

January 28, 2022

UE-210628

Via Electronic Filing

Amanda Maxwell
Executive Director
Washington Utilities & Transportation Commission
1300 S. Evergreen Pk. Dr. S.W.
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Olympia, WA 98504-7250

Re: Avista Corp. d/b/a Avista Utilities
Clean Energy Implementation Plan.
Docket UE-210628

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Dear Executive Director Maxwell:

Pursuant to the Washington Utilities and Transportation Commission's ("Commission") October 6, 2021 Notice of Opportunity to file comments in the above-referenced docket, the Alliance of Western Energy Consumers ("AWEC") files these comments on Avista's Clean Energy Implementation Plan ("CEIP").

Avista's CEIP, while lengthy, can be boiled down to two parts:

1. A set of interim resource acquisition goals that acquire renewable resources earlier than necessary; and
2. A set of interim renewable energy goals that reflect the actual renewable attributes of energy delivered to retail customers.

AWEC opposes Avista's plan because it is likely to result in cost and risk increases to Avista customers without carbon reduction benefits. The plan requires early renewable resource acquisition while stripping the renewable attributes from those resources prior to delivering the energy to customers. Avista currently has sufficient CETA-compliant resources to achieve Avista's proposed interim renewable energy targets through 2030. Avista can comply with CETA at a lower cost by only acquiring resources ahead of need when cost-effective to do so. Avista should only acquire new renewables if the resources are shown to be economic in the face of 2030 compliance requirements, including alternative compliance options.

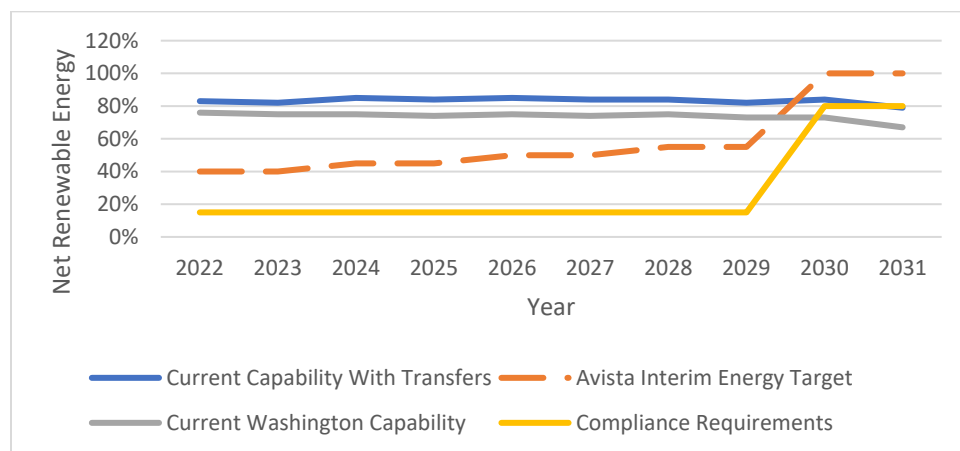
In meeting its carbon-free and renewable requirements, CETA requires that utilities “[a]chieve [these] targets at the lowest reasonable cost, considering risk.” RCW 19.405.040(6)(a)(i). This is critical for Avista because Avista currently has sufficient resources to meet CETA requirements through 2030. Avista’s plan results in the addition of uneconomic resources prior to 2030, which increases both cost and risk to customers.

I. COMMENTS

A. Early acquisition of renewable resources and dismissal of alternative compliance options unnecessarily increases cost and risk to customers.

Avista’s plan acquires resources years ahead of need. Avista also plans to achieve 100 percent renewable compliance without relying on alternative compliance options such as unbundled RECs. The figure below compares Avista’s renewable resources with Avista’s proposed net renewable glide path. Avista has sufficient generation to meet its proposed net energy needs until 2030.

