BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

Docket No. LC 75

In the Matter of AVISTA UTILITIES, 2021 Integrated Resource Plan.	Staff's Final Comments

Table of Contents

Introduction

The following are Oregon PUC Staff's ("Staff") Final Comments concerning Avista Utilities' ("Avista" or "Company") 2021 Integrated Resource Plan (IRP). The Citizens' Utility Board of Oregon ("CUB") and the Alliance of Western Energy Consumers ("AWEC") also submitted Opening Comments. In these Final Comments, Staff responds to the Company's Reply Comments and provides recommendations for the Company's Final Comments and preliminary recommendations for the 2022 IRP Update and the next IRP.

Staff's comments are organized by topic and detail Staff's primary areas of focus in this round of analysis, along with stakeholder comments. Staff also continues to address the Company's response to Staff recommendations from the 2018 IRP throughout these comments.

In opening comments, Staff identified three major areas of inquiry. These themes continue in Staff's final comments.

> **1 – Demand Forecast Methodology:** Staff noted that a number of changes to the demand forecast methodology were proposed and implemented. Staff sees both improvements and further opportunities in the methodology and scenarios.
>
> **2 – GHG Reductions & Executive Order 20-04:** Staff acknowledged that the Company has sought guidance on how to incorporate the activities from OPUC's work plan for Executive Order (EO) 20-04 related to IRP modeling. While some of this guidance is still in development, Staff continues to consider additional actions the Company can take to support the EO 20-04 work plan, both in near-term reductions, and for long-term planning. In these comments, Staff identifies opportunities to support these efforts.
>
> **3 – Distribution Investment Need:** In the IRP, the Company does not anticipate any significant distribution project investments in the next four years. Staff believes the Company has demonstrated sufficient planning to support this conclusion.

Demand Forecast

Peak Day Cold Weather Planning Standard

In Opening Comments, Staff generally supported Avista's new peak day methodology because it accounts for weather trends. Staff asked for clarification about how the Company computed the "99 percent Probability Average Temperatures" to confirm that the methodology does not result in too cold of a weather planning standard, which would result in an overestimation of future resource need.

In its Response Comments, Avista clarified that the 99 percent average temperatures in its peak day methodology are computed using the "NORMINV" function in Microsoft Excel. Staff finds this approach reasonable at this time because it has not been demonstrated that a different methodology, such as using a gamma or log-normal distribution instead of a normal distribution,

would improve accuracy.[1] Staff DR 64 asked about the Company's use of the normal distribution for modeling weather. Figure 1 reproduces Avista's response to Staff DR 64 for Medford:

Figure 1: Avista's response to Staff DR 64, peak day methodology, 99% probability versus historical coldest day[2]

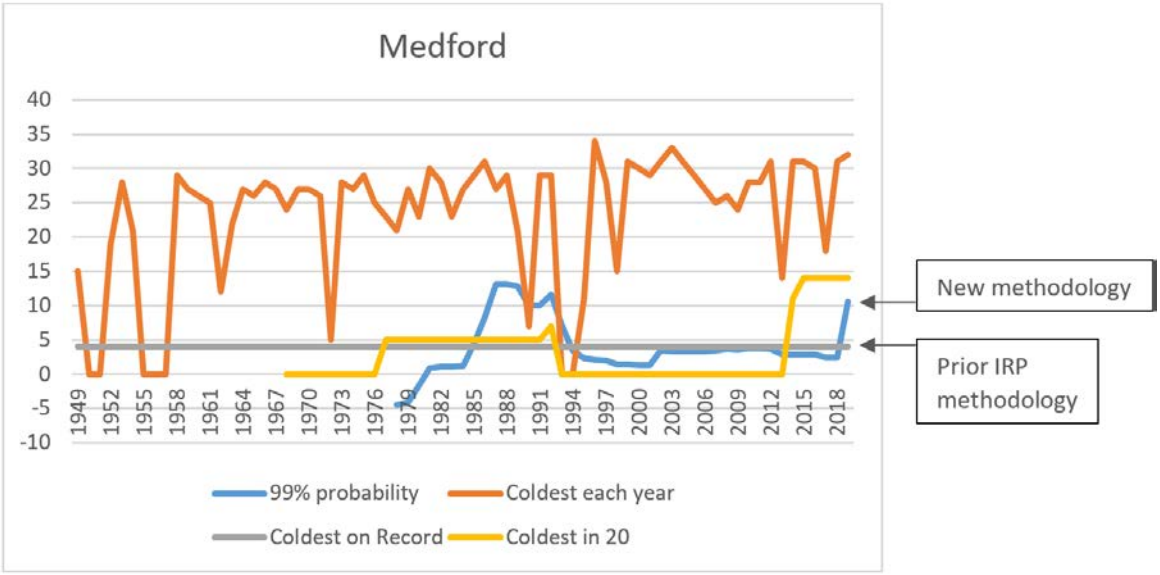


Figure 1 shows that for the Medford area, the new 99 percent probability methodology results in an 11 degree peak day, which is warmer than the prior IRP methodology of coldest on record, 4 degree peak day. Staff concurs with the Company that the new peak day methodology better accounts for weather trends from recent years that may be more representative of the future, and thanks the Company for the additional detail of the methodology that it provided in its Response Comments.

