

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON**

UG 519

In the Matter of)
)
Avista Corporation, d/b/a Avista Utilities,)
)
Request for a General Rate Revision.)

**OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS**

March 4, 2024

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EXHIBIT LIST

AWEC/101 – Qualification Statement
AWEC/102 – Revenue Requirement Calculations
AWEC/103 – Avista Responses to AWEC Data Requests
AWEC/104 – Third-Party Risk Premium Estimates
AWEC/105 – Capital Asset Pricing Model Analysis
AWEC/106 – AWEC Rate Spread Proposal

1 **I. INTRODUCTION AND SUMMARY**

2 **Q. PLEASE STATE YOUR NAME AND OCCUPATION.**

3 A. My name is Bradley G. Mullins. I am the Principal Consultant of MW Analytics, a consulting
4 firm that, among other things, represents utility customers before state public utility
5 commissions in the Northwest and Intermountain West. My witness qualifications are
6 provided in **Exhibit AWEC/101**.

7 **Q. PLEASE IDENTIFY THE PARTY ON WHOSE BEHALF YOU ARE TESTIFYING.**

8 A. I am testifying on behalf of the Alliance of Western Energy Consumers (“AWEC”). AWEC is
9 a non-profit trade association whose members are large energy users in the Western United
10 States, including gas sales and transportation customers of Avista Corporation, *dba* Avista
11 Utilities (“Avista”).

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

13 A. In my testimony I discuss my initial review of Avista’s request to increase its revenue
14 requirement by \$7,822,000,¹ a margin rate increase of 9.2%.² I evaluate Avista’s revenue
15 requirement calculations, including its requested cost of capital. I also evaluate Avista’s cost
16 of service study, its rate spread proposal, and rate design for Schedule 456.

17 **Q. WHAT IS YOUR RECOMMENDED COST OF CAPITAL?**

18 A. I reviewed the Capital Asset Pricing Model (“CAPM”) results prepared by Avista. Based on
19 that review, I recommend using a third-party forecast of equity risk premiums, including Kroll
20 of 5.5% and Damodaran from the New York University Stern Business School of 3.95%. I
21 also recommend using a “raw beta” in the calculation, not the “adjusted beta” calculations that

¹ Avista / 501, Garbarino / 1:2(d).

² Avista / 501, Garbarino / 2:9.

1 Avista uses. Based on this analysis, I estimate a cost of equity ranging from 6.20% to 9.45%
 2 and propose a return on equity (“ROE”) that is towards the upper end of that range, or 9.2%.
 3 AWEC’s proposed cost of capital based on this ROE is detailed in **Table 1**, below.

Table 1
AWEC Recommended Cost of Capital

Cost of Capital Component	Capital Structure	Cost	Weighted Cost
Total Debt	50.00%	4.93%	2.4700%
Common	50.00%	9.20%	4.6000%
Total	100.00%		7.0700%

4 **Q. WHAT IS YOUR RECOMMENDATION ON REVENUE REQUIREMENT?**

5 A. AWEC’s proposed revenue requirement is detailed in **Table 2**, below. The revenue
 6 requirement calculations supporting this proposal have been attached in **Exhibit AWEC/102**.
 7 Each adjustment in **Table 2** is described sequentially in Section III of this testimony.

Table 2
AWEC Proposed Revenue Requirement (\$000)

1	Avsita Initial Proposal	7,822
2	<i>% Margin</i>	<i>9.2%</i>
3	Impact of Adjustments	
4	a Cost of Capital	(3,225)
5	b Test Period Accum. Depr.	(964)
6	c Transp. Depr.	(277)
7	d CWC - Lead Lag Study	(146)
8	e CWC - O&M Service Lag	(35)
9	f O&M Escalation	(509)
10	g Labor Expense	(169)
11	h Legal Expense	(111)
12	i BOD Expense	(189)
13	j R&D Tax Credit	(8)
14	j Rate Case Expense	(155)
15	Interest Coordination	100
12	Total Adjustments	(5,687)
13	Adjusted Revenue Requirement	2,136
14	<i>Adjusted % Margin</i>	<i>2.5%</i>
15	h Less Customer Tax Credit Amort.	(4,093)
16	Rate Impact After Tax Credit	(1,957)
17	<i>% Margin</i>	<i>-2.3%</i>

1 **Q. ARE YOU ALSO PROPOSING AN ADJUSTMENT TO MITIGATE THE RATE**
2 **INCREASE ON AVISTA CUSTOMERS?**

3 A. Yes. I recommend a one-time amortization from the UM 2124 deferral balance to mitigate the
4 rate increase using incremental deferrals that have accrued since Docket UG 433. This one-
5 time amortization is \$4,093,096, and has been detailed “below the line” in **Table 2**, above.