Figure 1: Avista’s Net Renewable Energy Position



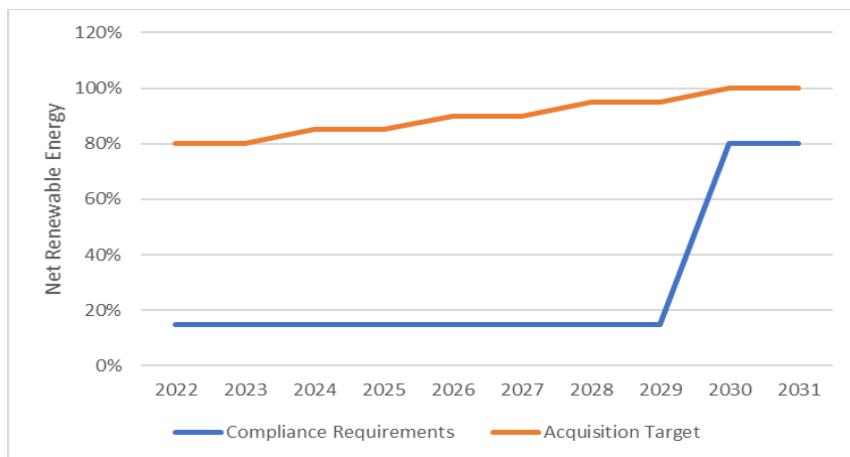
Despite having a generous renewable energy buffer until 2030, Avista plans to acquire renewable resources in 2024. Avista differentiates between “Renewable Energy Interim Targets” and “Total Clean Energy Acquisition Targets.” The Renewable Energy Interim Target is the amount of net renewable energy that serves Avista’s retail load. Total Clean Energy Acquisition Target is a measure that does not appear in the Clean Energy Transformation Act and represents Avista’s ability to generate clean energy regardless of whether the energy is used to serve retail load. The difference in these two measures represent RECs that Avista intends sell to other entities.

The Total Clean Energy Acquisition Targets are intended to ensure that Avista has adequate renewable or non-emitting resources to meet the 2030 carbon neutral standard.^{1/} The figure below compares the acquisition targets with compliance requirements. It is clear

^{1/} Avista CEIP at 2-11.

from the figure that Avista's acquisition targets greatly exceed compliance requirements in every year.

Figure 2: Acquisition Target Exceeds Compliance Requirement



Avista's 2021 IRP selects new Montana wind in 2023 to meet these early acquisition targets. These wind facilities would be 7 years old in 2030, the first year that the resource is actually needed for compliance. Much of the economic life of this wind will have expired before the wind ever becomes valuable for its renewable attributes. While the economic lives of wind facilities range from 20 to 40 years, many of the primary components of wind facilities have short lives and require interim replacements. For example, gear boxes often fail before they reach 10 years of operation. Given the substantial cost involved in early acquisition, there should be thorough financial analysis supporting any decision to acquire renewable generation early.

Avista also asserts that alternative compliance options should not be relied upon due to risk. As with early acquisition, Avista provides no financial analysis demonstrating alternative compliance is more costly or risky. Avista's dismissal of alternative compliance is a form of early acquisition because the amount of RECs that can be used as alternative compliance diminishes gradually over time

B. Avista does not demonstrate that early acquisition mitigates compliance risk.

Avista admits that it plans early acquisition, alleging that early acquisition mitigates compliance risk.^{2/} Avista also finds that renewable resources are not cost effective, as demonstrated in the \$14 per MWh renewable premium in its IRP avoided cost analysis.^{3/} A careful review of Avista's CEIP and IRP shows there is little quantification of risk and no consideration of the cost of early acquisition. Avista identifies the following risks:

^{2/} Avista CEIP at 2-14.

^{3/} Avista 2021 IRP at 11-20.

1. Transfers from Idaho may not be possible;
2. 2030 compliance rules may prevent some Avista resources from counting as compliant;
3. Renewable energy variability may cause annual production to fall short of average in some years;
4. Avista's reliance on third-party resource development may affect ability and cost of acquiring resources; and
5. The cost of alternative compliance is uncertain.

