. The Company expects to present the results of its research and to collaborate on this subject at either an August or September 2017 meeting of the Advisory Group.”

During the EE Advisory Group meeting on August 24, 2017, the Company provided summary slides along with some discussion, regarding various methods of demand

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<sup>1</sup> See Commission Order, Docket 16-057-08, dated December 1, 2016, pp. 8-9.

response as a resource for meeting peak-hour demands. Although this presentation did not provide the detailed supporting documentation that the Office requested, the information presented indicated that a viable demand response solution may not be immediately available. The Office recommends that advances in demand response be continuously monitored and reevaluated for solutions that will benefit ratepayers.

#### *Other Long Term Solutions for Peak-Hour Mitigation*

As discussed in the previous section, Demand Response currently offers little in terms of a solution for resolving the peak-hour issue. The Company also explored attaining excess firm upstream transportation capacity along with excess supply purchases and/or additional off-system storage. While Dominion states that these are viable sources for additional gas supplies, Dominion also states that these options may or may not be available when they are needed.

Additionally, Dominion states that the gate stations along the Wasatch Front are near capacity. Therefore, Dominion has made plans to expand the Hyrum gate station, as well as to add a North Salt Lake gate station in order to provide greater flexibility in adjusting sources of supply for the distribution system.

#### *Upstream Hourly Firm Peaking Services*

Page 8-4 discusses the Peak-Hour service contracts that the Company has attained to meet the requirements of the peak hour of design day. These contracts are currently at issue before the Commission in the aforementioned dockets 17-057-09, and 17-057-07. Unlike some of the other remedies discussed above, Dominion does not state within this subsection that this particular long term remedy is deficient in meeting the constraints of the peak hour on design day, only that it should be part of a diverse portfolio of resources.

#### *On System Storage*

The final long term remedy listed in section 8 of the IRP is "On System Storage". Prior to filing the IRP, Dominion held several pre-filing workshops. During those resource planning discussions Company representatives explained the peak hour of design day constraints along with potential solutions. In a meeting on February 28, 2017, an on system Liquid Natural Gas (LNG) storage facility was shown to be an extremely expensive option among other potential solutions, and was accordingly described after all other solutions had been explained. The implication in that meeting was that the LNG facility would therefore be considered last. However, the description of the LNG facility in section 8 concludes with Dominion stating that the LNG facility is "a critical component... and should be included as part of a portfolio of resources." The filing

further states that “the Company plans to take necessary steps to complete this process in the near future.”<sup>2</sup> The LNG facility is also described on page 4-20 as a component of the DNG Action Plan.

The Office notes that Dominion has not yet made any specific requests in regards to the LNG facility. However, as described in a later section, it has become clear that Dominion has a different view as to the significance of the information presented in its IRP. What is clearly missing from this IRP is a technical analysis with supporting workpapers that evaluate the costs, benefits, and risks to determine and support a least-cost alternative. The Office asserts that providing brief descriptions and overviews of a potential LNG facility in workshops and in this IRP filing, does not constitute a presentation of evidence that the facility is cost effective, or absolutely necessary. While a facility of such magnitude may have the capabilities described by Dominion, it must still be shown to be cost effective and quantifiably necessary. Such evidence supporting the LNG facility has yet to be presented to the Commission.

## **OTHER ISSUES**

### *Interruptible Service Class*

In page 3-4 of the IRP, Dominion states:

“The Company does not plan to use supply from interrupted customers during periods of interruption. While the Company has the option to buy excess supplies from interrupted customers, and the customers have the option to sell excess supplies, the Company is not confident in the amount of supply that will be available.”

Dominion further indicates that during a recent interruptible event about 50% of the customers receiving notification were either unable or unwilling to curtail to the lower of their firm demand or delivered quantities.

While the Company imposed penalties pursuant to the IS class tariff to those customers who did not interrupt, the outcome clearly calls into question the ability for IS customers to provide a reliable resource.

However, the Office notes that if IS customers do not fulfill their responsibility to curtail, the costs to purchase offset services should not be passed on to firm service customers. Other customers already pay rates that reflect discounts given to IS customers in exchange for their ability to curtail. It is not clear whether the penalties in the IS tariff

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<sup>2</sup> See pages 8-5, 8-6 of the 2018 IRP.

adequately compensate other customers. The Company should provide to parties a report of cost information for firm services to offset the lack of curtailment and the amount of penalty allocated to the GS class for comparison.

Sendout Model and Cost of Service Gas

Dominion utilizes a gas supply modeling software called SENDOUT. According to page 6-3 of the 2018 IRP, the SENDOUT model is used to determine the “appropriate production profiles for cost-of-service gas.” Among the inputs to the model denoted on page 6-3 are the time horizon (31 years for the 2018 IRP), and the number of categories of cost-of-service production (113 categories for the 2018 IRP).