6 **Q. WHAT IS YOUR RATE SPREAD RECOMMENDATION?**

7 A. While I have some disagreement over the methods used in Avista’s Long-Run Incremental
8 Cost (“LRIC”) cost of service study, the results overwhelmingly show that large customer
9 classes are paying margin rates vastly above their cost of service. Considering these results, I

1 recommend the Commission approve a rate spread that is based on the LRIC, with a rate
 2 reduction floor at (-)5.0%. **Table 3**, below, contains a summary of my recommended rate
 3 spread at AWEC’s revenue requirement, with detail of the impact of the proposed UM 2124
 4 deferral amortization.

Table 3
AWEC Proposed Rate Spread % of Billed Revenues

	Schedule	AWEC		
		Billed	Tax Credit	Net
1	SCH 410	1.8%	-4.0%	-2.2%
2	SCH 411	-3.6%	-4.1%	-7.7%
3	SCH 420	3.6%	-2.7%	1.0%
4	SCH 424	-2.2%	-1.1%	-3.3%
5	SCH 440	-2.6%	-1.6%	-4.2%
6	SCH 444	-1.8%	-1.2%	-3.1%
7	SCH 456	-5.0%	-3.2%	-8.2%
8	Total	1.8%	-3.5%	-1.7%

5 **Q. WHAT IS YOUR RECOMMENDATION FOR SCHEDULE 456 RATE DESIGN?**

6 A. Pursuant to the Stipulation in UG 461, Avista presented an alternative rate spread proposal for
 7 Interruptible Transportation Schedule 456 based on the use of a contract demand charge.³ For
 8 many of the same reasons Avista described in testimony, I support Avista’s conclusion that
 9 contract demand is not a meaningful cost driver for Schedule 456.⁴ I also agree with Avista
 10 that it is not appropriate to use contract demands as the basis for cost assignment in the context
 11 of the LRIC.⁵

³ Avista/900, Miller/15:5-10.

⁴ Avista/900, Miller/16:4-14.

⁵ Avista/800, Anderson/4:4-5:10.

1 **Q. HAVE YOU ATTACHED AN EXHIBIT WITH RELEVANT DISCOVERY**
2 **RESPONSES CITED IN THIS TESTIMONY?**

3 A. Yes. Responses to discovery responses cited in this testimony have been attached sequentially
4 in **Exhibit AWEC/102**.

5 II. RETURN ON EQUITY

6 **Q. WHAT COST OF EQUITY HAS AVISTA PROPOSED?**

7 A. In its initial filing, Avista proposed an ROE of 10.4%.⁶ This would be a major, 90 basis point
8 increase relative to the 9.5% ROE approved in its 2023 rate case, Docket No. UG 461. It would
9 also be 106 basis points higher than the 9.34% ROE the Commission approved for Oregon's
10 largest investor owned electric utility, Portland General Electric in December 2024, shortly
11 after Avista filed this case.⁷ It would also be 90 basis points higher than the 9.5% ROE the
12 Commission approved for PacifiCorp in December of 2024.⁸ Finally, it would also be 100
13 basis points higher than the 9.4% ROE that the Commission approved for NW Natural in
14 October 2023.⁹ While Avista may believe a major increase to its ROE is justified based on
15 changing market conditions, and perhaps based on its experience in other jurisdictions,¹⁰ this
16 increase is both inconsistent with the ROE's that have been recently awarded to other investor
17 owned utilities in this state, and contrary to the modeling results upon which the Commission
18 has historically relied.

⁶ Avista/300, Thompson/16:21.

⁷ *Portland General Electric Company, Request for a General Rate Revision*, Docket UE 435, Order 24-454 at 12 (Dec 22, 2024).

⁸ *In re PacifiCorp d.b.a. Pacific Power, Request for a General Rate Revision*, Docket UE 433, Order 24-447 at 11 (Dec. 19, 2024).

⁹ *In re NW Natural Gas Company, dba NW Natural, Request for a General Rate Revision*, Docket UG 490, Order 24-359 at 4 (Oct. 25, 2025).