Avista presents these risks as the basis for acquiring 100 percent renewable generation capability in advance of 2030, rather than the 80 percent required for alternative compliance. Notably lacking from Avista's justification for early acquisition is any material financial analysis. The Commission would not accept a proposal by Avista to hedge 100 percent of gas use with long-term contracts without detailed and rigorous financial analysis. A similar standard should be applied to renewable energy procurement. Avista's risk analysis is also deficient for the following reasons:

1. Transfers from Idaho may not be possible.

Avista plans to rely on 42.8 MWa of renewable energy attributes from Idaho-allocated resources to comply with net energy requirements in 2030. This represents approximately 7 percent of Avista's net retail load. Avista notes that future changes in state or federal policy could prevent the transfer of renewable attributes from Idaho to Washington.

If this occurs, Avista alleges, it may need to procure additional renewable resources on an accelerated timeline, at potential higher cost. This would only occur to the extent that changes in state and federal policy do not provide an adequate transition period. AWEC expects that if any changes occur, these changes would include sufficient time to allow for resource acquisition. Avista has also not identified any reason to expect such changes in federal or state policy. Therefore, while it is possible that Idaho transfers become limited, it is unlikely that relying on transfers for planning purposes will increase the cost of renewable resource acquisition.

2. 2030 compliance rules may prevent some Avista resources from counting as compliant.

Avista notes that the Commission has not finalized 2030 compliance rules, and these rules could affect what Avista resources qualify. However, if the Commission finalizes rules within the next two or three years, there will still be an extended procurement window to meet the 2030 interim compliance requirements. Rather than mitigate this risk through early resource acquisition, it makes more sense to mitigate this risk through timely finalization of compliance rules.

3. Renewable energy variability may cause annual production to fall short of average in some years.

Renewable generation is weather dependent and annual energy of renewable resources is expected to vary from year to year. If Avista acquires renewable resources to meet compliance requirements on average, it will be likely that in many years Avista does not comply simply due to natural variation in generation. However, beginning in 2030 CETA compliance is evaluated within four-year compliance periods. The variable production risk only exists to the extent that production within each four-year compliance period falls short of the expected average generation. Given that there is a low correlation in year-to-year weather, four sequential years of under-generation is unlikely. Avista's 100 percent acquisition goal for 2030 provides a 20 percent net energy buffer to substitute REC compliance if renewable generation falls short. AWEC suspects that this buffer is grossly excessive.

AWEC considers this a reasonable risk to address in a systematic and scientific manner. Rather than acquiring an arbitrary 20-percent resources buffer to mitigate this risk, Avista should analyze the annual variation in total system renewable generation and acquire a targeted amount of excess renewable generation. This buffer should only be acquired early if it is economical to do so.

A related risk that Avista does not discuss in its CETA is variation in load and load growth. CETA provides for some averaging of load across years, but it is unlikely that this averaging will smooth all weather-related load volatility or unexpected load growth. A reasonable risk mitigation plan should also take a scientific approach to evaluating and addressing the impact of load volatility on compliance.

4. Avista's reliance on third-party resource development may affect ability and cost of acquiring resources.

Avista notes that it does not develop greenfield resources and that resource availability, price, and performance may require changes to its renewable resource acquisition plan. This risk does not appear to relate to or require early acquisition of renewable resources.

5. The cost of alternative compliance is uncertain.

Avista implies that the cost of alternative compliance through REC purchases is uncertain and may not be cost effective. It is not reasonable to use this uncertainty to dismiss relying on alternative compliance without any cost-based analysis. While future REC prices are uncertain, they can be forecasted. Other planning inputs, such as market prices and gas costs are also uncertain. Avista's 2021 IRP includes new gas generation resources despite uncertain gas prices.

Avista should acquire a third-party REC price forecast, or perform an internal forecast, and use this forecast to evaluate alternative compliance for 2030. If alternative compliance is shown to be not cost effective, it does not necessarily warrant resource acquisition before 2030. Early acquisition would only be warranted if the incremental cost of early

acquisition outweighs the potential cost of duplicative resources resulting from a timing mismatch between Avista’s energy and capacity needs and Avista’s renewable needs.