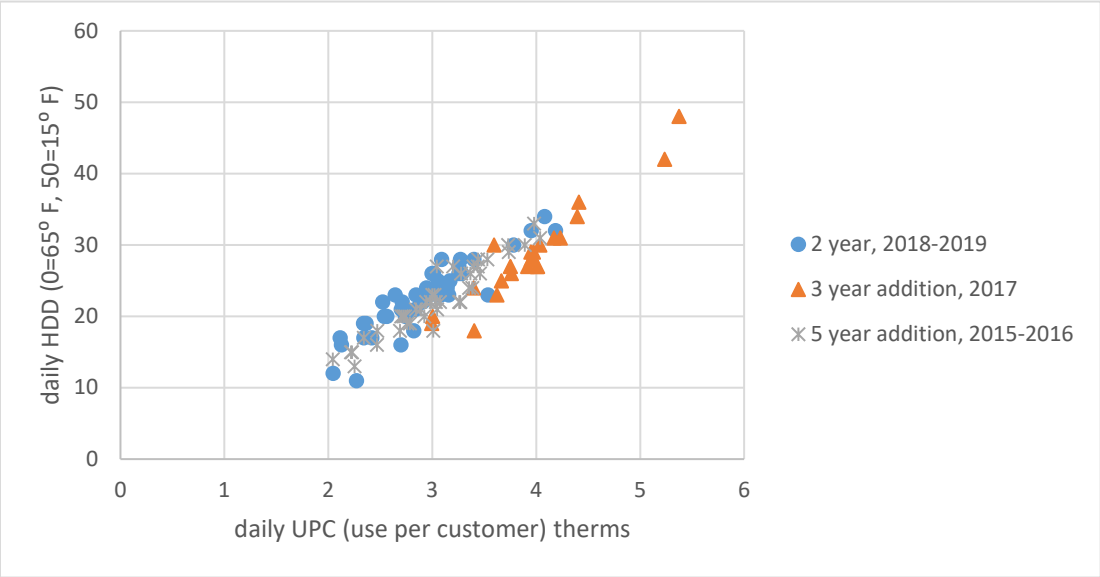
Staff appreciates the additional information the Company has provided on this topic and the Company's general willingness to explore alternatives in the future. Staff does not have any outstanding concerns about the Company's peak day methodology and looks forward to any future discussions in this area.

Use Per Customer (UPC) Forecast

In Opening Comments, Staff recommended that the Company switch from three years to five years of input data for its UPC forecast because Staff believes it is beneficial to use more years of input data. As presented in Opening Comments, Staff believes that the following figure demonstrated that using three years of data instead of five years is not more accurate, thus, using the maximum amount of data is a better approach.

[1] Gamma and log-normal as other potential distributions are discussed on a NOAA Physical Sciences Laboratory webpage titled "Distributions of Daily Meteorological Variables: Background," available at https://psl.noaa.gov/data/writ/distributions/background/index.*html*.
[2] Reproduced from Avista's response to Staff Data Request 64.

Figure 2: Residential UPC vs. HDD for Medford January Weekdays[3]



Avista did not reply to Staff's UPC forecast recommendation in its comments.

Staff reemphasizes that switching from three years to five years of input data is beneficial and recommends that future IRP updates and the next IRP employ this approach.

> **Recommendation 1: In the next IRP, use at least five years of historic data for modeling use per customer.**

No Growth Scenario

CUB requested that Avista: "Include a No Growth scenario in its next IRP and consider Oregon customers in the analysis, and, address resulting equity issues in its service area."[4]

On page 8 of its Response Comments, Avista summarizes that, "CUB's request… has been noted and will be discussed with the Company's Technical Advisory Committee (TAC) for the IRP as a potential scenario in the 2023 IRP."

Staff supports CUB's recommendation for a No Growth scenario, to address the concern of planning for the potential of lower than expected growth in natural gas demand, and further supports CUB's concerns about interstate equity. Staff finds Avista's proposal to address this scenario in the 2023 IRP reasonable.

> **Recommendation 2: Include a No Growth scenario in the next IRP.**

[3] Staff computation using Avista's Attachment A response to Staff Data Request 27.
[4] LC 75 – CUB Opening Comments, page 2.

