BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 75

In the Matter of)
Avista Corporation,)
2021 Natural Gas Integrated Resource Plan.)))

COMMENTS OF THE

OREGON CITIZENS' UTILITY BOARD

June 1, 2021



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In the Matter of AVISTA CORPORATION, dba AVISTA UTILITIES, 2021 Natural Gas Integrated Resource Plan.

OPENING COMMENTS OF THE OREGON CITIZENS' UTILITY BOARD

I. INTRODUCTION

The Oregon Citizens' Utility Board (CUB) hereby submits its opening comments on Avista Corporation's (Avista or the Company) 2021 Integrated Resource plan (IRP or Plan) filed on April 1, 2021.

CUB appreciates Avista's extensive analysis of its resource portfolio and engaging stakeholders in the process. CUB has reviewed Avista's Action Plan and related analysis and recommends that the Commission acknowledge the action items put forward by the Company.

In these opening comments, CUB addresses some aspects of the Company's analysis and makes suggestions for future IRP filings. CUB also provided written comments on the draft version of this IRP and appreciates Avista's responses, as presented in Appendix 0.2 of the IRP.

II. CUSTOMER LOAD FORECAST AND SENSITIVITIES

Avista has experienced and expects a slowdown in customer growth on its system in the near term. The Company attributes this decline in gas use-per-customer due to improved energy efficiency measures and insulation in new buildings. Avista also foresees an increase in demand beyond the planning period arising from increased reliance on natural gas fired plants to support renewable electricity resources as well as fuel switching in a low carbon emissions future.

CUB made a few suggestions regarding sensitivity analyses of forecasted gas demand in Avista's service territory. These included, a) including an electrification scenario which results in "no growth" on Avista's gas system, and b) a carbon price sensitivity in which the carbon price for Idaho is determined as a price range, rather than \$0.

a) No Growth Scenario

Avista's IRP includes Appendix 0.2 that addresses this concern. The Company states it will consider this scenario in its 2023 IRP. CUB looks forward to this analysis for Avista's Oregon service territory. Currently, Avista does not consider an electrification scenario for its Oregon service territory and states that if sufficient electrification were to take place here, that would result in stranded customers paying higher gas bills. CUB realizes that this could be true, which is one reason that Avista should consider a scenario of no natural gas growth to enable stakeholders and the Company to assess the risk associated with such a scenario. CUB also urges that the Company evaluate non-pipeline programs such as demand response measures that would address stranded capital costs arising from a transition away from gas in Avista's service territory.1 The more that Avista can explore non-pipes alternatives to meet future needs, the less likely it is that stranded customers will be exposed to higher costs under future electrification scenarios.

¹ Appendix, Chapter 0, p-6, Avista 2021 IRP

b) Carbon price for the Idaho jurisdiction

Avista considers a carbon price of \$0 in its demand sensitivity analysis for its Idaho service area. CUB realizes that at present the state of Idaho has no carbon policy in place and that is reflected by the \$0 assumption. The assumption that this will continue in the coming decades may not be realistic. For instance, the city of Boise has developed its own climate action plan that includes both limiting natural gas usage and exploring renewable natural gas (RNG) opportunities.² Another example could be future carbon costs, which are imposed on Avista's Idaho service territory on a federal level.

In response to CUB's concern around Avista's Idaho carbon price, the Company stated "In the event there is no [carbon] policy, like Idaho, formulating a potential price indicator is problematic leading Avista to measure the bounds for risk vs. a specific policy as done through the scenarios of high growth and low-prices and high prices." ³ CUB would like for Avista to provide an additional clarification on this statement, and include a discussion of any risks associated with not formulating a potential price indicator.

CUB Recommendation

- 1. 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.
- 2. Include a carbon price range with a lower limit of \$0 for its Idaho jurisdiction, rather than an absolute zero carbon price.

III. RNG AND HYDROGEN

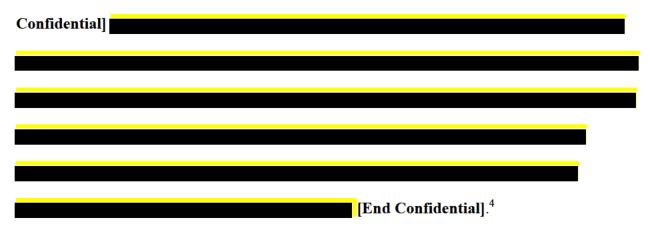
Avista is planning on bringing renewable natural gas (RNG) on its system to meet carbon regulations in Washington and Oregon, and believes that the "build" option is the best way to

² https://www.cityofboise.org/media/7676/ef-report.pdf

³ Appendix, Chapter 0, p-6, Avista 2021 IRP, p.3-4.

comply with regulatory requirements while improving local air quality and economy through creation of new jobs. The Commission is an economic regulator of Avista, and should consider what is best for ratepayers, rather than the employment or broader economic development benefits that may accrue due to a capital project, as these considerations are beyond the scope of the Commission's authority. Avista has two options to procure RNG: build or buy RNG. Under the current regulatory structure, Avista, as an investor-owned utility, can increases its profits by building new capital projects but does not earn a profit on purchased RNG. Therefore, it has a strong incentive to build new capital projects, although this model might not always be the best for its customers.

