BEFORE THE WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA UTILITIES

Respondent.

DOCKET NOS. UE-190334 and UG-190335, UE-190222 (*Consolidated*)

RESPONSE TESTIMONY OF AVI ALLISON
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT

EXHIBIT AA-1T

October 28, 2019

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I. INTRODUCTION AND SUMMARY

Q. Please state your name and occupation.

A. My name is Avi Allison and I am a Senior Associate with Synapse Energy Economics, Incorporated ("Synapse"). My business address is 485 Massachusetts Avenue, Suite 2, Cambridge, Massachusetts 02139.

Q. Please describe Synapse Energy Economics.

A. Synapse is a research and consulting firm specializing in energy and environmental issues, including electric generation, transmission and distribution system reliability, ratemaking and rate design, electric industry restructuring and market power, electricity market prices, stranded costs, efficiency, renewable energy, environmental quality, and nuclear power.

Synapse's clients include state consumer advocates, public utilities commission staff, attorneys general, environmental organizations, federal government agencies, and utilities.

Q. Please summarize your work experience and educational background.

A. At Synapse, I provide consulting and research services on a wide range of issues related to the electric industry. My areas of focus include resource planning, power plant economics, rate design, economic impact analysis, and regional capacity markets. I have provided consulting services for a variety of public sector and public interest clients including the U.S. Environmental Protection Agency, the Michigan Public Service Commission, the Michigan Agency for Energy, the New York State Energy Research and Development Authority, the Rhode Island Office of Energy Resources, the Efficiency Maine Trust, the Maine Office of the Public Advocate, the California Department of

Justice, the Washington State Office of the Attorney General, Consumers Union, Sierra Club, Natural Resources Defense Council, and other organizations.

I have provided testimony in resource planning, power cost, and rate case dockets in Michigan, Indiana, and Arkansas.

I hold a Master of Environmental Management from Yale University and a Bachelor of Arts in economics from Columbia University. A copy of my current resume is attached as Exhibit AA-2.[1]

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of the Public Counsel Unit of the Washington Attorney General's Office ("Public Counsel").

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to review the Energy Recovery Mechanism (ERM) filings of Avista Corporation ("Avista" or "the Company"). Specifically, I focus on the reasonableness of Avista's process for calculating pro forma net power supply expenses.

Q. Please identify the documents and filings on which you base the opinions presented in your testimony.

A. My findings rely primarily upon the testimony, workpapers, and discovery responses of Avista witness William G. Johnson.

[1] Avi Allison, Exh. AA-2 (Resume of Avi Allison).

Q. Please summarize your findings.

A. My primary finding is that Avista's biased calculations of 2018 pro forma net power costs resulted in unreasonably high authorized net power costs. Avista broke from its standard reliance on forward gas prices in deliberately and subjectively revising downward its projection of future gas transport optimization revenues. This resulted in unreasonably high authorized net power costs and unreasonably high customer rates. This instance of bias helps to explain the overall directional bias in Avista's power cost modeling that the Commission previously identified in Avista's 2017 general rate case.

Q. Do you have any recommendations for the Commission?

A. Yes. I recommend that the Commission re-affirm its position that Avista's net power cost calculations are directionally biased. Because the ongoing stakeholder process to improve Avista's net power cost calculations has been productive, the Commission should continue to support that process. The Commission should further require Avista to correct identified errors and biases in its net power cost calculations no later than its next rate case.

II. SETTING OF AUTHORIZED NET POWER COSTS

Q. Please summarize Avista's ERM.

A. Under Avista's ERM, the Company undergoes a modeling exercise to calculate pro forma net power costs that are used to set the "authorized" baseline level of net power costs to be recovered through rates. The Company then tracks the difference between those authorized net power costs and the net power costs that are actually incurred. Each year, the first $4 million of net power supply costs above or below the authorized level is absorbed entirely by the Company. When actual costs are less than authorized costs, 25

percent of the next $6 million differential is absorbed by the Company and 75 percent is deferred for rebate to customers. If the differential between authorized and actual net power costs exceeds $10 million, 10 percent of the amount above $10 million is absorbed by the Company and 90 percent is deferred for allocation to customers.[2] Avista's authorized baseline was last set in Avista's 2017 general rate case and Avista does not seek to reset baseline in this case.

Q. How does Avista calculate pro forma net power costs?

A. Avista calculates pro forma net power costs through a combination of electric dispatch modeling and out-of-model calculations that reflect physical and financial natural gas contracts. Notably, both Avista's calculation of pro forma net power costs and the Company's tracking of actual net power costs account for Avista revenues associated with the Company's use of its firm natural gas transportation contracts for price arbitrage purposes.[3] These revenues help to offset power costs, driving net power costs down. For 2018, authorized net power costs were primarily grounded in calculations presented by Avista in its 2017 general rate case.

[2] Direct Testimony of William G. Johnson, Exh. WGJ-1T at 7.
[3] *Id*. at 8-9.

