- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

Dominion Energy Utah's Integrated Resource Plan (IRP) for Plan Year: June 1, 2017 to May 31, 2018	DOCKET NO. 17-057-12 REPORT AND ORDER

ISSUED: January 5, 2018

On June 14, 2017, Questar Gas Company (now Dominion Energy Utah ("Dominion")) filed its Integrated Resource Plan ("IRP") for the period of June 1, 2017, through May 31, 2018 ("2017 IRP"). On June 27, 2017, the Public Service Commission ("PSC") held a Scheduling Conference and thereafter issued an order establishing the schedule for parties to file comments and setting the date for a technical conference. On August 2, 2017, the PSC hosted a technical conference during which Dominion presented additional information concerning the 2017 IRP. The Utah Association of Energy Users ("UAE") petitioned for leave to intervene on September 5, 2017, which the PSC granted on September 26, 2017.

The PSC received comments from the Division of Public Utilities ("DPU") and the Office of Consumer Services ("OCS") on August 31, 2017. On October 10, 2017, UAE and Dominion filed reply comments.

1. Summary of the 2017 IRP

The 2017 IRP presents Dominion's plan to meet, provide infrastructure for, and manage its ongoing natural gas demand. In preparing the 2017 IRP, Dominion represents it sought to maintain four primary objectives: (1) to project future customer requirements; (2) to analyze alternatives for meeting customer requirements with respect to gas supply, upstream capacity, and distribution system; (3) to develop a plan based on stochastic data and methods and risk mitigation programs to achieve the provision of reliable and safe gas supply services at reasonable long-term costs to all customer classes given system constraints and capacities; and (4) to use IRP-developed guidelines for creating a flexible framework to conduct day-to-day and longer-term gas supply decisions with respect to cost-of-service gas, gas purchases, gathering, processing, upstream transportation, and storage. (2017 IRP at 2-17.)

Dominion submits the following findings and forecasts for the 2017-18 IRP year:

(1) A forecast design-day firm sales demand of approximately 1.337 million decatherms ("Dth") at the city gates for the 2017-2018 heating season;

(2) A forecast cost-of-service gas production level of approximately 70.7 million Dth assuming the completion of new development drilling projects (61% of forecast demand);

(3) A forecast balanced portfolio of gas purchases of approximately 45.6 million Dth;

(4) A need for Dominion to maintain flexibility in purchase decisions pursuant to its planning guidelines, because actual weather and load conditions will vary from assumed conditions in its modeling simulation;

(5) No current need for any additional price stabilization, but Dominion will review this on an annual basis to determine whether such measures are appropriate in the future;

(6) A need for Dominion to continue to monitor and manage producer imbalances;

(7) A need for Dominion to continue to promote cost-effective energy-efficiency measures;

(8) A need for Dominion to enter into contracts to resolve peak-hour issues and to secure needed storage and transportation capacity; and

(9) A need for Dominion to take the necessary steps to obtain required approvals for the design and construction of an on-system liquefied natural gas facility ("LNG Facility") to help meet peak-hour requirements and ensure system reliability for customers.

(2017 IRP at 1-1, 1-2.)

The 2017 IRP presents Dominion's annual forecasts, summaries of system and gas modeling activities, and resource selection results. It also includes a discussion of regulatory, resource, and operational challenges that Dominion faced during the previous year or could face in the future. Forecasts include annual temperature-adjusted system sales and throughput, system firm peak design-day gas demand, residential usage per customer, and the number of new customers. Dominion uses the forecast information, along with other operational data, to evaluate current and projected gas supply needs and system infrastructure requirements. Dominion also uses these forecasts to inform the development of its annual natural gas request for proposals for base load and peaking gas supplies.

