BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF AVISTA)
CORPORATION'S 2015 ELECTRIC) CASE NO. AVU-E-15-08
INTEGRATED RESOURCE PLAN)
) ORDER NO. 33463
)

On August 31, 2015, Avista Corporation dba Avista Utilities filed its 2015 Electric Integrated Resource Plan (IRP). The Company files the IRP every two years to explain its evolving plans to meet its customers' energy needs over the next 20 years. The IRP discusses the Company's existing resources and loads, evaluates resource acquisition strategies that could be used to meet load under different future conditions, and identifies the Company's Preferred Resource Strategy for meeting expected load growth.

After the Company filed its IRP, the Commission invited interested persons to submit comments in the case. *See* Order No. 33385. The Commission Staff, Snake River Alliance (SRA), and a customer filed comments, all of which recommended that the Commission acknowledge the IRP. Staff and the SRA also recommended that the Company take some additional actions. The Company did not file a reply. Having reviewed the record, we find that the Company's 2015 IRP discusses the subjects required by the Commission's prior Orders.

OVERVIEW IRP PROCESS

An IRP is a status report on the utility's ongoing, changing plans to adequately and reliably serve its customers at the lowest system cost and least risk over the next 20 years. The report informs the Commission and the public about the utility's plans, and is similar to an accounting balance sheet; i.e., it is a "freeze frame" look at the utility's fluid, resource planning process. *See* Order No. 22299. The IRP is meant to demonstrate to the public that the Company has prepared for, and considered, many scenarios through a reasonable planning process. The Commission thus expects a utility to have vigorously tested the IRP's assumptions to ensure the IRP accurately reflects changing markets and customer demand.

The Company must update its IRP every two years and allow the public to participate in the development of the IRP. *See id.* and Order No. 25260. The final IRP must include the subjects required by the Commission's prior Orders, including Order Nos. 22299 and 25260. In summary, the final IRP should explain the Company's present load/resource position, expected

responses to possible future events, and the role of conservation in those responses. It also should discuss "any flexibilities and analyses considered during comprehensive resource planning, such as: (1) examination of load forecast uncertainties; (2) effects of known or potential changes to existing resources; (3) consideration of demand- and supply-side resource options; and (4) contingencies for upgrading, optioning and acquiring resources at optimum times (considering cost, availability, lead time, reliability, risk, etc.) as future events unfold." *See* Order No. 22299. The IRP should separately address:

- "Existing resource stack," by identifying all existing power supply resources;
- "Load forecast," by discussing expected 20-year load growth scenarios for retail markets and for the federal wholesale market including "requirements" customers, firm sales, and economy (spot) sales. This section should be a short synopsis of the utility's present load condition, expectations, and level of confidence; and
- "Additional resource menu," by describing the utility's plan for meeting all potential jurisdictional load over the 20-year planning period, with references to expected costs, reliability, and risks inherent in the range of credible future scenarios.

Id.

If the Commission finds the IRP discusses these required subjects, then it will enter an Order acknowledging that the Company filed the IRP. By acknowledging the IRP, the Commission is acknowledging the Company's ongoing planning process, not the conclusions or results reached through that process.

THE 2015 ELECTRIC IRP

The Company's 2015 Electric IRP guides the Company's resource strategy over the next two years and provides insight into its preferred resource procurements through 2035. In summary, the 2015 IRP shows the Company can meet its customers' energy needs through 2020 with Company-owned or contractually-controlled generation resources, conservation, and market purchases. In the longer term, plant upgrades, energy efficiency measures, and additional natural gas-fired generation are integral to the Company's 2015 Preferred Resource Strategy. Among other things, the IRP discusses stakeholder involvement in the IRP process; projected load growth; existing supply resources; energy efficiency and demand response; environmental policy

considerations; the Company's Preferred Resource Strategy; and progress on action items referenced in the 2013 IRP and new action items to be addressed in the 2017 IRP.

A. Stakeholder Involvement

The Company developed the IRP in consultation with its Technical Advisory Committee ("TAC"). The TAC consists of more than 75 invited participants, including customers, Commission Staff, the Northwest Power and Conservation Council, consumer advocates, academics, environmental groups, utility peers, government agencies, and other interested parties. The Company held six TAC meetings for this IRP and plans to expand TAC membership in the future and maintain TAC meetings as an open public process.

B. Projected Load Growth

The 2015 IRP predicts the Company's average annual load will grow by 0.6% per year (down from the 2013 IRP's prediction of 1% per year) through 2035, which in turn will decrease the contribution of natural gas-fired peaking plants. The Company notes that its highest peak loads occur during extreme winter weather conditions. The Company states it can meet peak loads through 2020 by using its existing resources, conservation, and buying power on the market. The Company notes it currently is buying power to meet a short-term capacity deficit in the winter of 2015-2016, but the Company states it will not experience a long-term winter deficit until 2021.