A. Avista's Actual Net Power Costs Have Consistently Been Lower than Authorized Net Power Costs in Recent Years

Q. How have Avista's authorized net power costs compared to actual net power costs in recent years?

A. In recent years, Avista's authorized net power costs have consistently been substantially higher than actual incurred net power costs. Actual net power costs have been at least $6 million less than authorized levels in each of the past five years and in seven of the past eight years.[4] Over the period from 2014 through 2018, cumulative actual net power costs were $57 million below authorized levels.[5] Under the ERM framework, Avista has retained $27 million of that differential.[6]

Q. Is it a good thing that Avista's actual net power costs have consistently been lower than authorized levels?

A. It is certainly a positive development when Avista efficiently manages its system in a way that reduces net power costs. And the tendency of Avista to incur actual net power costs that are lower than authorized levels may reflect efficient, prudent system operations to some degree. However, the frequency and magnitude of Avista's actual power cost savings relative to authorized costs raises the concern that Avista's modeling of authorized net power costs is systematically biased, as argued by Public Counsel and Commission Staff in Avista's 2017 general rate case.

[4] Allison, Exh. AA-3 (Attachment A to Avista Response to Public Counsel Data Request No. 106, Column D).
[5] *Id.* (sum of Cells D16:D20).
[6] *Id.* (sum of Cells I16:I20).

Q. Did the Commission evaluate the presence of bias in Avista's power cost modeling in Avista's 2017 general rate case?

A. Yes. In its final order in Avista's 2017 rate case, the Commission noted that "Avista's power cost forecasts have been consistently unbalanced in the Company's favor over recent years" and recognized the results of Avista's power cost modeling as "directionally biased."[7] The Commission went on to order Avista to engage Commission Staff, Public Counsel, and other interested parties in a discussion about how Avista's power cost modeling could be simplified and improved. [8]

Q. Has Avista engaged Commission Staff, Public Counsel, and other interested parties in a discussion of how to improve Avista's power cost modeling?

A. Yes. Avista, Staff, Public Counsel, and the Alliance of Western Energy Consumers have engaged in a series of power cost workshops to discuss potential improvements to Avista's power cost modeling. The goal of this process is to arrive at consensus adjustments that will improve Avista's power cost modeling. Avista has conducted modeling at the stakeholders' request, and stakeholders are in the process of engaging a third-party consultant to review Avista's modeling approach. This power cost workshop process is ongoing and appears to be headed in a useful direction. However, Avista's 2018 net power cost calculations exhibit the same upward bias as in previous years, as I discuss in this section of my testimony.

[7] *WUTC v. Avista Corp.*, Dockets UE-170485 and UE-170486, Order 07: Final Order at 53-54 (Apr. 26, 2018).
[8] *Id.* at 55.

B. Avista's Treatment of Natural Gas Transport Optimization Revenues Demonstrates the Upward Bias in Avista's Setting of 2018 Authorized Net Power Costs.

Q. How did Avista's actual net power costs compare to authorized net power costs in 2018?

A. In 2018, actual net power costs were $15.5 million lower than authorized levels. Avista retained $6 million of this differential.[9] Thus, 2018 continued the trend of actual net power costs coming in substantially lower than authorized levels.

Q. What was the primary source of the differential between Avista's actual and authorized net power costs in 2018?

A. In 2018, discrepancies between actual and projected natural gas transport optimization revenues were the greatest source of differences between actual and projected net power costs. Mr. Johnson's testimony identifies the "Change in Gas Generation and Natural Gas Prices" category as accounting for $14.6 million of the total $15.5 million differential between authorized and actual costs.[10] Mr. Johnson describes this category's differential as "primarily driven by lower AECO gas prices and the large increase in the price spread between the AECO and Malin trading points."[11]

[9] Johnson, Exh. WGJ-1T at 2.
[10] Johnson, Exh. WGJ-1T at 14.
[11] *Id.*

Q. Why does a larger spread between the AECO and Malin natural gas trading hubs result in lower Avista net power costs?

A. A larger spread between the AECO and Malin trading hubs decreases Avista's net power costs because the Company's firm natural gas transportation contracts enable it to purchase low-cost gas at AECO and sell that gas at the higher-priced Malin hub.[12] This gas transport optimization enables Avista to generate revenues that help to offset power costs.

Q. Did Avista's calculation of 2018 pro forma net power costs contain a reasonable projection of the impact of gas transport optimization revenues?

A. No. Avista's calculations of 2018 pro forma gas transport optimization revenues were biased in a way that predictably contributed to actual 2018 net power costs being lower than authorized levels. Although Avista did account for this category of revenues in its calculation of 2018 authorized net power costs, it did so in a way that was inconsistent with market evidence and the Company's own standard process for forecasting commodity prices.

Q. In general, how does Avista set commodity price assumptions for the purposes of its pro forma net power cost calculations?

A. Generally, Avista relies heavily on forward market prices to determine its commodity price assumptions for its pro forma net power cost modeling. Avista used market forwards to set natural gas price input assumptions for the power cost modeling

[12] *Id.* at 9.

underlying its 2018 authorized net power costs.[13] Avista even adjusted a variety of inputs in the AURORA$_{XMP}$ electric dispatch model in an effort to get the energy price output from that model to align with forward prices.

