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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF AVISTA)
CORPORATION’S 2021 ELECTRIC) **CASE NO. AVU-E-21-04**
INTEGRATED RESOURCE PLAN)
)
) **COMMENTS OF THE**
) **COMMISSION STAFF**
)
_____)

STAFF OF the Idaho Public Utilities Commission, by and through its Attorney of record, Dayn Hardie, Deputy Attorney General, submits the following comments.

BACKGROUND

On March 31, 2021, Avista Corporation (“Avista”) dba Avista Utilities (“Company”) filed its 2021 Electric Integrated Resource Plan (“IRP”). The IRP outlines and analyzes the Company’s strategy for meeting its customers’ projected energy needs over the next 24 years. The Company files an IRP every two years and uses it to guide resource acquisitions.¹

On April 28, 2021, the Commission issued a Notice of Filing and Notice of Intervention Deadline. Order No. 35022. Idaho Conservation League (“ICL”) intervened in this case.

¹ The Company was granted a six-month extension to file its 2019 IRP. Order No. 34312. The Commission changed the caption for the Company’s filing to the “2020 Electric Integrated Resource Plan” when it issued the Notice of Filing. Order No 34609. The Company’s 2020 IRP was acknowledged on October 15, 2020. Order No. 34814.

On April 29, 2021, the Company filed an updated 2021 IRP. The updated IRP includes a ten-year contract with Chelan PUD for five percent of its Rocky Reach and Rock Island hydro facilities. This contract was executed prior to filing the 2021 IRP.

The Commission requires the Company to update its IRP biennially, allow the public to participate in its development, and to implement the IRP. *See* Order Nos. 22299 and 25260. More specifically, the Commission has asked for the IRP to explain the Company’s current load/resource position, its expected responses to possible future events, and the role of conservation in its explanations and expectations. The IRP should also 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.

STAFF REVIEW

Staff believes the Company meets IRP minimum requirements set forth in Order Nos. 22299 and 25260 and recommends the Commission acknowledge the Company’s 2021 Electric IRP. Staff’s recommendation is based on its active participation in the IRP Technical Advisory Committee (“TAC”), its review of the Company’s IRP filing, the Company’s responses to audit and production requests, and its review of the customer and stakeholder feedback received through the public input process. Staff acknowledges the Company’s IRP team’s work to solicit input and feedback from parties throughout the IRP process. Staff regularly observed the Company encouraging participation from a diverse array of stakeholders, including those new to the IRP process, and believes the Company considered all feedback.

Staff identified several topic areas it believes require additional review or focus in the next Electric IRP cycle. These include:

- Reliability Analysis
- Market Reliance
- Colstrip Economic Analysis
- Portfolio Optimization by State and System
- Energy Efficiency and Demand Side Management Programs

Staff's comments are organized to address the topic areas described above.

Reliability Analysis

Staff is still concerned with the Company's reliability analysis in the 2021 IRP. In the 2020 IRP, Staff was concerned with assigning a single Planning Reserve Margin to all portfolio scenarios and the Company not verifying reliability across multiple years and portfolios. *See* Staff Comments in Case No. AVU-E-19-01. The Company made progress to address these concerns, but Staff expects the reliability analysis to receive increased focus in the next IRP cycle. Specifically, Staff would like to see a reliability analysis that measures the resulting Loss of Load Probability ("LOLP") or Loss of Load Expectation ("LOLE") of all its portfolios under evaluation across the full planning time horizon.

Changing environmental policy and economics are driving the addition of variable and energy-limited resources included in the Company's resource mix and driving accelerated coal plant retirements. These changes can create reliability issues due to reduced firm capacity available at system peak under certain operating conditions. Recently, more frequent extreme weather conditions, a transition toward renewables and away from fueled generation resources, have created issues affecting reliability and market availability of firm generation and transmission across the western United States.

The 2020 IRP reliability analysis only evaluated the resulting LOLP for the Preferred Resource Strategy ("PRS") portfolio for one-year. In the 2021 IRP, the Company increased the number of portfolios it evaluated for the resulting LOLP, but still only for a single year. However, to understand the reliability performance of the Company's Clean Resource Plan portfolio, the Company evaluated its reliability across an additional year. These are improvements to Staff's concerns from the 2020 IRP, but they do not fully address Staff's lack of confidence in the Company's reliability evaluations for its portfolios. Staff acknowledges the Company's work on reliability analysis and looks forward to continuing improvements in the future.

Coverage of reliability analysis in the IRP process is often limited and presented at the end of the IRP cycle. In the 2021 IRP, the results of the reliability analysis were presented after the draft IRP was sent out for review. Performing reliability analysis at the very end of the process can result in portfolios that appear promising from a cost standpoint, only to end up unreliable.