¹⁰ For example, the Washington Utilities and Transportation Commission approved a 9.8% ROE for Avista in its 2024 Washington rate case Docket Nos. UE-240006/UG-240007, which is materially higher than recent ROEs approved in Oregon.

1 **Q. DID AVISTA USE THE COMMISSION’S PREFERRED MODEL TO JUSTIFY ITS**
2 **PROPOSAL?**

3 A. No. The Commission has a long-standing practice of preferring a multi-stage Discounted Cash
4 Flow (DCF) model when evaluating ROE.¹¹ The Commission recently stated it “primarily
5 relie[s] upon the multi-stage DCF model in determining a reasonable range of ROE”¹² In its
6 cost of capital recommendation, however, Avista omitted that model completely. Rather than
7 use the Commission’s preferred model, Avista relies on a single-stage DCF model, which the
8 Commission has historically rejected.¹³ While my own analysis focuses mostly on the CAPM,
9 proper application of a multi-stage DCF model, which I expect Staff will present, would likely
10 not support the inflated ROE that Avista is recommending.

11 **Q. IS IT VALID TO CONCLUDE THAT RISING INTEREST RATES LEAD TO**
12 **HIGHER EQUITY COSTS?**

13 A. No. While interest rates may change from period to period, equity risk premiums and equity
14 costs are also changing. Accordingly, it is not valid to conclude, as Avista does, that rising
15 interest rates will automatically lead to higher equity costs.¹⁴ Interest rates may have risen, but
16 equity risk premiums are also changing, leading to equity costs that may be higher or lower
17 than they were previously. For example, if interest rates increase, but equity premiums decline
18 by an equivalent amount, there would be no change in market equity costs. This is why it is
19 necessary to perform a cost of equity analysis, as opposed to merely pegging a utility’s ROE at
20 a certain number of basis points above the risk-free interest rate, which is basically what Avista
21 argues in this docket.

¹¹ See e.g. *In re PacifiCorp's Proposal to Restructure and Reprice its Services in Accordance with the Provisions of SB 1149*, Docket No. UE 116, Order No 01-787 at 33 (Sep. 07, 2001).

¹² See Docket UE 435, Order 24-454 at 11.

¹³ *In re PacifiCorp, dba Pacific Power, Request for a General Rate Revision*, Order No. 20-473 at 30 (citing Order No. 01-787 at 33) (Dec. 18, 2020).

¹⁴ Avista/200, Thompson/31:18-22.

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE CAPM METHOD FOR ESTIMATING**
2 **DISCOUNT RATES.**

3 A. My analysis uses the Capital Asset Pricing Model (“CAPM”). The CAPM is widely
4 acknowledged as a method for estimating the discount rate or expected return for an
5 investment. In its simplest form, the CAPM formula represents the concept that higher-risk
6 investments demand higher returns, and lower risk investments demand lower returns. The
7 formula is as follows:

$$rf + \beta * erp$$

8
9 Where:

- 10 *rf* = The risk-free rate - This is the return an investor expects in the absence
11 of any risk, usually based on government debt yields.
12 *β* = Beta – This variable describes how risky an investment is relative to the
13 market with 1.0 being the riskiness of the market, higher values being
14 higher risk investments, and lower values being lower risk.
15 *erp* = The equity risk premium. The return in excess of the risk-free rate that
16 is expected broadly in the market.
17

18 This linear formula, comprising only three variables—the risk-free rate, a beta, and an
19 equity risk premium—is straightforward. Given the simplicity of the formula, the
20 disagreements regarding the assumptions are generally narrow in scope, although they can
21 produce significantly different outcomes. For instance, the appropriate risk-free rate is a
22 relatively straight forward assumption, but it can be viewed in a few different ways. On the
23 other hand, the assumed beta (the risk variable), can be the subject of significant controversy,
24 although in this case, the proxy group that Avista proposed results in beta estimates that fall
25 within a relatively predictable range. Notably, Avista uses heuristically adjusted betas as the
26 basis for its CAPM, but it is also appropriate for the Commission to consider the raw, or
27 unadjusted, betas in evaluating ROE. Finally, equity risk premiums are a more subjective
28 element of the CAPM and, as I discuss below, the use of an excessively high risk premium
29 assumption is a key driver of Avista’s proposed ROE estimate.

1 **Q. WHAT IS A “PROXY GROUP”?**

2 A. When estimating the cost of equity, the standard of reasonableness for utility ratemaking is that
3 “[t]he return to the equity owner should be commensurate with the returns on investments in
4 other enterprises having corresponding risks.”¹⁵ This is done by evaluating the expected
5 returns, not for the target utility itself, but for a group of similarly situated companies, known
6 as a “proxy group.”