The following tables summarize price (dollars per Dth), sales, peak demand, throughput, and usage per customer information provided in the 2017 IRP. For comparison, historic information is provided where available:

Table 1. Price[1] ($/Dth) (2017 IRP at 5-1 and 2016 IRP at 5-1)

Historic First of Month Index Price for Natural Gas on Dominion Questar Pipeline	2017 IRP	2016 IRP	2015 IRP
Annual average price	2016: $2.24	2015: $2.49	2014: $4.25
Heating season average price	2016-2017: $2.95	2015-2016: $2.01	2014-2015: $3.21

Table 2. Sales (million Dth)
(2017 IRP at 3-1; Exhibit 3.10 and 2016 IRP at 3-1; Exhibit 3.10)

Annual System Sales	2017 IRP Forecast 2017/18-2026/27	2016 IRP Forecast 2016/17-2025/26	2016 Actual
Temperature-adjusted sales[2]	115.0 – 123.6	111.6 – 122.7	114.9
Actual sales	N/A	N/A	106

Table 3. Peak Demand (million Dth/day) (2017 IRP, Exhibit 3.9 and 2016 IRP, Exhibit 3.9)

Peak Demand at the City Gate	2017 IRP Forecast Heating Season 2017-2018	2016 IRP Forecast Heating Season 2016-2017	Actual Heating Season 2016-2017
Total	1.778	1.739	1.239
Firm Sales	1.337	1.317	0.977
Transportation	0.441	0.423	0.262

Table 4. System Throughput (million Dth)
(2017 IRP at 3-1; Exhibit 3.10 and 2016 IRP at 3-1; Exhibit 3.10)

System Throughput	2017 IRP Forecast 2017/18-2026/27	2016 IRP Forecast 2016/17-2025/26	2016 Actual
Temperature-adjusted system throughput	206.8 – 222.1[3]	191.6 – 204.0	199.0
Actual system throughput	N/A	N/A	192.0

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[1] In the 2015 IRP Questar changed its First-of-Month ("FOM") index price reference from Questar Pipeline to Northwest Pipeline. Questar stated the Northwest Pipeline index is now a better indication of price.
[2] The projections contained in the IRP reflect the temperature and elevation compensation the PSC approved in Docket No. 09-057-16, *In the Matter of the Application of Questar Gas Company to Increase Distribution Non-Gas Rates and Charges and Make Tariff Modifications* (Report and Order, June 3, 2010).
[3] Dominion's current forecast includes anticipated throughput for electricity generation plants fueled by natural gas.

Table 5. Usage per Customer (Dth) (2017 IRP at 3-1 to 3-2; Exhibits 3.2, 3.3, and 3.10)

Temperature Adjusted Average Annual Usage per Customer	2017 IRP Forecast 2017/18-2026/27	2016 IRP Forecast 2016/17-2025/26	2016 Actual
Utah GS	105.6 – 94.9	103.4 – 93.0	108.2
Utah Residential GS	80.6 – 72.8	78.6 – 69.4	82.0
Utah Commercial GS	450.7 – 408.1	442.0 – 424.2	464.0

Table 6. Natural Gas Supply Requirements (Dth)
(2017 IRP at 10-5 to 10-6; Exhibits 10.89 and 10.90)

Natural Gas Requirement	2017 IRP Forecast June 2017 – May 2018	2016 IRP Forecast June 2016 – May 2017
Total	130.8	133.0
Cost-of-Service Gas	70.7	64.9
Purchased Gas	45.6	53.6
Other (off system and storage)	14.5	14.5

Dominion also identifies several reinforcement and replacement projects that are currently in the planning, design, or construction phase. These projects include seven high pressure station projects, six feeder line projects, and three intermediate high pressure projects located throughout its system.

Different from past IRPs, Dominion includes in the 2017 IRP a new chapter addressing peak-hour demand and reliability options. Dominion forecasts that projected peak-hour demand across its system will materially exceed Dominion's total firm capacity on a peak day for each of the next ten heating seasons. Dominion concludes that "[a]n on-system LNG facility is a critical component of a long-term solution to meet peak-hour demand and reliability requirements and should be included as part of a portfolio of resources used to meet peak-hour requirements and ensure diverse supply for customers. Therefore, [Dominion] plans to take necessary steps to complete this process in the near future."[4]

2. Parties' Comments

The DPU

The DPU's analysis of the 2017 IRP addresses procedural, reporting, and informational requirements. According to the DPU, "The purpose of the IRP filing is to provide regulators with an update of the 'process in which known resources are evaluated on a uniform basis, such that customers are provided quality natural gas services at the lowest cost to DEU and its customers consistent with safe and reliable service.'"[5] The DPU reports that the General Information Requirements outlined in the 2009 IRP Standards and Guidelines[6] ("2009 IRP Guidelines") have been met: in general, the requirements for the 191 Account have been met; an overview of the distribution non-gas ("DNG") system has been given, including a detailed explanation of Dominion's integrity management plan activities and a DNG Action Plan; and gas supply, transportation options, and storage were addressed. Accordingly, the DPU concludes Dominion has made reasonable attempts to satisfy the 2009 IRP Guidelines and recommends the PSC acknowledge Dominion's 2017 IRP.

