

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF AVISTA) **CASE NO. AVU-G-21-02**
CORPORATION DBA AVISTA UTILITIES')
2021 NATURAL GAS INTEGRATED)
RESOURCE PLAN) **ORDER NO. 35218**
)

On March 31, 2021, Avista Corporation dba Avista Utilities (“Company”) filed its 2021 Natural Gas Integrated Resource Plan (“IRP”). The Company filed its IRP by the deadline set in Order No. 34697, which extended the Company’s typical, August 31, 2020, filing deadline to April 1, 2021.¹ The IRP must discuss the subjects required by Commission Order Nos. 25342, 27024, 27098, and 32698, and Section 303(b)(3) of the Public Utility Regulatory Policies Act (“PURPA”), 15 USC § 3202.

On April 23, 2021, the Commission issued a Notice of Filing and Notice of Intervention Deadline. Order No. 35021. No one intervened and on May 19, 2021, a Notice of Parties was issued. On June 3, 2021, the Commission issued a Notice of Modified Procedure establishing deadlines for public comments and the Company’s reply. Order No. 35059. Commission Staff (“Staff”) filed comments to which the Company replied.

Having reviewed the record in this case, the Commission now issues this Order acknowledging the Company’s IRP.

BACKGROUND

A natural gas IRP describes a company’s plans to meet its customers’ future natural gas needs. As a result of amended Section 303 of PURPA, local gas distribution companies must develop an IRP. *See* Order No. 25342. The Commission previously shortened the required planning horizon in an IRP from 20 years to *at least* 5 years. *See* Order No. 27024. While there is no requirement that companies formally evaluate potential demand-side management (“DSM”) programs in their IRPs, the Commission previously directed companies to explain whether cost-effective DSM opportunities exist. *See* Order No. 27098. In developing its IRP, the Company is required to offer a Technical Advisory Committee (“TAC”) or other public outreach meeting that is geographically convenient for Idaho customers. *See* Order No. 32698.

¹ Per Commission Order No. 32233, Avista must file its IRP by August 31 of every even-numbered year.

In sum, the above-referenced orders direct the Company to file an IRP every two years that includes:

1. A forecast of future gas demand for each customer class, which includes the number, type, and efficiency of gas end-users as well as effects from economic forces on gas consumption;
2. An analysis of gas supply options for each customer class, which includes a projection of spot market versus long-term purchases for both firm and interruptible markets, an evaluation of the opportunities for using company-owned or contracted storage or production, an analysis of prospects for company participation in a gas futures market, and an assessment of opportunities for access to multiple pipeline suppliers or direct purchases from producers;
3. An explanation of whether or not there are cost-effective DSM opportunities;
4. The integration of the demand forecast and resource evaluations into a long-range (at least a five-year) plan describing the strategies designed to meet current and future needs at the lowest cost to the utility and its ratepayers;
5. A short-term (e.g., two-year) plan outlining the specific actions to be taken by the utility in implementing the IRP;
6. A progress report that relates the new plan to the previously filed plan; and
7. Public participation, including input from the TAC.

THE IRP FILING

The IRP contains an Executive Summary, and chapters on Demand Forecasts; Demand-Side Resources; Supply-Side Resources; Carbon Reduction; the Company's Integrated Resource Portfolio; Alternate Scenarios, Portfolios, and Stochastic Analysis; Distribution Planning; and the Company's Action Plan. The following information is from the IRP's Executive Summary.²

In the IRP, the Company "identifies a strategic natural gas resource portfolio to meet customer demand requirements over the next 20 years." IRP at 1. The IRP was developed with input from the Company's TAC which includes Commission Staff, peer utilities, customers, and other stakeholders. Topics discussed with the TAC included natural gas demand forecasts, DSM,

² Further detail may be obtained in the IRP and its appendices.

supply-side resources, modeling tools, distribution planning, and policy issues. The Company stated that the IRP process resulted in an integrated resource portfolio designed to serve customers' natural gas needs while balancing cost and risk. IRP at 1-2.