7 **Q. DO YOU SUPPORT THE PROXY GROUP THAT AVISTA HAS SELECTED?**

8 A. Yes. The universe of stand-alone gas companies, similar to Avista’s services in Oregon, have
9 diminished in recent years, and accordingly Avista selected a proxy group of just eight stand-
10 alone gas companies upon which to base its requested ROE. While my view is that this proxy
11 group is still significant enough to provide a reasonable estimate of ROE, it must be noted that
12 it is a small proxy group, and therefore, more easily prone to be influenced by anomalous
13 results of a single member, although this does not appear to be the case for this particular proxy
14 group.

15 **Q. HOW RISKY ARE STAND-ALONE GAS COMPANIES RELATIVE TO THE**
16 **OVERALL MARKET?**

17 A. Beta is a variable in the CAPM that measures the riskiness of an asset relative to the overall
18 market. In general, utility stocks historically have been less risky than the overall market. This
19 is because utility stocks tend to have more stable returns and dividend payouts, and thus are
20 less risky than many other enterprises. This is confirmed in utility stocks’ beta variable, which
21 tends to be less than 1.0, often ranging between 0.6 and 0.9. A recent study published by New
22 York Stern School of Business suggested that the risk premium for utilities was approximately

¹⁵ *Federal power Commission v. Hope Natural Gas Company*, 320 US 591, 603 (1944). Adopted into ORS 756.040(1).

1 0.45.¹⁶ This compares to Avista’s CAPM model that was based on average, adjusted beta
2 variables ranging from 0.85 to 0.95.

3 **Q. HOW IS BETA CALCULATED?**

4 A. Beta measures the covariance between the returns of a security and the returns of a market
5 portfolio as a percentage of the variability of market returns. While conceptually this
6 formulation is the same for all beta calculations, the calculation can be implemented in many
7 different ways, each of which can produce different results. It can be calculated over different
8 time periods—one year, five years, fifty years etc. Similarly, it can be calculated with different
9 return horizons—daily returns, weekly returns, monthly returns, etc. It can also be calculated
10 against different market portfolios—the S&P 500, Nasdaq Composite; Dow Jones; Russel
11 2000, etc. Each of these approaches can produce different beta values.

12 **Q. ARE THERE DIFFERENT TYPES OF BETA VARIABLES?**

13 A. Yes. There are at least two types of beta variables that can be used in the CAPM—a raw beta
14 and an adjusted beta. The raw beta is the ordinary calculation using the formula above. In
15 contrast, the beta variables Avista used were adjusted betas, heuristic estimates published by
16 Value Line. Many market research organizations, such as Value Line, calculate ordinary raw
17 betas using the formula identified above. When publishing betas in their market services,
18 however, they apply heuristic adjustments to the calculated raw beta, to bring the values more
19 in line with what they expect for that particular stock. There are many different heuristic
20 adjustments that are made, but a common adjustment—the one used by Value Line—is known
21 as a “Blume” adjustment. As I discuss below, the actual, or raw, beta of the proxy group is

¹⁶ NY Stern School Of Business, Betas by Sector (US) (Jan. 2025), Available at https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/Betas.html (accessed Feb 28, 2025).

1 markedly different from the estimates Value Line publishes, and while there may be some
2 good reasons for using an adjusted beta estimate in certain circumstances, evaluation of a
3 proxy group is not one of them.

4 **Q. WHAT ARE THE RAW BETA VARIABLES FOR THE PROXY GROUP?**

5 A. A summary of some of the raw beta variables for the gas proxy group are summarized in
6 **Table 4**, below.

Table 4
Summary of Raw Beta Variables for Proxy Group

	Ticker	Company	Zachs	LSEG / Reuters	Yahoo Finance
1	ATO	Atmos Energy Corp.	0.72	0.67	0.71
2	CPK	Chesapeake Utilities	0.65	0.61	0.66
3	NJR	New Jersey Resources	0.63	0.59	0.65
4	NI	NiSource Inc.	0.54	0.50	0.54
5	NWN	Northwest Natural	0.62	0.58	0.62
6	OGS	ONE Gas, Inc.	0.72	0.65	0.71
7	SWX	Southwest Gas	0.44	0.36	None
8	SR	Spire Inc.	0.58	0.55	0.60
9		Average	0.61	0.56	0.64

7 As demonstrated above the raw beta estimates from well-known market service providers, such
8 as Zachs and the London Stock Exchange Group, are significantly lower than the adjusted beta
9 variables used by Value Line. In this case, the beta variables range from 0.56 to 0.64, as
10 compared to a range of 0.85 to 0.95, using the Value Line adjusted beta variables.