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[4] 2017 IRP at 8-5 to 8-6.

[5] DPU Comments at 2 (quoting *"In the Matter of 1997 IRP for Mountain Fuel Supply Company"* Docket No. 97-057-06 (Recommended Guidelines for Questar Gas' IRP filed April 17, 1998 at 1)).

[6] "In the Matter of the Revision of Questar Gas Company's Integrated Resource Planning Standards and Guidelines" Docket No. 08-057-02 (Report and Order on Standards and Guidelines for Questar Gas Company, issued March 31, 2009).

The OCS

The OCS concludes that Dominion's 2017 IRP generally meets the 2009 IRP Guidelines with the exception that it "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 [IRP] Guidelines."[7] Therefore the OCS recommends the PSC either not acknowledge the 2017 IRP or specifically not acknowledge the "Plant Projects" section of the DNG action plan referring to a liquefied natural gas facility. The OCS also requested additional information and offered suggestions to improve the IRP process.

A. Peak-Hour Demand

According to the OCS, the issue of peak-hour demand is relatively recent and the 2016 IRP DNG Action Plan did not address this issue. The OCS summarizes Dominion's various solutions for meeting the peak-hour demand including demand response programs, facility improvements, peaking services, and on-system storage. The OCS states:

> [Dominion] 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 [OCS] 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 [2017] 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.[8]

The OCS contends that the 2017 IRP is not comprehensive or consistent in its presentation of projected and budgeted amounts. The 2009 IRP Guidelines provide that the DNG Action Plan should span the period of the IRP year and the subsequent two calendar years, and

[7] OCS Comments at 8.
[8] *Id*.

that the DNG Action Plan should describe specific actions and their projected/budgeted amounts. Nevertheless, the OCS' primary concern is "the complete lack of budget or projections for the LNG facility."[9] The OCS prompts the PSC to conclude that Dominion's analysis of peak-hour demand solutions is insufficient to be used as evidence in any cost recovery proceedings. Pertaining to the issue of demand response programs for meeting the peak-hour need, the OCS recommends that Dominion continuously monitor and evaluate advances in these programs for solutions that will benefit ratepayers.

B. Gas Supply from Interruptible Customers during an Interruption

The OCS notes that Dominion has no plans to use supply from interrupted customers during interruption periods.[10] The OCS is concerned that the costs to purchase gas supply during a curtailment event to offset the effect of Interruptible Service ("IS") customers failing to interrupt may not be appropriately matched to amounts from penalties and fines applied for failure to curtail pursuant to Section 3.02 of Dominion's Tariff. The OCS cites a 2017 curtailment event where Dominion reported about 50% of its IS customers, when given a notification to curtail usage, failed to do so.[11] Accordingly, the OCS suggests Dominion 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.

[9] *Id.* at 9.
[10] *Id*. at 4.
[11] *Id.* at 4-5.

C. Sendout Model and Cost of Service Gas

In addition, the OCS expressed concerns regarding implications surrounding significant changes previously made to Dominion's SENDOUT Cost-of-Service gas production modeling, which occurred around the same time that the market price of gas was falling relative to Dominion's price on its Cost-of-Service gas but provided no recommendations on this issue.

D. Informing the Public and Regulatory Community

The OCS states that some materials disclosed in pre-filing meetings of the 2017 IRP were not filed in the 2017 IRP docket itself, but were instead filed in a PSC miscellaneous docket. This, and the confidentiality of some key information, the OCS argues, make it more complicated than necessary for the public and other interested parties to involve themselves in Dominion's IRP process.

To resolve this issue, the OCS suggests Dominion should: (1) formally request that the PSC create a docket at the beginning of Dominion's annual IRP process under which Dominion can file all information pertaining to the IRP process for a given planning year; and (2) restructure its IRP filing so that the DNG Action Plan is called out as a clearly identified and separate section, allowing the public to easily locate Dominion's upcoming plans.

