



U-210553

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Amanda Maxwell
Executive Director and Secretary
Washington Utilities & Transportation Commission
621 Woodland Square Loop SE
Lacey, WA 98503

Re: Docket No. UE-210553 – Comments of Avista Utilities

Dear Ms. Maxwell,

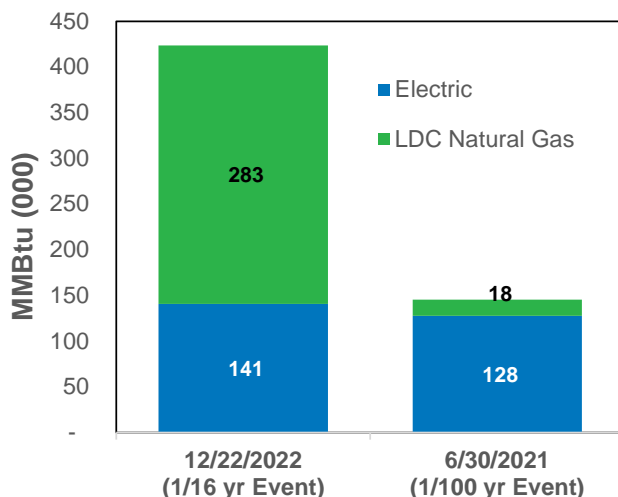
Avista Corporation, dba Avista Utilities (Avista or the Company), submits the following comments in accordance with the Washington Utilities and Transportation Commission's (Commission) Notice of Opportunity to File Written Comments (Notice) issued in Docket UE-210553 on June 28, 2023, relating to the Commission's examination of Decarbonization Pathways. Specifically, the Commission now seeks comments and feedback on the dashboard published by Sustainability Solutions Group (SSG) to share the data and modeling used in their analysis, which will inform the Commission's final report in this proceeding.

Avista is concerned with the practicality and usefulness with the amount of uncertainty and unlikely outcomes for assumed energy demand in SSG's analysis. Further, their analysis appears to generalize time and operations and underestimates the needs of the electric system. For example, the analysis lacks the ability to serve customer load on a temporal basis during extreme cold weather events. Further, the energy demand forecast during these events appears to be low, specifically for eastern Washington, and may not consider real limitations of new technologies. Avista is also concerned with the lack of credible resources used to serve customer demand, whereas the largest resource listed is "unspecified" and all the other resources do not have any aspect of reliable dispatch that can be counted on to meet firm customer load.

The data and analysis lacks understanding or detail on how peak day demand is determined. A peak is described only as "on average weekdays" rather than a design peak where harm to persons and structures is real. This further confuses the issues of whether capacity can be met with these estimated resources. Avista's all-time peak daily energy usage occurred on December 22, 2022. The energy delivered from the natural gas system accounted for 2/3 of the overall energy provided to firm customers as illustrated in Figure 1. This figure nearly doubles when accounting

for Avista’s Oregon natural gas service territory and all energy delivered through the gas distribution which would include transport and interruptible customers and thermal generation supply. This contrasts with our summer peak day where very little energy is provided from the gas system.

Figure 1: WA/ID Peak Day Demand



For these reasons, Avista is concerned the peak energy demand is not high enough given the recent experience shown above, even accounting for efficiency savings when using electric sources. These extreme days in the winter can create an energy vacuum where solar is generally not available and, in some cases, wind also lacks availability. This leaves many new resources such as batteries to pick up the capacity. Instead of a few hours, this needed capacity could extend to days.¹

As of July 2022, the estimated housing units in Washington State is roughly 3.314 million.² Of this housing stock, Avista had nearly 241,000 residential customers as of December 2022. Using the growth rate of housing units considered by SSG, this total would climb to roughly 302,000 or roughly 7.3% of the housing stock by 2050. Per Avista’s 2023 Electric Integrated Resource Plan (IRP),³ Avista is estimated to increase its winter peak demand by roughly 1,000 MW by 2045. The remaining 2,000 MW⁴ in peak demand growth on average weekdays identified by SSG would be divided among the 93% or 3.8M houses no in Avista’s service territory. The math and assumptions used by SSQ quickly becomes difficult to reconcile.

The estimated energy sources attributed to Avista in the Electrification scenario include some new resource additions and the majority coming from “unspecified power” as illustrated in Table 1 below. Simply stated, this would need to be long duration storage such as power to gas

¹ E3 study from 2019 (*Resource Adequacy in the Pacific Northwest*, March 2019.)

² United States Census Bureau

³ Docket UE-200301.

⁴ https://cis-community.ssg.coop/washington/demand_summary

and may not be high enough based on prior comments.⁵ The amount of supply from these resources is a large percentage of the total at 35% and a large percentage of the plan as laid out by SSG without specific values or detail available as a part this plan. Currently, the 2050 values attributed to Avista create more questions with the MW values including 20 MW for run of river hydro, 160 MW of hydro resource, which is not possible with current system assets, and the rooftop solar of 1,483 MW, which would imply that every available roof would require solar panels. Even then it is vastly overestimated.

Table 1: Avista added capacity by 2050

Resource Group	Resource	MW
Current	Onshore Wind Existing	603.5
Current	Ground mount Solar Existing	20
Current	Run of River	20
Current	Hydro	160
Current	Batteries Existing	108.3
New	Onshore Wind New	498
New	Rooftop Solar	1483
New	Batteries New	467.4
Unspecified	Unspecified	1,390.5

Regarding the overall process used by SSG to develop their analysis, , the public meetings held to provide feedback were initially separated into industry experts and the public. These meetings requested feedback and information from the participants, with no specific outcome nor descriptions of how data would be utilized. Additionally, the software and story board ideas as considered in Miro⁶ was not available to many due to IT restrictions, thus limiting input from participants and the transparency of the considerations and results. Overall, the process used to reach the final results was clunky, lacked communication, and poorly executed. The final results of this study should not be used to inform future policy decisions due to the many unresolved issues, as discussed above.

Please direct any questions regarding these comments to me at 509-495-2782 or shawn.bonfield@avistacorp.com.

Sincerely,

/s/ Shawn Bonfield

Shawn Bonfield
Sr. Manager of Regulatory Policy & Strategy

⁵ Avista 2023 Electric IRP page 10-10 for portfolio choices and load forecast is on page 2-32.

⁶ <https://miro.com/>