C. Avista’s IRP assumptions prevent analysis of the cost-effectiveness of early acquisition to meet future energy needs.

In addition to the five risks discussed above, Avista notes that it has energy and capacity needs identified in its IRP in 2026 to 2027.^{4/} Avista suggests that renewable resources could be acquired early to displace thermal resources in 2026 or 2027. While this could be cost effective, Avista provides no supporting financial analysis. Furthermore, Avista’s 2021 IRP plan to acquire wind in 2022 and 2023 is far in advance of thermal resource additions. It is very unlikely that these additions will stand up to any rigorous cost analysis.

Avista should perform a holistic IRP-type analysis to determine whether early renewable acquisition is cost effective. Avista’s 2021 IRP includes logic and constraints that could have informed the cost effectiveness of early adoption; however, the utility did not parameterize its model to allow for this.

Avista’s 2021 IRP resource selection is assisted by a mathematical model called “PRiSM”. In Avista’s 2021 IRP, PRiSM included renewable energy constraints and REC constraints. The figure below illustrates the parameters that Avista used for these constraints.^{5/}

Figure 3: IRP Goals Exceed Compliance Requirements

Clean Energy Goal																								
Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Clean goal aMW	495.6	498	530	534	567	568	605	608	641	642	641	644	645	646	645	648	650	651	651	655	658	660	662	667
Clean Goal	80%	80%	85%	85%	90%	90%	95%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Constraint																								
Offset Limit (Percent)	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	20%	20%	15%	15%	15%	15%	10%	10%	10%	10%	5%	5%	5%	0%
Total Offset Limit (aMW)	0	0	0	0	0	0	0	0	128	128	128	129	97	97	97	97	65	65	65	66	33	33	33	0
Constraint	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<
Non-Hydro Offset Limit (aMW)	44	43	43	42	43	42	43	42	42	41	42	41	41	41	41	40	40	39	39	20	20	7	8	7
Constraint	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<	=<

These constraints illustrate two fatal flaws with Avista’s 2021 IRP. First, Avista’s clean energy goals of 80% in 2022, increasing to 100% in 2030, do not match CETA’s requirements in this period. This means early acquisition of wind resources in the 2021 IRP is not due to cost effectiveness, but rather due to parameter errors. Second, Avista unreasonably constrains the use of RECs to meet clean energy goals. Avista models the use of RECs to offset clean energy goals on the line beginning “Offset limit.” Avista does not allow any offsets between 2022 and 2030. Again, this does not match CETA’s requirements, which contain only interim targets before 2030. The effect of these two erroneous limits is that the IRP model was forced to acquire long-term resources between 2022 and 2029 to meet 95 percent of energy needs with no reliance on RECs. In 2030, the first year that the model allows alternative

^{4/} Avista CEIP page 2-14.

^{5/} 2PRiSM70GUROBI120720IRPBaseline1.xlsm last accessed from <https://www.myavista.com/-/media/myavista/content-documents/about-us/our-company/irp-documents/emissions/2prism70gurobi120720irpbaseline1.xlsm> on January 27, 2022.

compliance through RECs, there is no real option to use RECs because the model has already selected long-term renewable resources in previous years.

If Avista had parameterized these two variables in the PRiSM model to reflect CETA's requirements, the IRP results could be relied on to cost-effectively optimize the decision to acquire renewable energy resources in advance of 2030. Avista could also have performed sensitivity analysis related to the risks discussed above. For example, Avista could have explored a range of offset costs to assess REC price risk.

II. CONCLUSION AND RECOMMENDATION

Given the risks and concerns raised in Avista's CEIP and discussed in these comments, there is no justification for acquiring renewable energy before 2026. Avista is currently developing its 2023 IRP and can refine its analysis of early acquisition in that study to reflect the shortfalls of the 2021 IRP noted above. Early acquisition of renewable resources should also be tested against a power purchase agreement or other solutions to meet the energy gap between 2026 and 2030. AWEC recommends that no renewable resources be acquired early without firm cost justification. Because the earliest potentially justifiable date is 2026, Avista's Total Clean Energy Acquisition Targets should be rejected.

Dated this 28th day of January, 2022.

Respectfully submitted,

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