The Company stated the IRP addresses uncertainties surrounding supply and demand by evaluating multiple scenarios with wide-ranging possible outcomes. *Id.* at 2.

The Company discussed its demand forecasts. The Company estimated average day, system-wide core demand increasing from 95,126 dekatherms per day ("Dth/day") in 2021 to 102,054 Dth/day in 2040. The Company forecasted that coincidental peak day, system-wide core demand will increase from a peak of 363,586 Dth/day in 2021 to 407,216 Dth/day in 2040. Forecasted non-coincidental peak day demand peaks at 349,210 Dth/day in 2020 and increases to 388,615 Dth/day in 2040. *Id.* at 2-4.

The Company presented its natural gas price forecasts. The Company stated gas prices are a significant part of the total cost of a resource option, which affects the avoided cost threshold for determining cost-effectiveness of conservation measures and how customers consume natural gas. The Company expects carbon legislation in Oregon and Washington and stated its current IRP price forecast includes higher carbon adders in those states, but not in Idaho. The Company combined forward prices with three fundamental price forecasts to develop high and low expected price strips at the Henry Hub. The Company noted it used an expected elasticity response factor to model how customers' consumption of natural gas will respond to price changes. *Id.* at 5-6.

The Company discussed existing and potential natural gas supply resources. The Company stated it has a diversified portfolio of gas supply resources, including contracts to buy gas from several supply basins, owned and contracted storage providing supply source flexibility, and firm capacity rights on six pipelines. The Company considered incremental pipeline transportation, renewable natural gas, storage options, hydrogen, distribution enhancements, and various forms of liquefied natural gas ("LNG") storage or services as potential resource additions. *Id.* at 6.

The Company discussed projected resource needs. In the high growth and low-price and carbon reduction (cost of carbon) scenarios, resource deficiencies were identified. The high growth and low-price scenario observed an energy shortage which would require additional assets to supply more energy. The carbon reduction scenario did not include an energy shortage, but a need for carbon neutral or carbon reducing resources. However, the Company was not resource

deficient in the expected case for the 20-year planning horizon. The Company indicated it would integrate additional information on goals and legislation that come into focus. *Id.* at 7-9.

The Company stated that, even with the planning, analysis, and conclusions reached in the IRP, uncertainty still exists. The Company stated it will diligently monitor issues and challenges, including: (1) demand scenarios that will provide insight into how quickly resource needs can change if demand varies from the expected case; (2) how natural gas demand in international markets will affect regional gas infrastructure and natural gas pricing; (3) use of natural gas to back up renewable resources and for replacement of retired coal plants; and (4) other issues that might affect demand and pricing. *Id.* at 11-12.

The IRP contains a 2021-2022 Action Plan outlining activities identified by the IRP team with input from Company management and TAC members. The Company indicated the Action Plan positions the Company to provide the best cost/risk resource portfolio and to support and improve IRP planning. The Company stated ongoing activities include:

- Monitoring supply and resource trends including the availability and price of natural gas, LNG exports, methanol plants, supply and market dynamics, and pipeline and storage infrastructure availability;
- Monitoring availability of resource options;
- Meeting regularly with Staff to provide information on market activities and significant changes in assumptions and/or status of activities related to the IRP or natural gas procurement; and
- Managing existing resources and optimizing underutilized resources.

Id. at 174-75

The Company stated new activities for the study, development, and preparation of the 2023 IRP include:

- Completing additional modeling on carbon reduction (Oregon and Washington);
- Investigating new resource plan modeling software and integrating the Company's system to run parallel with current modeling software;
- Modeling all requirements from Executive Order 20-04 (Oregon);
- Ensuring the Energy Trust ("ETO") has sufficient funding to acquire therm savings of the amount identified and approved by the Energy Trust Board;

- Exploring the feasibility of using projected future weather conditions in its design day methods;
- Discuss integration of ETO and Conservation Potential Assessment data, program experience, knowledge of current and development markets, and future codes and standards; and
- Performing high pressure distribution or city gate station capital work as needed.

Id. at 12-13, 174-75.