Electrification

Staff noticed the 2021 IRP presents a forecast of electrification for the State of Washington, but not Oregon. In DR 28, Staff requested a similar study for Oregon. The Company responded by explaining that Avista lacks load estimates, cost estimates, and other details from electricity providers in Oregon. Avista was in a better position to conduct this study for Washington, because the Company provides electricity in the same territory as its gas customers, allowing access to this data.

In Opening Comments, Staff asked for more detail on what data inputs are required from electric providers to perform the Washington electrification scenarios analysis for Oregon. In Response Comments, the Company stated that those inputs included the cost of serving increased electric load reliably, such as assessing current distribution feeders' remaining capacity, the ability to split current feeders, and the right-of-way available to add substations and lines: Avista also identified energy efficiency analysis needed to assess home and business technology:

> This would lead to pairing forced air furnaces with a central heat pump or options that will work with the current system. A similar analysis would need to be done for water heaters, clothes dryers, and fireplaces. Next, an efficiency curve for each appliance, applied to normal temperatures for energy calculations and extreme temperatures for peak analysis, is needed to associate energy and operating conditions.[5]

Staff thanks Avista for this detailed answer. In Oregon, Avista cannot as easily access the electricity data inputs it relied upon in Washington. Staff does not have additional questions at this time, and looks forward to engaging the Company in the Natural Gas Fact-Finding (NGFF) workshops NGFF docket.

Resources

Energy Efficiency

In Opening Comments, Staff requested that the Company describe the specific actions taken to share data between AEG and Energy Trust. AEG is the consultant who produces the Conservation Potential Assessment (CPA) for the Company's Washington and Idaho territories. Energy Trust delivers energy efficiency services, including the CPA, for Oregon. Staff also recommended that the Company provide a comparison between the current CPA and the last CPA. AWEC also expressed overall support for continued energy efficiency investments.

In assessing the Company's work in sharing data with Energy Trust and AEG, Staff notes that Avista transitioned to using Energy Trust as the utility's energy efficiency administrator in 2017. In Response Comments, the Company explained that it discussed the different state methodologies in a TAC meeting during which it learned about Energy Trust's processes. The discussion led the Company to conclude that Energy Trust's CPA model was the most effective means of modeling available cost-effective energy efficiency and it has since adopted this

[5] LC 75 – Avista Response Comments p 10.

approach.[6] Avista also agrees to Staff's request to provide a comparison of current CPA values with the previous CPA values in future IRPs.[7]

After reviewing these remarks and consulting with Energy Trust, Staff believes that the Company has made reasonable efforts to attempt to share information across service territories. Staff appreciates the Company's willingness to provide more historic context in future CPAs.

> **Recommendation 3: In future IRPs, provide a comparison between the current CPA and the last CPA, including a narrative explanation of major changes in the potential.**

Avoided Costs

In Opening Comments, Staff described notable changes to avoided costs between the 2021 IRP and numbers currently in use for energy efficiency avoided cost calculations in UM 1893, noting significant changes to supply capacity values and natural gas values. Staff followed up with the Company to confirm these changes and further understand the reason for the changes in these values.

Staff noted that natural gas prices for calculating avoided costs decreased by half. In discussions with the Company, it was determined that there was an error in the use of past natural gas price forecasts submitted through UM 1893, where carbon prices had been incorporated into the natural gas values, resulting in double counting of carbon compliance costs between those values and a separate set of carbon values. The new values provided by the Company for this IRP are consistent with similar forecasts from other gas utilities. Staff appreciates this correction.

Staff noted that the supply capacity value for calculating avoided costs declined by 19 percent. In DR 60, the Company explains that the same data is used in the 2018 IRP and the 2021 IRP to create these values. In further correspondence, the Company attributes the decline to changes in the time period forecasted for capital costs and operations and maintenance costs. Staff considers this a sufficient explanation.

Peak Day Factors

Avista had been ordered to "consider additional peak day factors by the next IRP" in its acknowledgement order in 2019.[8] In Opening Comments, Staff noted that the Company did not incorporate Oregon-specific peak day factors in this IRP. After discussing this issue with Energy Trust and the Company, Staff determined that the Company did comply with this request by providing peak day factors to Energy Trust before filing the 2021 IRP. However, while the Company complied with the recommendation, the new peak day factors were provided after Energy Trust produced the CPA for the 2021 IRP and were not used in this IRP. These numbers will be available for use in future IRPs. While not used in this IRP, the Company acted on these considerations in compliance with the Order. Staff appreciates the Company's assistance in clarifying this matter.

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[6] LC 75 – Avista Response Comments p. 4.
[7] LC 75 – Avista Response Comments p. 12.
[8] Order No. 19-106, Appendix A p. 2.