Included in exhibit 6 of the 2009 IRP was a letter from the developer of SENDOUT (that company has since been acquired by ABB). Regarding the 21-year time horizon of the Questar SENDOUT model, the letter states, “The 21-year time horizon also adds to the model’s complexity. Only a handful of SENDOUT models go beyond ten years.” However, exhibit 6 to the 2018 IRP states “the Company used a modeling time horizon of 31 years. A relatively long time-horizon better reflects the fact that cost-of-service gas is a long term resource.”

Regarding categories of cost of service production, exhibit 6 to the 2009 IRP explained that “these categories have been created to naturally group wells which have common attributes including factors such as geography, economics, and operational constraints.” The 2009 IRP utilized 51 categories compared to the 113 categories used for the 2018 IRP.

The significant increases to both of these inputs occurred in the 2014 IRP (docket 13-057-04, filed May 31, 2013). In that year the time horizon increased from 21 years to 31 years and the cost-of-service categories increased to 94, up from the 46 modeled the year before. Page 6-1 of the 2014 IRP states “Questar Gas substantially increased the number of modeled categories in order to provide for greater economic and operating precision in prioritizing supplies.”

The Office notes that cost-of-service gas was generally lower than market prices prior to 2008. However, the price of gas began a significant decline starting in 2009, by 2013 it was apparent that the decline of the price of gas would not likely be reversed in the immediate future. Since that time, cost-of-service gas has generally been more expensive than average market prices.

The Office is concerned by the possible implications of the radical changes in SENDOUT model inputs, as well as to the potential correlation that the changes have to the timing of market gas prices falling below and remaining below cost-of-service gas

for a sustained period of time. The Office requested additional information about the material and immaterial impacts that these changes have on the modeling process and the IRP, as well as how the 2018 IRP would be changed or impacted by use of the 2008 model inputs. The Office has not yet received those responses. The Office may provide more specific recommendations on this topic in its reply comments after reviewing the discovery responses.

## **CONSISTENCY WITH STANDARDS AND GUIDELINES**

### General Observations

In the first paragraph of the Commission's Report and Order on Standards and Guidelines for Questar Gas Company<sup>3</sup> (IRP Guidelines Order) it states:

The Commission will require Questar Gas company ("Questar" or "Company") to pursue the least-cost alternative for the provision of natural gas energy services for its present and future ratepayers which is consistent with safe and reliable service, the fiscal requirements of a financially healthy utility, and the long-run public interest. This alternative should be identified in an Integrated Resource Plan ("IRP").

Appendix A of the IRP Guidelines Order provides the complete set of 2009 IRP standards and guidelines. In Section 1, Definition and Purpose, it states in relevant part:

The results of the Planning Process guide the Company in the selection of the optimal set of resources, given expectations relating to costs, risk and uncertainty, safety and other regulatory requirements, and technical feasibility such that present and future customers are provided natural gas energy services at the lowest cost consistent with the Company's duties specified in Utah Code §54-3-1, the fiscal requirements of a financially healthy utility and the long-run public interest. The results of the Planning Process, as compiled in a comprehensive integrated resource plan ("IRP"), will inform the public and the regulatory community of the Company's evaluations, resource selections, implementation plans, and future risks in pursuit of the lowest cost objective, and may be used to evaluate the Company's requests for

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<sup>3</sup> Report and Order on Standards and Guidelines for Questar Gas Company, Docket No. 08-057-02, March 31, 2009, p. 1.

recovery of gas costs in various proceedings, including pass-through and general rate cases.<sup>4</sup>

Dominion has taken the position in another docket that the information provided in previous IRPs constitutes evidence regarding the peak-hour issue and appropriate solutions. In another case before the Commission Dominion provided the following testimony:

Q. Has the Company adequately justified the need for the Peak-Hour Service?

A. Yes. The Company has addressed its design peak day needs and its plan to address design peak day needs in every IRP. For the last two years, the Company has provided evidence about the peak-hour issue, and explained the steps it was taking to solve the issue in IRP workshops and technical conferences. Given that the purpose of the IRP dockets is to address system planning, the Company expected that the division and others would address any perceived shortfalls in the IRP dockets. But the Division and the UAE are raising these issues for the first time in this docket. I have attached, for the Commission's convenience, the presentations in which the Company discussed peak hour needs in DEU Exhibits 1.1R through 1.6R.<sup>5</sup>

It should be noted that all of Dominion's citations to where it contends it provided evidence are presentations given in pre-filing and post-filing technical conferences, not to the IRP itself. Further, Dominion does not even contend that it provided evidence or any analysis demonstrating the "least-cost alternative" as contemplated in the Commission's IRP Guidelines Order.

The issue of evidence regarding the peak-hour contracts are best addressed in other dockets and the Office will take appropriate positions in those other forums. However, this recent testimony has clearly illuminated a few questions that need to be addressed:

- Have recent IRP reviews focused on the key emerging issues?
- Does the Dominion IRP comply with the Commission's IRP Guidelines Order?

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<sup>4</sup> Report and Order on Standards and Guidelines for Questar Gas Company, Docket No. 08-057-02, March 31, 2009, p. 22.