Staff believes evaluating scenarios that are not known to meet reliability standards is inefficient and has limited value to the overall IRP objectives. Staff understands the 2021 IRP cycle was shortened due to the extension of the 2019 IRP, but Staff believes reliability analysis should be a larger priority in the IRP process due to the increasing number of factors potentially affecting reliability of the system.

In a meeting with the Company on July 21, 2021, Staff expressed concerns with the reliability analysis. In the meeting, the Company stated its plan to start testing a new modeling software called PLEXOS that will replace its current reliability modeling software if it performs as expected. Staff is encouraged by the Company's efforts to improve reliability analysis in the IRP and looks forward to reviewing the results from testing the PLEXOS software. Staff recommends the Company take sufficient time testing the new software to verify the results are accurate for the Company's system before fully implementing it into the IRP process.

Market Reliance

The Company changed the market reliance assumption from 250 MW in previous IRPs to 330 MW in this IRP. This change was driven by load changes and reduced resource capacity contributions based on new analyses and data. *See* Response to Staff's Production Request No. 5 (c). It was determined 330 MW was necessary during regionally stressed hours to maintain a 5% LOLP with a 16% planning margin. *See* Response to Staff's Production Request No. 5 (b). However, Staff has two concerns. First, as discussed earlier, Staff is concerned with the Company's reliability modeling. Second, the Company has not determined if it can rely on this additional level of market availability on a long-term basis.

To determine a reasonable level of market reliance, the Company should evaluate import capability considering market availability of both firm generation and transmission capacity. The Commission shared this view in previous orders. Order No. 33425 states that a utility's import capability—its ability to make short-term purchases using its transmission capacity—should be included in the load and resource balance. Recently, changes in market conditions for firm transmission have caused availability to tighten considerably across the Western Interconnection. These conditions were not expected by most utilities' long-term plans and may affect their ability to rely on the market in the future.

The Company participates in the Northwest Power Pool's Resource Adequacy ("RA") Program development effort. The Company expects to set future market reliance based on the information provided by the program. *See* Response to Staff's Production Request No. 5. Staff believes the main benefit of the program is to provide a process for participating utilities to reserve capacity, ensure that it will be there when needed, and to provide visibility to the amount of capacity available across the region for making future reservations.

Colstrip Economic Analysis

Staff believes the Colstrip economic analysis performed in the IRP continues to be important and has expressed concern with the Company's Colstrip analysis in the last three IRP cycles. In the 2021 IRP, the Company changed how Colstrip is modeled to help address one of Staff's concerns. Staff appreciates the change and believes it is an improvement over previous IRP modeling methods. However, Staff remains concerned with Colstrip being removed in 2021 in the PRS and how removing Colstrip in 2021 may affect reliability. In addition, Staff would like to see more progress toward a Colstrip analysis that accurately quantifies the impact of different exit dates on reliability, cost, and risk to Idaho customers.

In previous IRPs, the Company chose a limited number of years to evaluate the retirement of Colstrip. Staff has recommended evaluating more years for retirement or allowing the model to evaluate every year possible. In the 2021 IRP, the Company allowed the Colstrip plant to remain in the Idaho portfolio in any year it remains economic. IRP at 2-18. Staff believes this modeling change is an improvement because it provides a resource portfolio and coal-plant exit scenario that serves as a least-cost bookend to compare against environmental policy-driven scenarios.

Staff's concern with Colstrip being removed in 2021 in the PRS is related to the Company not providing evidence that retiring Colstrip in 2021 is possible. Staff does not believe the PRS should include resource retirements that are not feasible, especially for a large capacity resource that rely on unrealistic lead times to close the plant. Staff is also concerned that by making unrealistic exit date assumptions, portfolios will likely reflect incremental replacement resources that are not optimal for the system by limiting the types of replacement resources to those that only require a short lead time to implement. Staff believes it is appropriate to evaluate retiring

Colstrip in 2021 as a scenario for comparison purposes, but the Company should not include unrealistic retirement dates for Colstrip in its PRS portfolios.

An additional concern related to removing Colstrip in 2021 is how this would impact reliability. The Company's reliability analysis focuses primarily on a single year—2030—which Staff believes is a flaw in the current reliability analysis. Staff believes if the Company is going to retire Colstrip in the coming years, the Company should do more analysis to ensure retiring Colstrip early will not affect reliability.

Staff understands the Company's status as a minority partner in the Colstrip plant and its existing contractual obligations create a difficult situation for modeling Colstrip in the IRP. Commission Order No. 34814 requires the Company to file an annual update on its Colstrip ownership interest by October 1. *See* Case No AVU-E-19-01. Staff looks forward to reviewing the updated Colstrip economic analysis that will be provided in the annual update later this year and would like to see progress in understanding the reliability, cost, and risk impacts to Idaho customers across alternative Colstrip exit dates.