Demand Response

In its Opening Comments, CUB recommended that Avista reconsider demand response as an option to reduce loads on peak days and also reduce GHG emissions. CUB cited examples of other utilities having success with such programs, and suggested opportunities for Avista to consider.[9]

Staff also supports exploring the use of demand response for managing loads at peak events. Staff recommends that the Company consider its demand response resource options and discuss demand response options with stakeholders at a TAC meeting prior to the next IRP.

> **Recommendation 4: Discuss demand response as a demand side resource option at a TAC meeting before filing the next IRP.**

Supply Side Resources

In Opening Comments, Staff indicated that Avista has maintained a reasonable approach to procuring gas on a reliable basis for its customers. However, Staff suggested the Company begin assessing long-term transport procurement in the context of a policy environment that is shifting in its approach to the role of fossil fuels. Staff suggested including long-term transport procurement as a topic of discussion at a future TAC meeting in the next IRP cycle.

In Reply Comments, Avista agreed to include a discussion about long-term natural gas transport strategies in a 2023 TAC meeting. Staff appreciates that the Company is willing to incorporate this discussion in future IRPs.

> **Recommendation 5: Discuss long-term transport procurement strategies at a TAC meeting before the next IRP.**

Carbon Reduction

Near-Term Emissions Reductions

Carbon reduction workshop

In Opening Comments, Staff recommends Avista convene a stakeholder workshop to discuss strategies to achieve near-term emissions reductions while working toward Oregon Department of Environmental Quality's (DEQ) Climate Protection Program goals. Staff suggested consideration of a pilot program, such as an SB 844 GHG reduction project or an SB 98 RNG project. Staff notes that as part of the OPUC's work plan for EO 20-04, Staff committed to "convene stakeholders to identify ways to increase utilization of SB 844 and ensure that it is complementary to SB 98 and EO 20-04."

In Reply Comments, Avista states that it is open to a stakeholder workshop on carbon reduction. Avista suggests that as an alternative to a near-term stakeholder workshop, a workshop could also be held as part of the Natural Gas Fact-Finding (NGFF) workshops being held by Staff, or as part of Avista's next IRP.

[9] LC 75 – CUB Opening Comments p. 5-7.

Staff is supportive of the Company leveraging the NGFF forum to model and share strategies for GHG emission reductions. However, Staff continues to recommend a near-term workshop for stakeholders to discuss Avista's specific strategies on how to best approach carbon reduction on Avista's system and encourages the Company to include work done in the NGFF as part of this conversation. The workshop should take place after DEQ Draft Climate Protection Program Rules are published, and should have the goal of discussing how to integrate the Company's approaches to SB 98, SB 844, and EO 20-04 in a way that provides momentum for near-term GHG reduction and utilizes the two pieces of legislation to help Avista achieve the goals of EO 20-04.

RNG role in near-term

The issue of emission reduction goals is addressed in the Near-Term Emissions Reductions section above. In Staff's Opening Comments, it requested a workshop regarding near-term emission reduction strategies. To date, Avista has been actively involved in the above referenced NGFF efforts, which is anticipated to include modeling emission reduction strategies aimed at meeting the Clean Power Plan (CPP) targets articulated in EO 20-04 and the draft CPP rules.[10] Avista has indicated a willingness to work closely with Staff throughout this process

Staff encourages the Company to leverage the work in the NGFF effort to articulate and model how RNG could be used to meet emission goals. Staff understands that there may be differences between how DEQ and the PUC model the carbon intensity of various RNG solutions. While Staff will continue to work closely with DEQ to align modeling parameters, Avista has indicated awareness of these differences and will work with Staff as part of the NGFF to address these differences and provide transparency to Staff and stakeholders on the methodologies it employs.

> **Recommendation 6: Avista should provide a workshop, within two months of the publishing of DEQ's draft CPP Rules, with the goal of facilitating a discussion of how to integrate the Company's approaches to SB 98, SB 844, and EO 20-04 in a way that provides momentum for near-term GHG reduction and utilizes the two pieces of legislation to help Avista achieve the goals of EO 20-04. The workshop should address how the Company could use different types of RNG projects to meet emissions goals.**

Carbon Risk

In Opening Comments, Staff noted that it may be reasonable to consider replacing the current carbon prices considered in Avista's IRP with the social cost of carbon in order to help inform the risks and rewards of resource decisions in future IRPs.

In Opening Comments, CUB recommended the Company model a range of carbon prices for its Idaho jurisdiction, rather than a zero carbon price.

In Response Comments, Avista responds to CUB's recommendation by explaining that it considers state and federal policy, as well as current legislative bills, when determining a price

[10] See https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rghgcr2021.aspx.

signal for carbon. Avista states that without a policy example in Idaho, "attributing a carbon tax is subjective and not in alignment with a quantitative analysis to consider future resources."