UAE

UAE supports the OCS' comments and urges the PSC not to acknowledge any aspect of the 2017 IRP that purports to address peak-hour issues and solutions raised by Dominion. UAE requests that the PSC ensure the proposed LNG Facility cannot reasonably be considered to have been acknowledged in this docket and that such a determination should be made solely on its own merits in proper PSC proceedings that are open and noticed to all affected parties, and only after Dominion has been required to meet its burden to prove that any such expenditures or proposals are necessary, prudent, economical, and in the public interest. UAE echoes the OCS' suggestions that Dominion should improve its ability to notify and involve the public, regulatory entities, and Dominion customers during the IRP process when proposed solutions may significantly affect them.

Dominion Reply Comments

Dominion supports the DPU's recommendation for the PSC to acknowledge Dominion's 2017 IRP.

In response to the OCS' request for cost information reports for IS customers failing to interrupt usage during a curtailment, Dominion states that penalties collected pursuant to Section 3.02 of Dominion's Tariff were never designed to "compensate" other customer classes, but rather to incent desired behavior. As such, Dominion maintains, a cost report is unnecessary.

Contrary to the OCS' assertion that Dominion has not provided sufficient supporting analyses for Dominion's peak hour needs and solutions, Dominion argues it has provided robust information through multiple IRP documents, IRP presentations, and in testimony and discovery in other dockets. Dominion asserts that since the first IRP was filed on September 30, 1991, the prudence review of resource acquisitions has always occurred during ratemaking proceedings. Dominion maintains that while the 2009 IRP Guidelines are silent on the concept of "acknowledgement" of an IRP, this terminology dates back to the Final Standards and Guidelines for Integrated Resource Planning for Mountain Fuel Supply issued on September 26, 1994. Dominion requests that the PSC acknowledge the 2017 IRP "with the full understanding that the informal-information-exchange attributes of the IRP process do not constitute a final prudence review, but are fundamental in providing important information in the justification of resource acquisitions."[12] Dominion also committed to continuously monitor and reevaluate advances in demand response for solutions that will benefit ratepayers and report on this issue in future IRPs.

Regarding the OCS' two suggestions to enhance how the public and regulatory entities are informed of Dominion's future IRPs, Dominion agrees that opening a formal docket at the onset of Dominion's annual IRP process would ensure any interested party has access to such resource planning materials. Also, Dominion agrees to place the DNG Action Plan section of future IRP filings in its own separate section, with its own tab.

3. Discussion, Findings, and Conclusions

Dominion's IRP process is an open, public process through which all relevant supply-side and demand-side resources are investigated in the search for the optimal set of resources to meet current and future natural gas service needs at the lowest total cost to the utility and its customers, in a manner consistent with the long-run public interest, and public safety, given the expected combination of costs, risks, and uncertainty. Pursuant to the 2009 IRP Guidelines, we consider comments on the adequacy of the 2017 IRP Planning Process and the information presented in the 2017 IRP. We also provide guidance to Dominion on certain issues.

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[12] Dominion Reply Comments at 4.

a. SENDOUT, DNG Action Plan, Pre-Filing Materials, and Firm Services Cost Information Report

With respect to the OCS' comments and suggestions regarding changes to Dominion's SENDOUT cost-of-service gas estimates, the DNG Action Plan and its future placement in the annual IRP application filing, and the accessibility of "pre-filing" IRP-related materials, we find that Dominion's reply comments filed October 10, 2017 adequately address these concerns. If the OCS disagrees with Dominion's reply comments, we request it elaborate on any continuing concerns in future IRPs.

Pertaining to the OCS' request that Dominion 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," we find Dominion's response reasonable. However, to the extent confusion remains on this issue, we direct Dominion to discuss the interruptible rate schedules (for both sales and transportation customers) and the failure to interrupt provisions of its tariff during a 2018 IRP public meeting.

b. Peak-Hour Demand

In response to the OCS' request, we appreciate Dominion's willingness to continuously monitor and reevaluate advances in demand response for solutions that will benefit ratepayers and report on this issue in future IRPs. We encourage Dominion to continue to address this issue in the Demand-Side Management Advisory Committee. We also agree with Dominion that while the IRP-process, as identified in the 2009 IRP Guidelines, provides valuable information pertaining to resource acquisitions, nothing therein constitutes a final prudence review of resource acquisitions.[13]