C. Existing Supply Resources

The Company owns 1807 megawatts (MW) of nameplate capacity generating resources, including hydroelectric facilities having a nameplate capacity of 972 MW, and 845 MW of thermal generation. The Company also has power purchase agreements allowing it to obtain about 477 average MW (aMW). The Palouse Wind farm and other PURPA facilities also contribute to supply-side resources. Net metering customers have installed 1.8 MW of capacity as of year-end 2014.

D. Energy Efficiency and Demand Response

The Company's energy efficiency programs provide conservation and education options to the Company's residential, low-income, commercial, and industrial customers. For its 2015 IRP, the Company retained an independent consultant to develop a 20-year Conservation Potential Assessment that formed the basis for the conservation portion of the IRP. The Conservation Potential Assessment analyzed thousands of residential, commercial, and industrial

energy efficiency options. Based on this data, the Company reports that its historical energy efficiency efforts have decreased its load requirements by 127 aMW, or about 11% of its total load in 2014. However, the data also revealed that the Company's demand response programs had higher costs than were expected under the 2013 IRP and generally were not cost-effective. In fact, the Company reports that the costs of its demand response programs would have to drop by nearly 50% from 2023-2035 before they would be cost-effective. The Company thus opted not to include demand response as a resource in the 2015 IRP.

The Company notes that the State of Washington's Energy Independence Act (EIA) requires the Company to meet 3% of retail load from qualified renewable resources by 2012, 9% by 2015, and 15% by 2020. The EIA also requires the Company to acquire all cost-effective conservation and energy efficiency measures. The Company states that it will satisfy its EIA obligations through the IRP timeframe by combining qualifying hydroelectric upgrades, the Palouse Wind project, Kettle Falls Generating Station output, and renewable energy certificate purchases.

E. Environmental Policy Considerations

The IRP notes that greenhouse gas regulation varies throughout the country. Some states, for example, have active cap and trade programs, emissions performance standards, renewable portfolio standards or a combination of active and proposed regulation affecting emissions from electric generation resources. Further, the federal Environmental Protection Agency (EPA) issued its proposed Clean Power Plan rule in 2014 with the intent of reducing emissions from existing fossil fuel plants. The Company notes that its 2015 IRP reduces emissions consistent with the EPA's proposed rule. But the 2015 IRP does not account for the final version of the EPA's rule because the final rule issued after the Company had completed its modeling for the 2015 IRP. The Company thus states it will analyze the EPA's final rule and the corresponding state implementation plans as it prepares its 2017 IRP. The Company predicts western region emissions will decrease through 2035 while the Company's emissions will modestly increase. The Company explains this occurs because the Company does not own the less cost-effective coal and natural gas-fired plants that are expected to close by 2035.

F. Preferred Resource Strategy

The IRP's Preferred Resource Strategy (PRS) provides a least reasonable-cost portfolio that minimizes future costs and risks within actual and expected environmental

constraints. The Company expects its 2015 PRS will outperform the 2013 PRS. Major changes from the 2013 strategy include reduced contribution from natural gas-fired peaking plants, the elimination of demand response due to higher estimated costs, and a modest reduction in energy efficiency.

The Company developed its 2015 PRS through modeling techniques that balanced cost, reliability, rate volatility, and renewable resource requirements. The resulting PRS, which is summarized in the table below, includes energy efficiency, generation upgrades, and new natural gas-fired generation:

2015 Preferred Resource Strategy

Resource	By the End of Year	ISO Conditions (MW)	Winter Peak (MW)	Energy (aMW)
Natural Gas Peaker	2020	96	102	89
Thermal Upgrades	2021-2025	38	38	35
Combined Cycle CT	2026	286	306	265
Natural Gas Peaker	2027	96	102	89
Thermal Upgrades	2033	3	3	3
Natural Gas Peaker	2034	47	47	43
Total		565	597	524
Efficiency Improvements	Acquisition Range		Winter Peak Reduction (MW)	Energy (aMW)
Energy Efficiency	2016-2035		193	132
Distribution Efficiencies			<1	<1
Total			193	132

To develop the PRS, the Company first identified potential new generation resources to serve projected electricity demand through 2035. The Company then mapped its existing resources to the transmission grid to simulate hourly operations for the Western Interconnect during this timeframe, and modeled the need to add new resources and transmission to the Western Interconnect as regional loads grow and older resources are retired. The Company's model varied hydroelectric and wind generation loads, forced outages, and natural gas price data over 500 iterations of potential future market conditions. Based on its analyses, the Company expects the levelized Mid-Columbia electricity price to be \$38.48 per megawatt hour (MWh) in nominal dollars from 2016-2035. The Company notes that electricity prices highly correlate

with natural gas prices because natural gas typically fuels marginal generation in the Northwest. The Company expects nominal levelized prices for natural gas at northeastern Oregon's Stanfield trading hub to be \$4.97 per dekatherm over the next 20 years.