For the next IRP, Staff recommends Avista discuss with stakeholders the possibility of using the social cost of carbon to inform carbon risks in its portfolios, instead of the carbon values currently used by the Company.

Additionally, Staff finds that Avista's hesitance to model a non-zero carbon price in Idaho is not justified. If there are no examples of carbon policy available from the Idaho legislature, then there are certainly examples of federal carbon pricing policies that could eventually apply to Idaho. For example, the 117th US Congress currently has five bills with prices that range from $15 per metric ton (in 2021) to $59 per metric ton (in 2022).[11] Avista has provided no justification for refusing to consider this risk.

Recommendation 7: Provide a workshop in the next IRP development process to discuss the possibility of using the social cost of carbon to help inform carbon risks in its portfolios.

Recommendation 8: Include a non-zero carbon risk value for its Idaho customers.

Renewable Natural Gas (RNG)

Avista included a new chapter in its IRP on their ongoing research regarding opportunities to develop and procure RNG projects. These projects are being explored as part of their effort to comply with decarbonization policies in Washington and Oregon and to mitigate climate policy related risks. Staff appreciates the Company's consideration of risks, benefits, and challenges associated with RNG projects and its work in identifying the role different RNG projects play in its decarbonization effort. While this IRP does not include consideration of any RNG projects, the Company indicated it anticipates the inclusion of RNG projects for consideration as soon as the next IRP.

Overall, Staff is satisfied with the level of detail provided by the Company on the topic of RNG. However, in Opening Comments, Staff explained that there are three issues that warrant mention and more attention in preparation for the next IRP:

1) The role of RNG in meeting emission reduction goals in Oregon;
2) Interest in developing a deeper understanding about customer adoption potential in Oregon; and
3) Ensuring protections for customers in the decisions around ownership structure, development, and execution of RNG projects.

These themes appear in the next three sections.

Customer Adoption of RNG

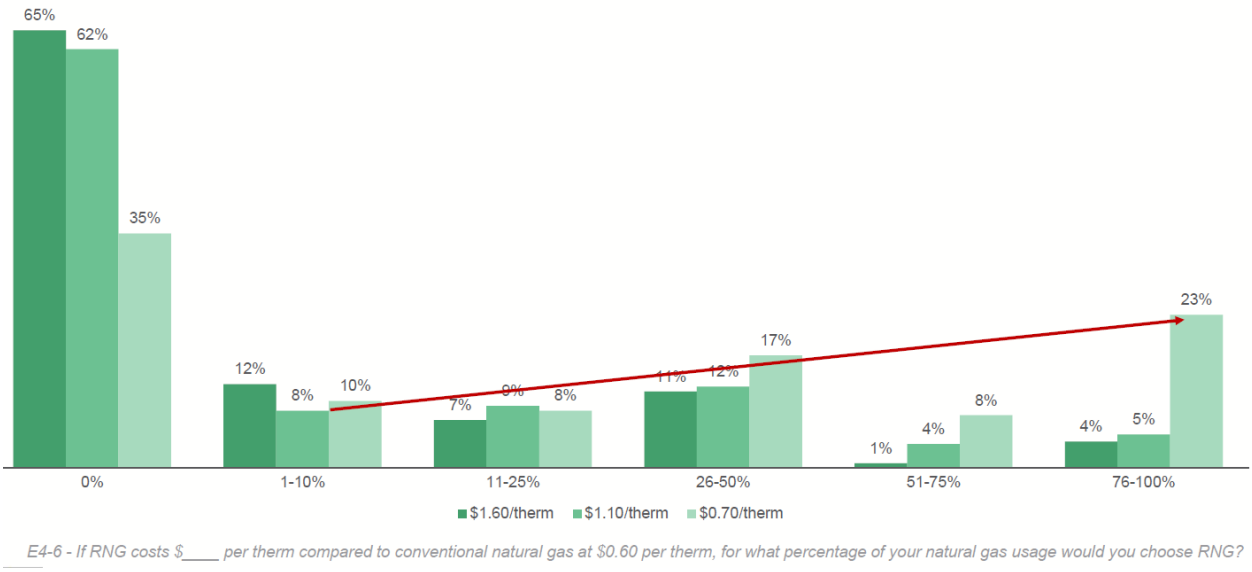
In Opening Comments, Staff inquired about Avista customers' anticipated willingness to pay for GHG reduction programs. Avista's IRP referenced two studies conducted with Washington and

[11] See Carbon Pricing Proposals in the 117th Congress https://www.c2es.org/site/assets/uploads/2021/06/carbon-pricing-proposals-in-the-117th-congress.pdf.