CUB would like to be clear with Avista. Under Commission IRP Guidelines, RNG projects for Oregon customers must be least-cost and least-risk. CUB wants the best RNG projects to be constructed to meet customer's needs, and is not concerned with who earns a profit from the project. If Avista were to move forward with an RNG project for Oregon customers, CUB would require evidence during the prudence review process that Avista evaluated a variety of resource options and ownership structures prior to moving forward with a project. For example, **[Begin**



⁴ Staff DR 34C Confidential Attachment B.

Avista also views hydrogen as an important component in meeting its clean energy goals, but realizes that at present this resource is not cost effective. CUB suggests that in its next IRP, Avista should detail on how its existing gas distribution, transmission and storage infrastructure can handle hydrogen. If the current system is unable to accommodate hydrogen addition, a discussion of the costs of system upgrades needed to accommodate hydrogen is necessary. CUB is interested on the status of Avista's current natural gas distribution system, which consists of plastic and steel pipe, to handle pure hydrogen or blended hydrogen and natural gas. CUB would like to know if pipeline upgrades and repairs or pipeline segmentation would be required to accommodate hydrogen on system.

CUB Recommendation:

- CUB recommends that the Company evaluate a variety of RNG sources and ownership structures prior to committing to an RNG project.
- 2. Provide a description of Avista's current gas infrastructure and whether it is able to handle hydrogen. CUB also asks that the Company provide information on the capital investment needed to handle hydrogen on system.

IV. DEMAND RESPONSE RESOURCES

Avista's long-term plans include investing in clean supply side resources such as RNG and Hydrogen. These projects would help Avista meet regulatory and legislative requirements in two of its three jurisdictions, these would also aid the Company achieve its corporate clean energy goals and clean up its energy system. CUB believes that the benefits and costs of these projects should be equitably distributed between customers. For instance, stranded gas customers in Avista's Oregon service territory should only bear a reasonable share of existing infrastructure and new renewable gas resources cost.

CUB suggests Avista take a deeper look into demand response (DR) programs that could also help reduce GHG emissions through reduced and managed usage. CUB would like to propose that firm gas customers could receive capacity credits for lowering or shifting their gas usage to non-peak hours of the day. Below, CUB presents an account of demand response potential for meeting peak demands and saving customers significant amounts in gas bills.

A study by Brattle group discusses multiple values that could be obtained from having a gas demand response program for winter and severe weather (like a polar vortex) peaks.

The study shows that on a severe weather day when both wholesale natural gas and electricity markets experience price increases, natural gas DR can prevent price hikes in both markets as DR relieves gas supply constraints. CUB believes that targeted Gas DR also has the potential to prevent or defer long-term investments in gas infrastructure resulting in substantial savings for gas customers.⁵

Several gas utilities in California, including SoCalGas, Con Edison and National Grid have each implemented innovative DR pilots that contributed toward reducing winter peak demand and relieved constraints on their distribution systems. For example, "SoCalGas's Seasonal Savings program for residential customers with a smart thermostat resulted in 8% gas heating savings during the winter of 2016-17. The MA DOER Nest Seasonal Savings programs resulted in a 3.5% heating savings in the winter of 2014-15 (73% of participants had gas fueled heating furnaces) – including significant results on the 10 peak days".⁶

⁵ Details of this study can be found at

http://files.brattle.com/files/13929_demand_response_for_natural_gas_distribution.pdf ⁶ Id.

A recent study by Auffhammer and Rubin (2018)⁷ on natural gas price elasticities in California shows that winter price elasticity is higher and has a greater statistical significance compared to summer elasticity, with low income households having a higher winter price sensitivity compared to higher income groups.⁸ This finding has several policy implications, including the potential for price-based DR programs and subsidizing smart thermostats for low income households in order to implement these programs.

While CUB believes that innovative DR programs for gas customers have the potential to be a useful tool for Avista's future resource planning, CUB is also aware of the challenges that the Company could face in implementing them. Deployment of smart thermostats and smart gas meters could be critical to having these programs in place, though we note that smart meters are not necessary for many DR programs. Gas customers may be less flexible compared to electric customers in their usage. Customer response rates to existing DR programs have generally been low.⁹ Avista could, for instance, use information from its Program Offering Assessment¹⁰ to identify barriers that exist in designing an effective demand response program and plan on overcoming them. The Company could design a similar study for its natural gas customers to help overcome barriers to natural gas participation.

⁷ Maximilian *Auffhammer*, Edward *Rubin*. NBER Working Paper No. 24295. Issued in February 2018. NBER Program(s):Environment and Energy Economics.

⁸ Specifically, the authors estimate that "the "wintertime" price elasticity of demand for natural gas is-0.523 (0.142) for CARE households and -0.317(0.150) for non-CARE households." CARE are the low-income households.

⁹ Id.

¹⁰ Staff DR_39 Attachment A

V. CONCLUSION

CUB appreciates the opportunity to participate in Avista Corporation's 2021 IRP process. CUB is supportive of the action items and recommends that the Commission acknowledge these action items. CUB has made several suggestions for the Company's future IRPs and looks forward to Avista's response.

Dated this 1st day of June 2021

Respectfully submitted,

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