G. Action Items

The 2015 IRP contains an Action Plan that is based on input from Commission Staff, the Company's management team, and the TAC. The 2015 Action Plan updates the Company's progress on action items from the 2013 IRP. It also identifies three categories of new actions to be performed before the 2017 IRP is published, including actions related to generation resource-related analysis, energy efficiency, and transmission planning.

THE COMMENTS

Commission Staff, SRA, and an individual customer filed the only comments in the case. All of them recommended that the Commission acknowledge the 2015 Electric IRP. Staff opined that the 2015 IRP reasonably assesses the Company's future options to meet future load, gives balanced consideration to supply and demand resources, and adheres to the requirements of Commission Order Nos. 25260, 24729 and 22299. In a similar vein, the individual customer observed that the 2015 IRP is well balanced, and mixes hydro and other renewable energy, conservation, and thermal resources to provide customers with reliable and reasonably-priced energy for years to come. The SRA, too, noted that the IRP shows the Company does not need new supply-side resources until 2021, can meet periodic capacity needs before 2021 through market purchases, and is well prepared to meet its customers' energy needs for much of the IRP period. The SRA nevertheless criticized the Company's heavy reliance on natural gas-fired plants that are subject to unknown regulations and costs and have uncertain reliability and availability. Further, the SRA observed that the Company's intent to acquire 565 MW of new natural gas resources through 2035, while simultaneously shutting down demand response, sends mixed signals about the Company's ability to achieve deeper carbon emissions reductions. Despite these concerns, however, the SRA recognized the Company continues to seek carbon free resources to at least reduce its reliance on gas and coal. The SRA also appreciated the Company's interest in potential Energy Imbalance Markets that could help lower customer rates by providing another market to buy and sell short-term capacity products and services. Lastly, the SRA commended the Company for its continued progress in making the TAC and the development of the Preferred Resource Strategy and IRP increasingly transparent and accessible

to the public. The SRA thus ultimately supported the 2015 IRP, and recommended that the Commission acknowledge it.

Staff and the SRA also recommended that the Company take some additional actions. Staff recommended that, for the 2017 IRP, the Company should address and quantify the effects of the EPA's Clean Power Plan rule on scenarios involving Colstrip Units 3 and 4. Staff suggested this evaluation should consider the operating permit, emissions compliance, plant operating life, and power supply costs. Staff also recommended that the Company thoroughly investigate the demand response program, given that the Company's firm curtailment program is nearly cost-effective and has high achievable demand response potential.

The SRA, on the other hand, recommended that the Commission direct the Company to not wait until it publishes the 2017 IRP to report to the Commission on how the EPA's final Clean Power Plan rule might impact the Company's IRP and/or Preferred Resource Strategy. The SRA also recommended that the Company become more familiar with solar characteristics by exploring, at least as a pilot project, solar development and integration.

FINDINGS AND DISCUSSION

The Company is an electrical corporation and public utility as defined in *Idaho Code* §§ 61-119 and -129, and the Commission has jurisdiction over it and the issues in this case under Title 61 of the Idaho Code, including *Idaho Code* § 61-501. Having reviewed the record in this case, we find that the Company's 2015 Electric IRP satisfies the requirements set forth in the Commission's prior Orders. We thus acknowledge that the Company has filed the 2015 Electric IRP. In doing so, we reiterate that an IRP is a working document that incorporates many assumptions and projections at a specific point in time. It is a plan, not a blueprint, and by issuing this Order we merely acknowledge *the Company's ongoing planning process*, not the conclusions or results reached through that process. With this Order, the Commission is not approving the IRP or any resource acquisitions referenced in it, endorsing any particular element in it, or opining on the prudency of the Company's decision to select its preferred resource portfolio. The appropriate place to determine the prudence of the IRP or the Company's decision to follow or not follow it, and the validation of predicted performance under the IRP, will be a general rate case or another proceeding in which the issue is noticed.

The Commission appreciates the Company's collaboration with stakeholders in developing the 2015 Electric IRP and willingness to continue to increase stakeholder

involvement in the IRP process. With respect to Staff's and SRA's recommendations about the Clean Power Plan, we expect the Company has been analyzing how the EPA's final rule may impact the Company's resource planning, and we find it reasonable for the Company to discuss the potential impacts with the TAC and stakeholders to ensure the 2017 IRP appropriately addresses them. We also find it reasonable for the Company and its stakeholders to continue to explore the role that demand response, solar energy, and other resources might have in the Company's resource planning. We appreciate the Staff's, SRA's and other stakeholders' active participation in the IRP process, and we are confident that their input helps the Company develop a better and more comprehensive IRP.

ORDER

IT IS HEREBY ORDERED that the filing of the Company's 2015 Electric 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 $\mathcal{H}^{\text{4}\text{1}}$ day of February 2016.

PAUL KJELLANDER, PRESIDENT

KRISTINE RAPER, COMMISSIONER

ERIC ANDERSON, COMMISSIONER

ATTEST:

Jean D. Jewell ()

Commission Secretary

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