Idaho customers regarding customer adoption potential of RNG programs, including the RNG Commercial Marketing Study completed in 2019, and the RNG Residential Marketing Survey conducted in September 2020.[12] These reports, submitted in response to Staff's DR 39, suggested that the cost differential between conventional fossil gas and RNG, as well as outstanding questions about the how effective RNG projects will be in reducing GHG emissions, may be significant barriers to program enrollment.

Figure 3 below comes from a marketing study conducted for Avista in April 2019 that was submitted in response to DR 39.[13] It shows that the majority of Avista customers were not willing to commit to using large percentages of RNG at a price premium, but as the price decreases to $0.70/therm, customers were increasingly interested in purchasing larger percentages of RNG.

Figure 3: Percent of RNG customers would select at $1.60, $1.10, and $0.70/therm as compared to conventional gas at $0.60/therm [14]



Staff appreciates the work the company has done to understand customers' willingness to pay for RNG and thinks this information may be especially valuable in future conversations about DEQ CPP compliance and OPUC's NGFF effort. Staff sought to better understand how well these findings correlate with the behavior of Oregon customers and whether the Company anticipated these findings affecting its ability to rely on RNG to reduce GHG emissions.

Staff issued a number of DRs regarding customer preferences in Oregon to which the Company responded indicating that such studies have not been conducted. It indicated that select feedback from Oregon customers suggests that customers have an interest in emission reductions, and that they seek economical options for doing so. The Company reports that some customers, in particular institutional and commercial customers, see electrification as a cost prohibitive solution and that they have alternatively expressed an interest in RNG and offsets as a potential way to meet their carbon reduction goals. Staff recommends that prior to

[12] Avista Attachment B of its response to Staff Data Request 39.
[13] Avista Attachment A of its response to Staff Data Request 39.
[14] Avista Attachment A to response to Staff Data Request 39 p. 52.

the next IRP, the company conduct market research to more fully reflect Oregon customer willingness to pay for various carbon reduction strategies to inform the feasibility and potential adoption rates of possible emission reduction strategies.

Additionally, staff looks forward to learning more about the company's revenue requirements associated with RNG and the potential rate impacts. To this end, Staff looks forward to continued engagement with Avista as part of the NGFF effort mentioned in the Near-Term Emissions Reductions section above.

> **Recommendation 9: Prior to the next IRP, conduct market research to reflect the willingness of Oregon customers to pay for various carbon reduction strategies. Present results at a TAC meeting.**

Customer Protections from RNG Investment Risk

In Opening Comments, Staff was interested in understanding how Avista intends to identify and mitigate RNG investment risks to ratepayers. In DRs, Avista provided draft business cases the Company is considering for future RNG projects. While no ownership structures were suggested in the responses provided by the Company, Staff notes that the nature of the relationship between affiliated interests can result in more or less risk being born by ratepayers. Additionally, RNG project risk to ratepayers will vary greatly based on whether the project is a 'buy' versus a 'build' project. This concern was echoed by CUB in its Opening Comments, who recommended that the Company evaluate a variety of RNG sources and ownership structures prior to committing to an RNG project.

Staff encourages Avista to engage with Staff and stakeholders early in the development process to discuss potential RNG project types and ownership structures and ways to mitigate or balance project risks fairly. Staff recommends Avista provide an update on its RNG project pipeline as part of its 2021 IRP Update and that it work closely with stakeholders to identify what information the update should include. Staff recommends the update include, at a minimum, project type, location, ownership structure, carbon intensity and emission reduction potential, development timeline, and measures the Company is considering to mitigate customer risk.

> **Recommendation 10: Work with stakeholders and Staff to identify information that should be included in an RNG project pipeline update and provide an update on the Company's RNG project pipeline as part of the next IRP Update, including, but not limited to consumer risks and costs assessment associated with buy vs build RNG options.**

Hydrogen

Staff appreciates the analysis the Company conducted to assess the competitiveness of green hydrogen and the other various types of hydrogen projects. The Company explained that part of what will make green hydrogen cost-effective is its connection with the expansion of renewable electricity projects. Staff's and CUB's primary interests were in understanding the infrastructure needs to accommodate hydrogen blends.

In its Opening Comments, CUB recommended that the company provide a description of its current infrastructure and whether it is able to handle hydrogen. CUB also asked that the Company provide information on the capital investment needed to handle hydrogen on system.

Staff supports a more detailed accounting of Avista's current gas infrastructure and its ability to accommodate various blends of hydrogen. Staff recommends that in the next IRP, or if applicable, as part of the NGFF effort, that the company provide more detailed information about the make-up and current status of existing infrastructure, insofar as it can accommodate hydrogen. Where that accommodation includes necessary upgrades, the Company should also provide an accounting of the upgrades required. Staff recommends that if and when future upgrades are considered, that the Company report on the costs associated with including upgrades that enable the inclusion of varying percentages of hydrogen.