We find merit in the OCS' concerns that Dominion's 2017 IRP lacks technical analysis and supporting workpapers identifying the costs, benefits, and risks used to determine and support the selection of an LNG facility as the least cost alternative to address peak-hour demand. In this instance, as a basis for providing guidance, we refer to the following provisions in the 2009 IRP Guidelines (in relevant parts) as we evaluate Section 8. "Peak Hour Demand and Reliability" of the 2017 IRP:

> **Section IX**: The Company will include the following information, discussion and analysis in its annual IRP
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> [. . .]
>
> **Subsection C**: DNG Issues
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> [. . .]
>
> 2a. Identification of substantial projects including feeder line, large diameter main, small diameter main, and measurement and regulation station equipment projects, their associated capital budgets and long-range plan estimates, and a forecast of the revenue requirement impacts for those projects over the three-year time-frame addressed in the IRP.
>
> 2b. 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.
>
> 2c. A comparison of each selected project with the next best alternative including a discussion of cost and benefit, an 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.
>
> 3. A discussion of how changes or risks in the natural gas industry and/or the regulatory environment may affect resource options

[13] We will be addressing whether, or the extent to which, a need for peak-hour services exists in *Pass-Through Application of Dominion Energy Utah for an Adjustment in Rates and Charges for Natural Gas Service in Utah*, PSC Docket No. 17-057-20.

> available to the Company and their potential impacts on resource options and costs.
>
> [. . .]

Absent from the 2017 IRP peak-hour demand discussion is supporting information relating to costs, benefits, and risks associated with each potential solution as required by the various provisions of Subsection C presented above. We expect pursuant to Subsection C that information supporting potential peak-hour demand solutions will include modeled sensitivity analyses (i.e., low, medium, high scenarios) pertaining to, at a minimum, project costs, ongoing operations and maintenance costs, gas costs, and usage forecasts. Also, we request a discussion of whether future feeder line replacement projects could be economically modified or enhanced to help address the peak-hour issue. We direct Dominion to provide this information in future IRPs and filings related to approval of an LNG facility.

Based on our review of the 2017 IRP and the comments and reply comments from the DPU, OCS, UAE, and Dominion, we find that, with the exception of Chapter 8, Peak-Hour Demand and Reliability, Dominion's 2017 IRP generally complies with the requirements of the 2009 IRP Guidelines.

ORDER

1) With the exception of Chapter 8 Peak-Hour Demand and Reliability, we find that the 2017 IRP as filed generally complies with the requirements of the 2009 IRP Guidelines.
2) Dominion shall monitor and report on demand-response issues, initiate an IRP docket early each year, modify the IRP so the action plan is readily accessible,

and include a discussion of its interruptible customer rate structures and tariff provisions in a 2018 pre-IRP filing public meeting.

3) Dominion shall provide modeling sensitivity analyses and other information identified in Section 3 above in future IRPs pertaining to all evaluated solutions for addressing perceived peak hour deficiencies and in all flings related to approval of an LNG facility.

DATED at Salt Lake City, Utah, January 5, 2018.

/s/ Thad LeVar, Chair

/s/ David R. Clark, Commissioner

/s/ Jordan A. White, Commissioner

Attest:

/s/ Gary L. Widerburg
PSC Secretary
DW#298859

Notice of Opportunity for Agency Review or Rehearing

Pursuant to Utah Code Ann. §§ 63G-4-301 and 54-7-15, a party may seek agency review or rehearing of this order by filing a request for review or rehearing with the PSC within 30 days after the issuance of the order. Responses to a request for agency review or rehearing must be filed within 15 days of the filing of the request for review or rehearing. If the PSC fails to grant a request for review or rehearing within 20 days after the filing of a request for review or rehearing, it is deemed denied. Judicial review of the PSC's final agency action may be obtained by filing a Petition for Review with the Utah Supreme Court within 30 days after final agency action. Any Petition for Review must comply with the requirements of Utah Code Ann. §§ 63G-4-401, 63G-4-403, and the Utah Rules of Appellate Procedure.

CERTIFICATE OF SERVICE

I CERTIFY that on January 5, 2018, a true and correct copy of the foregoing was delivered upon the following as indicated below:

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