<sup>5</sup> Rebuttal Testimony of Kelly B. Mendenhall, DEU Exhibit 1.0R, Docket No. 17-057-09, Page 2, lines 37-46.

- Has the Dominion IRP succeeded in “informing the public and regulatory community” of its evaluations and plans “in pursuit of the lowest cost objective”?

### Focus of Recent Reviews

While the Company’s IRP has historically addressed peak day demand, the issue of peak-hour demand is relatively recent. In last year’s IRP, the Company did not include anything in its action plan with respect to the peak-hour demand. While peak-hour demand was addressed verbally in some of the IRP associated meetings, the Office has never understood the scope of our comments and review to include meeting presentations which are not always filed formally with the Commission. In fact, the Office recently discovered that the presentations from pre-filing meetings are posted by the Commission in the docket assigned to miscellaneous correspondence and reports. Thus it would not be reasonable to consider those presentations part of the IRP record. In summary, the Office believes the focus of recent IRP reviews has been reasonable. We have some concerns about whether the Company presented adequate information on its emerging issues, but will not re-litigate past dockets in these comments.

### Compliance with Commission Guidelines

In general, the IRP complies with the various reporting requirements included in the IRP Guidelines Order. However, the Office is concerned that the IRP does not comply with the guidelines in one key, substantive manner.

Simply stated, the IRP does not provide analysis to justify the selection of “the optimal set of resources” with respect to peak-hour demand, as required in the “Definition and Purpose” of the Guidelines. The Company appears to be moving forward with pursuit of an LNG facility despite not having included any cost benefit analysis or modeling that demonstrates it to be the least cost alternative. The Office views this decision as precisely the type of analysis the IRP was designed to capture. Thus, while we have been appreciative of the overall information presented in the IRP and associated processes, as well as its general educational value, the peak-hour demand issue has shown that the IRP process is not working as designed.

The Office has additional concerns with the Action Plan in general. The IRP Guidelines Order requires that the “DNG Action Plan will span the period of the IRP year and the subsequent two calendar years. The DNG Action Plan will describe specific actions and their projected/budgeted amounts.”<sup>6</sup> The DNG Action Plan in this IRP (see pages 4-14 to 4-22) is not comprehensive or consistent in its presentation of projected and budgeted

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<sup>6</sup> Report and Order on Standards and Guidelines for Questar Gas Company, Docket No. 08-057-02, March 31, 2009, p. 33.



amounts. The Office's primary concern, however, is the complete lack of budget or projections for the LNG facility.

For these reasons, the Office recommends that the Commission either not acknowledge the IRP or specifically not acknowledge the "Plant Projects" section of the DNG Action Plan that references the LNG facility.<sup>7</sup> Either way, the Commission should clearly indicate to the Company that its analysis of peak-hour demand solutions is insufficient to be used as evidence in any cost recovery proceedings.

### Informing the Public and Regulatory Community

The Office believes that the IRP could do a better job of informing the public. Dominion has raised issues in other dockets that the regulatory agency and other parties should have known about the peak-hour demand issue because of the Company's various presentations. However, as noted earlier, some of these presentations were posted in the docket assigned to miscellaneous correspondence and reports. While the regulatory entities were deeply involved in these meetings, members of the public were not. It would be difficult for the public to know how to find all of the relevant material, particularly since it isn't all filed in the IRP docket. The access to the public is further complicated by the fact that some of the key information is confidential and redacted. Since these presentations are not part of the IRP docket in many cases, parties with legitimate interests and a willingness to sign the confidentiality agreements may not have a clear path to do so.

The Office recommends two specific logistical changes. First, all IRP-relevant material should be filed and posted in the IRP docket. To accomplish this, the Office recommends that the Company be ordered to launch the IRP process with a formal request to the Commission so that the Commission may open a docket and the regulatory community, interested parties, and the public will easily know where to find all relevant documents and presentations. Second, the Office recommends that the Company be required to restructure the IRP document itself so that the DNG Action Plan is called out as a clearly identified and separate section. This would allow the public to easily locate the upcoming plans of the Company, which is the primary purpose of the IRP.

## **RECOMMENDATIONS**

The Office recommends that the Commission either not acknowledge the IRP, or specifically not acknowledge the "Plant Projects" section of the DNG Action Plan that references the LNG facility. The Commission should also clearly indicate to the

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<sup>7</sup> See R746-430-1 (3). Definition and Filing of Action Plan

Company that its analysis of peak-hour demand solutions is insufficient to be used as evidence in any cost recovery proceedings.

The Office further recommends that the Commission order Dominion to take the following actions:

1. Provide a report of cost information for firm services to offset the lack of curtailment and the amount of penalty allocated to the GS class for comparison.
2. Provide more consistent and comprehensive budget and cost projections for the items identified in the DNG Action Plan.
3. Formally request that the Commission open a docket for the IRP prior to the first pre-filing technical conference so that all IRP-related materials can be easily accessed and reviewed by the public and regulatory community.
4. Restructure future IRP filings so that the Action Plan is a separate, clearly identified section.