Portfolio Optimization by State and for the System

The IRP portfolio optimization model changed in the 2021 IRP allowing new resources to be added to the system or assigned to a specific state to understand the drivers and cost responsibility of state specific resource decisions. IRP at 2-19. The Company states the reason for the modeling change was, "to better understand the impacts of Washington State policies' effect on Idaho." IRP at 11-3. Staff believes the modeling changes improve the IRP and will help to better understand the impacts of those policies. However, Staff has concerns with the method the Company used to divide load and resources in the IRP and believes that whatever methods are used, they should maintain the benefits of the system but allow for state-by-state needs and constraints.

Loads and resources are divided using the Production-Transmission ("PT") ratio in the 2021 IRP. IRP at 2-18. The PT ratio is the current state allocation method used for generation and cost allocation and is based on the breakdown of load between states. *See* Response to Staff's Production Request No. 2 (a). Staff believes using the PT ratio to divide existing resources is reasonable but believes using the PT ratio to divide all state specific attributes may need to be reevaluated in future IRPs. The Company is developing a multi-jurisdictional workshop to

discuss and consider alternative methods to allocate costs and benefits of resources between Idaho and Washington. *See* Response to Staff’s Production Request No. 2 (b). Staff believes this workshop is important to developing methods of resource planning that maintain the benefits of planning and operating as a system, identify state specific resource needs, and aid in the update of the current state allocation methods as state specific policies continue to change in the coming years.

Energy Efficiency and Demand Response Programs

In Staff’s 2019 IRP Comments, Staff outlined concerns that the Company’s method for energy efficiency savings overstated the peak load reduction obtained from the energy efficiency programs. Since that filing and the Settlement and Stipulation of AVU-E-18-12, the Company has significantly improved its accuracy in providing reliable estimated energy efficiency savings. Staff appreciates the Company’s efforts to improve the accuracy of its estimated energy efficiency savings from these programs and believes the results from the most recent prudency filing—Case No. AVU-E-20-13—will assist the Company in accurately quantifying energy efficiency’s contribution to reducing peak load.

In the Company’s PRS, energy efficiency will reduce the Company’s future load growth by 68% by 2045, with 23% of the new energy efficiency savings coming from Idaho customers. In total, 47% of energy efficiency savings are set to be achieved by the Company’s commercial customers and 37% to be achieved by the residential customers. Additionally, in the PRS, demand response programs are estimated to reduce 16 MW of peak load by 2024 for the Company’s Idaho service territory with 8 MW peak load reduction to be achieved from Third Party Contracts and another 8 MW to be achieved from Variable Peak Pricing and Time of Use Rates. Staff looks forward to reviewing how the Company can utilize demand response programs to mitigate the need for additional supply-side capacity resources.

Public Participation

The Company conducted six virtually held TAC meetings. During these meetings, the Company provided details on the mechanics of its planning strategies, tools, and results. Meetings were conducted in an interactive manner to include feedback and input from TAC team

members and stakeholders. Topics presented and discussed were made available on the Company's website.

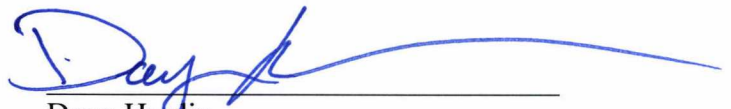
In addition to TAC meetings, the Company conducted an electronic IRP public outreach meeting and a virtual meeting with the Washington UTC where interested Idaho parties could participate. Both meetings allowed participants to ask questions about the IRP and provide feedback.

STAFF RECOMMENDATION

Staff recommends the Commission acknowledge Avista's 2021 IRP filing. Additionally, Staff recommends improvements toward the following goals as discussed above:

- Improving the IRP reliability analysis to include resulting LOLP/LOLE of all competing portfolios across the planning time horizon;
- Evaluating and determining the amount of market purchases the Company can rely on;
- Improving the Colstrip analysis to quantify the impact of different exit dates on reliability, cost, and risk;
- Evaluating how load and resources are divided in the portfolio optimization to maintain the benefits of the system but allow for state-by-state needs/constraints; and
- Accurately quantifying energy efficiency and determining how to utilize energy efficiency and demand response to help meet future load growth.

Respectfully submitted this 11th day of August 2021.


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Deputy Attorney General

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 11th DAY OF AUGUST 2021, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF**, IN CASE NO. AVU-E-21-04, BY E-MAILING A COPY THEREOF, TO THE FOLLOWING:

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