Staff looks forward to engaging with Avista on the OPUC's work plan for EO 20-04 item 5.4.2: to consider the creation of a joint electric and natural gas utility pilot to explore leveraging resources for in-state production of hydrogen.[15]

> **Recommendation 11: In the next IRP, provide an analysis of the capabilities of Avista's system to accommodate hydrogen, where upgrades would be required to accommodate hydrogen, and estimated costs of those upgrades.**

Integrated Resource Modeling

Natural Gas Price Modeling

In Opening Comments, Staff requested additional information on the modeling of natural gas market purchases and forward price curves. The Company described these methodologies in Response Comments, including a detailed explanation of how different forecasts are combined. Staff finds this explanation sufficient and has no further questions at this time.

Alternate Supply Resources

Staff seeks a long-term comparison of the expected costs of market purchases and the expected cost of distributed renewable gas resources available as an alternative to extracting fossil fuel gas. In the 2021 IRP, Avista provided the current levelized costs of these renewable resources. All are considerably more costly than transporting gas from Canada, where most of Avista's gas is originally extracted. Long-term planning in an IRP should help understand if this cost difference is expected to change in the later years of the planning period.

In Opening Comments, Staff sought clarity in how improvements in renewable gas technology that decrease the expected levelized cost were modeled in later years. In reply comments, the Company confirmed that Avista's assumed levelized costs include future technology improvements that lower the levelized cost.

In DR 71, Staff requested the basis for the future cost assumptions. The Company's reply shared the 2018 internal study by Black and Veatch that formed the basis for the 2021 IRP's cost assumptions of renewable resources.[16] This study estimated cost variables out to 2040. Staff finds the Company has reasonably modeled the expected future costs of these renewable

[15] OPUC EO 20-04 Work Plan, p. 10-11, found at https://www.oregon.gov/puc/utilities/Documents/EO-20-04-WorkPlans-Final.pdf.
[16] Avista. Response to OPUC Staff Data Request 71, Attachment A, July 6, 2021, p 1.

resources. In the Company's next IRP, Staff requests Avista describe the assumed technology changes and their impact on future levelized costs in the text of the next IRP.

> **Recommendation 12: In the next IRP, describe the assumptions for changes to renewable technologies and their impact on future levelized costs in the text of the next IRP.**

Stochastic Analysis

Staff has followed through on Staff Recommendation 7 from Order No. 19-106 to "identify a scientifically accurate and reliable stochastic modeling approach to replace the 200-draw Monte Carlo technique."[17] At the time, Staff was concerned at the low number of draws. In its Opening Comments, Staff asked for a report on what was discussed and what was adopted. In Response Comments, the Company explained stochastic results now use draws to 1000 draws which are used to create 95th and 25th percentile prices in each month to determine high and low price curves. Staff thanks Avista for this clarification and finds the Company's stochastic analysis reasonable.

Large-Scale Supply Interruptions

In the last IRP, Staff recommended that the Company discuss large-scale supply interruptions such as the 2018 Enbridge incident and the role of storage in such a scenario.[18] In Opening Comments, Staff followed up with a request that the Company clarify its decision not to model an extreme supply interruption scenario. AWEC also requested additional analysis of the Enbridge Pipeline rupture, including "a scenario where this type of event happened in winter, where it would not have been possible to interrupt natural gas fired electric generation."[19]

In Reply Comments, the Company explained that in all forecasts, a large-scale supply interruption would lead to immediate load shedding. The Company determined that the only feasible solutions would involve significant regional coordination or very expensive infrastructure investments.

Staff requests that Avista go further in developing a reasonable scenario with assumptions about the response of other regional entities, as experienced in the Enbridge Incident. The purpose of pursuing such an exercise is to consider different courses of action that could be taken to mitigate the impact of another such event occurring.

> **Recommendation 13: Work with TAC to develop a scenario with a future large-scale supply interruptions, like the October 2018 Enbridge incident.**

Distribution Planning

Staff approached its analysis of distribution system planning with the intent of determining whether Avista has conducted sufficient planning to conclude that there is no need for major distribution system upgrades. In Opening Comments, Staff noted that the Company did not identify any new major construction projects or new plans for future distribution projects. Staff

[17] OPUC Order No. 19-106, p 16.
[18] OPUC Order No. 19-106 March 25, 2019, Appendix B, p. 3.
[19] LC 75 – AWEC Opening Comments, page 2.

pointed to the Klamath Falls city gate station and Sutherlin city gate station, where the Company had identified in previous IRPs that these were areas it was monitoring for potential capacity issues. Staff submitted multiple discovery requests to verify whether the Company has no new projects on the horizon. Staff also requested that the Company provide additional information on how it collects pressure data on its system, and whether it had any plans for collection points. AWEC also asked in its comments whether the Company will be reducing the frequency of rate case filings since it is indicating that it does not have many distribution projects planned.