Q. How did Avista forecast natural gas prices for the purpose of its 2018 pro forma gas transport optimization revenue calculations?

A. For the purposes of its calculations of pro forma gas transport optimization revenues, Avista broke from its standard reliance on forward prices. Avista estimated that forward pricing at the time of its 2018 pro forma power cost analyses indicated gas transport optimization revenues of $13.8 million for calendar year 2018 and $13.3 million for the 2017 rate case pro forma period lasting from May 2018 through April 2019.[14] However, rather than using its own forwards-based revenue projections, Avista "tempered" its projections using "historic average" estimates.[15] "Based on forward prices, history, and price uncertainty," Avista decided to include a gas transport optimization value of $9 million for the pro forma period.[16] In other words, for the May 2018 through April 2019 pro forma period, Avista decided to decrease projected gas transport optimization revenues (and therefore increase projected net power costs) by more than $4 million from its own forwards-based projection.

[13] Allison, Exh. AA-4 (Avista Response to Public Counsel Data Request No. 117(d)).
[14] Allison, Exh. AA-5 (Supplemental Attachment B to Avista Response to Public Counsel Data Request No. 107).
[15] Allison, Exh. AA-6 (Avista Supplemental Response to Public Counsel Data Request No. 107).
[16] *Id.*

Q. Has Avista provided any satisfactory explanations for its decision to lower its gas transport optimization revenue projection from forwards-based values?

A. No. Avista has not offered any reasonable explanations for this decision. Instead, Avista's departure from its forwards-based projection of natural gas transport optimization revenues appears to be an instance of deliberate bias in Avista's setting of authorized net power costs.

Q. Has Avista identified any other instances in which it relied on historical data to forecast commodity prices for the purpose of setting authorized net power costs?

A. No. When asked, Avista did not identify any other instances in which it relied on historical data to forecast commodity prices used to set authorized net power costs.[17] More importantly, Avista's statements suggest that the Company relied on forwards to set AECO and Malin natural gas prices for the purposes of its AURORA$_{XMP}$ power cost modeling but rejected those same forwards-based assumptions when projecting gas transport optimization revenues. Such use of a contradictory set of assumptions within the same modeling process is clearly unreasonable.

Q. At the time of Avista's modeling of 2018 pro forma net power costs, did recent "history" support Avista's determination to manually reduce its forwards-based projected gas transport optimization revenues?

A. No. At the time of Avista's 2017 rate case calculations, recent history already showed a trend of an increasing AECO-Malin spread and increasing gas transport optimization

[17] Allison, Exh. AA-4 (Avista Response to Public Counsel Data Request No. 117(b)).

revenues.[18] In addition, Avista had already experienced 2016 natural gas transport optimization revenues of $11.2 million, $2.2 million more than the level to which it subjectively reduced its pro forma gas transport optimization revenue projection.[19]

Q. Was "price uncertainty" a valid justification for Avista to reject its own forwards-based projection of natural gas transport optimization revenues?

A. No. Price uncertainty is present in any forecasting exercise and can cut both ways, causing actual costs and revenues to be either lower or higher than expected. Using "uncertainty" as an excuse to justify a lower revenue value than indicated by forwards is a clear marker of bias. In this case, Avista's forwards-based projections turned out to be substantially *lower* than its actual natural gas transport optimization revenues. Whereas Avista's forwards-based projection indicated 2018 gas transport optimization revenues of $13.8 million, Avista actually earned $20.5 million in gas transport optimization revenues in 2018.[20]

Q. Does the bias in Avista's setting of 2018 pro forma natural gas transport optimization revenues entirely explain the discrepancy between Avista's actual and authorized 2018 net power costs?

A. No. There are likely numerous factors underlying the discrepancy between Avista's actual and authorized 2018 net power costs. Some of these factors may lie outside of Avista's control. However, the example of bias in Avista's *process* for setting 2018 authorized natural gas transport optimization revenues indicates that substantial portions

[18] Allison, Exh. AA-7 (Supplemental Attachment C to Avista Response to Public Counsel Data Request No. 107).
[19] *Id.*
[20] *Id.*

of the overall discrepancy are a direct result of Avista's biased decision-making. Such sources of discrepancy are inappropriate and unreasonable. They are also the easiest sources of discrepancy to fix.

III. CONCLUSIONS AND RECOMMENDATIONS

Q. Please summarize your conclusions and recommendations relating to Avista's setting of 2018 authorized net power costs.

A. I conclude that Avista's process for setting 2018 authorized net power costs was biased in a way that led to unreasonably high electricity rates. It is reasonable for the Commission to allow the ongoing power cost workshop process to proceed as the primary effort to correct the bias in Avista's net power cost calculations. However, the Commission should reaffirm its stance that Avista's net power cost calculations are directionally biased. In addition, the Commission should require Avista to implement corrections to identified biases and errors in its net power cost calculations no later than its next rate case.

Q. Does this conclude your testimony?

A. Yes, it does.