COMMENTS

1. Staff Comments

Staff reviewed the Company's 2021 natural gas IRP and believed it generally complied with Order Nos. 25342, 27024, 27098, and 32698. Staff thus recommended that the Commission accept the IRP for filing. Staff's review focused on the Company's: (1) natural gas demand forecasts; (2) supply-side resources; (3) DSM, resource and distribution planning; (4) Resource Planning; and (5) action plans.

Natural Gas Demand Forecast

Staff reviewed the Company's demand forecast assumptions, along with projections for demand growth rates. Staff confirmed the Company's demand forecasts were based on reasonable assumptions using historical data over the planning horizon and provided a range of demand projections to test the sensitivity of future resource investments. Staff noted the Company developed five alternative demand scenarios from the reference case forecast: an average case, an expected case, a high growth/low price case, a low growth/high price case, and a carbon reduction case.

In the expected case scenario, the Company forecasted its system-wide average annual daily demand would increase 7.28% between 2021 and 2040, to 102,054 Dth/day. The Company forecasted a 12% system-wide peak-day demand increase of 407,216 Dth/day by 2040. System-wide, the Company expected its customer base to increase at an average annual rate of 1.0% which is slightly lower than the 2018 projection of 1.2%. Staff believed the above rates were based on reasonable growth and consumption projections for the Company's service area.

Using the expected case scenario, the Company's analysis showed that it would not be resource deficient during the 20-year planning horizon. However, a resource deficiency is projected to occur in 2035 for the high growth/low-price scenario using existing resources. Staff

noted the Company did not recommend resource options to meet the 2035 deficiency because it occurs well into the future. Staff considered this a reasonable approach because the deficiency occurs beyond the five-year planning horizon, giving the Company sufficient lead time to perform additional analysis and explore alternatives.

Staff stated the high growth/low price, low growth/high price, and carbon reduction scenarios were developed to account for potential variations in customer growth, market conditions, usage, and carbon regulations. The additional demand scenarios help the Company create a more robust analysis by allowing the Company to evaluate the risks of potential resource plans given a range of possible demand outcomes.

Under the carbon reduction scenario, an energy deficiency does not exist, but instead will require the Company to plan for carbon reducing—or carbon neutral resources—in 2022, due to expected legislation from Oregon and Washington State. The Company expects Oregon to pass cap-and-trade legislation, and for Washington to require utilities to include the social cost of carbon to evaluate its resource plans. Because of these expectations, the Company plans to further model carbon reduction as it develops its next natural gas IRP.

Supply and Resource Options

The Company developed high, expected, and low-price forecasts to represent a reasonable range of Henry Hub natural gas pricing possibilities. Each forecast begins in 2020-2021 at under \$3.00 per dekatherm (“Dth”). The high price scenario peaks at approximately \$17.00 per Dth in 2045 and the expected case peaks at about \$7.00 per Dth in 2045. The low-price scenario shows natural gas at under \$5.00 per Dth over the 2021-2045 planning horizon.

The expected case scenario shows a gradual price increase over the planning horizon. Staff believed it was reasonable because the Company’s Henry Hub forecasts are consistent with forecasts generated by other utilities and the gas industry generally. The fundamentals reflect availability with an abundance of natural gas and minimal price volatility.

Demand Side Management

In 2020, the Company completed a Conservation Potential Assessment (“CPA”) of its DSM programs for the 2021-2040 planning horizon. Applied Energy Group (“AEG”) determined energy efficiency (“EE”) potential for Idaho using three analyses: (1) Technical Potential which is the theoretical upper limit of EE potential; (2) Achievable Technical Potential; and (3) Utility Cost Test (“UCT”) Achievable Economic Potential.

Recent trends with the Company's IRP show a decline in cumulative Residential savings and a steady increase in EE savings in the Commercial and Industrial sectors. In the Filing, AEG's 20-year cumulative UCT Achievable Economic Potential for Commercial and Industrial sectors increased 56% from the 20-year forecast conducted in the Company's 2018 natural gas IRP. Despite the increase in the Company's most recent natural gas DSM Prudency filing, AVU-G-20-08, the Company reported 3,327 Dth of savings for Commercial and Industrial sectors in 2019, which is 36% of their savings target from the 2018 IRP. Most of the Company's EE savings in recent DSM prudency filings have been in the Residential sector. The Commercial and Industrial Sectors have had marginal impacts on total EE savings. Staff believed that the Commercial and Industrial savings potential may be overstated. Staff will continue to monitor the CPA analyses, and the Company's DSM goals in future IRP filings.