In the Company's Response Comments, Avista indicated that the Sutherlin city gate station's peak flow is predicted to be at 112 percent of the physical capacity of the city gate station, and the Klamath Falls city gate station's peak flow is predicted to be at 93 percent of the city gate station's physical capacity. Avista stated that it would continue to monitor customer usage at these city gates.

Staff submitted further discovery about these two projects, and the Company reassured Staff that it does not intend to make any substantial Oregon plant investments related to added capacity in the next four years. Avista also stated that though it would consider making such investments where customer loads would require it, currently, its load study reviews do not indicate a need for any distribution plant investments over the next four years. [20]

In response to AWEC regarding the cadence of rate cases, the Company maintained that "there are many factors that impact the Company's need to file a rate case" and that it is "unable to predict the future frequency of rate case filings due to the many unknown future variables that impact the need to file a rate case."[21] The Company also responded to AWEC by stating that it is exploring a dollar threshold for including distribution projects in the IRP.

Staff is satisfied with the Company's responses to questions about distribution planning. In the next IRP, Avista should continue to keep the Commission apprised of any future distribution projects, including the Sutherlin and Klamath Falls city gate projects.

> **Recommendation 14: In the next IRP, Avista should continue to keep the Commission apprised of the Sutherlin and Klamath Falls city gate projects. The Company should also provide a list of areas or projects where the Company is monitoring for capacity or pressure issues.**

Action Plan

In Opening Comments, Staff asked for clarification as to whether the Company's Action Plan does in fact cover a four-year interval, or if it only covers two years. The Company confirmed that it is a four-year action plan and will be clearer about the time period in future IRPs. Staff appreciates the clarification and understands that, while the action plan references activities leading up to the next IRP two years from now, it also indicates that the Company does not plan to make significant new resource investments in the next four years, whether as part of the supply system, or the distribution system.

[20] See Staff Attachment 1, Avista response to Staff Data Requests 77 and 78.
[21] LC 75 – Avista's Response Comments, page 11.

Staff supports the Company's action items and also has additional recommendations. Staff proposes that these recommendations become new action items for the Company.

Below are Staff's recommendations for the Company's Reply Comments:

Recommendation 1: In the next IRP, use at least five years of historic data for modeling use per customer.

Recommendation 2: Include a No Growth scenario in the next IRP.

Recommendation 3: In future IRPs, provide a comparison between the current CPA and the last CPA, including a narrative explanation of major changes in the potential.

Recommendation 4: Discuss demand response as a demand side resource option at a TAC meeting before filing the next IRP.

Recommendation 5: Discuss long-term transport procurement strategies at a TAC meeting before the next IRP.

Recommendation 6: Avista should provide a workshop, within two months of the publishing of DEQ's draft CPP Rules, with the goal of facilitating a discussion of how to integrate the Company's approaches to SB 98, SB 844, and EO 20-04 in a way that provides momentum for near-term GHG reduction and utilizes the two pieces of legislation to help Avista achieve the goals of EO 20-04. The workshop should address how the Company could use different types of RNG projects to meet emissions goals.

Recommendation 7: Provide a workshop in the next IRP development process to discuss the possibility of using the social cost of carbon to help inform carbon risks in its portfolios.

Recommendation 8: Include a non-zero carbon risk value for its Idaho customers.

Recommendation 9: Prior to the next IRP, conduct market research to reflect the willingness of Oregon customers to pay for various carbon reduction strategies. Present results at a TAC meeting.

Recommendation 10: Work with stakeholders and Staff to identify information that should be included in an RNG project pipeline update and provide an update on the Company's RNG project pipeline as part of the next IRP Update, including, but not limited to consumer risks and costs assessment associated with buy vs build RNG options.

Recommendation 11: In the next IRP, provide an analysis of the capabilities of Avista's system to accommodate hydrogen, where upgrades would be required to accommodate hydrogen, and estimated costs of those upgrades.

Recommendation 12: In the next IRP, describe the assumptions for changes to renewable technologies and their impact on future levelized costs in the text of the next IRP.

Recommendation 13: Work with TAC to develop a scenario with a future large-scale supply interruptions, like the October 2018 Enbridge incident.

Recommendation 14: In the next IRP, Avista should continue to keep the Commission apprised of the Sutherlin and Klamath Falls city gate projects. The Company should also provide a list of areas or projects where the Company is monitoring for capacity or pressure issues.

This concludes Staff's Final Comments.

Dated at Salem, Oregon, this 3rd of August, 2021.

Anna Kim

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Anna KIM
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Energy Resources and Planning Division