Resource Evaluation

The Company evaluated its ability to obtain adequate natural gas and ensure sufficient pipeline transportation capacity to meet demand. Staff recommended that the Company also ensure that its distribution system is sufficient to meet demand and projected load growth requirements.

In its 2018 IRP, the Company included three distribution system enhancements: the Coeur d'Alene High Pressure Reinforcement—the Post Falls Phase; the Schweitzer Mountain Road Reinforcement; and the Warden High Pressure Reinforcement. The Company updated Staff on each enhancement project.

In this IRP Filing, Staff observed that no distribution system enhancements were included for Idaho. The Company confirmed that the distribution system serving Idaho customers does not currently require any additional reinforcements. Staff appreciated the Company's commitment to frequently assess the need to achieve sufficient capacity to meet demand and keeping the Commission informed.

Action Plans and Progress

The 2019-2020 IRP Action Plan, listed in the 2018 IRP, included several items Staff believed the Company completed and reasonably discussed in the current IRP.

2021 - 2022 Action Plan

Staff noted the Company's IRP team, with input from Company management and TAC members, identified the 2021-2022 Action Plan to provide the best cost/risk resource portfolio and to support and improve future IRP planning. These specific items are addressed in greater detail

in the “IRP Filing” section above. Staff believed these action items were appropriate and reasonable. Staff looks forward to reviewing the specifics of these action items prior to the 2023 IRP cycle.

Public Participation

The Company conducted four virtual TAC meetings. During these meetings, the Company provided details on the mechanics of its planning strategies, tools, and results. Meetings were conducted to allow feedback and input from TAC members and stakeholders.

2. Company Reply Comments.

The Company replied that it appreciated Staff’s comments affirming the IRP complies with previous Commission orders and recommending the Commission acknowledge the IRP Filing. The Company stated that it would continue to work with Staff on the timing of its next IRP and that it looks forward to Staff’s continued collaboration in the Company’s resource planning efforts.

COMMISSION FINDINGS AND DECISION

The Company is a natural gas corporation and public utility. *See Idaho Code* §§ 61-116, -117, and -129. The Commission has jurisdiction over the Company and the issues in this case under Title 61 of the Idaho Code, including *Idaho Code* § 61-501. The Commission has reviewed the record, including the IRP and Staff and the Company’s comments. We appreciate Staff’s thorough review and input in this matter. We find that the Company’s IRP contains the required information and is appropriately formatted, consistent with Order Nos. 25342, 27024, 27098, and 32698, as well as Section 303(b)(3) of PURPA. We therefore acknowledge the Company’s 2021 IRP and accept it for filing.

Our acceptance of the IRP should not be interpreted as an endorsement of, or judgment of prudence as to any particular element of the Company’s plan, nor an approval of any resource acquisition or proposed action included in the IRP. We recognize the Company’s ongoing efforts to keep customers informed, including through TAC meetings and other forms of public outreach. We encourage the Company to continue in its efforts to engage affected and interested persons. We further encourage the Company to evaluate how it can obtain more value from the IRP process to anticipate the dynamic nature of the energy environment. We anticipate the Company will continue using the IRP to evaluate new resource scenarios that could benefit Idaho customers.

ORDER

IT IS ORDERED that the Company's 2021 natural gas IRP is acknowledged.

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date of this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. *See Idaho Code §§ 61-626.*

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 12th day of November 2021.



PAUL KJELLANDER, PRESIDENT



KRISTINE RAPER, COMMISSIONER



ERIC ANDERSON, COMMISSIONER

ATTEST:



Jan Noriyuki
Commission Secretary

I:\Legal\GAS\AVU-G-21-02\orders\AVUG2102_final_rndh.docx