11 **Q. HOW HAVE YOU CONSIDERED BETA IN YOUR ANALYSIS?**

12 A. Since beta is somewhat subjective, and can be calculated many different ways, I calculated the
13 CAPM results using a range of beta values, including those detailed in **Table 4**, above.

1 Specifically, I evaluated a range between 0.56 and 0.90, the upper bound being the average
2 Value Line adjusted beta.

3 **Q. WHAT IS THE EQUITY RISK PREMIUM?**

4 A. The equity risk premium is an estimate of the overall risk, and correspondingly, the anticipated
5 returns, expected in equity markets relative to near-riskless investment opportunities. In the
6 absence of a price for risk, all market equity products would receive the same expected return,
7 equal to the risk free rate. Since investors are generally risk adverse, however, higher average
8 returns are required for an investment resulting in more volatile portfolio returns, compared to
9 one that reduces portfolio volatility. The equity risk premium is the average return in excess of
10 the risk-free rate expected for a market portfolio and is used in conjunction with a beta to
11 estimate the required return of an individual security considered in the context of a portfolio of
12 investments.

13 **Q. WHAT MARKET RISK PREMIUMS HAS AVISTA PROPOSED?**

14 A. Unlike its beta estimates, which rely on values published by Value Line, Avista attempted to
15 perform its own calculations of a market risk premiums using a single stage DCF analysis
16 based on earnings per share growth estimates provided by Value Line, Zachs, and the London
17 Stock Exchange (i.e. Yahoo Finance). Based on that analysis, Avista has proposed a market
18 risk premium of 7.4%.

19 **Q. DO YOU AGREE WITH AVISTA'S ANALYSIS?**

20 A. No. First, the Commission has historically used a multi-stage DCF model, not the single stage
21 approach Avista has used. And even if it were practicable for Avista to calculate an equity risk
22 premium independently, doing so is entirely unnecessary, since there are several unbiased
23 publications that independently forecast equity risk premiums. One such provider is Kroll,

1 formerly Duff & Phelps. Another source is a publication from the New York University, Stern
 2 Business School, published by Aswath Damodaran, a leading expert in the field, who
 3 calculates an annual estimate of the implied market risk premium. Those equity risk premium
 4 estimates, as compared to Avista’s, are provided in **Table 5**, below:

Table 5
Third-Party Equity Risk Premium Estimates

	Source	Forecast ERP
1	Avista	7.40%
2	Kroll	5.50%
3	NYU (Damodaran)	3.95%

5 As shown above, Avista’s calculation yields a result that is several hundred basis points
 6 higher than industry-accepted, third-party estimates. The reports behind the independent, and
 7 unbiased estimates have been attached as **Exhibit AWEC/103**, which clearly show the
 8 unreliability of Avista’s calculation.

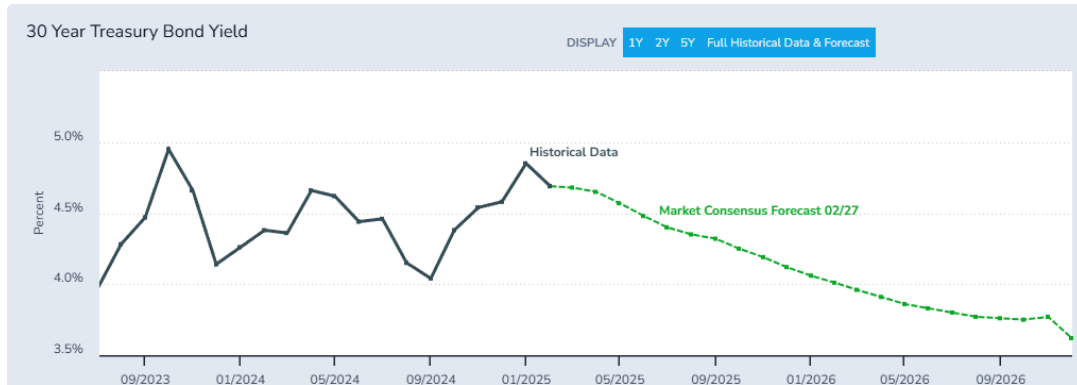
9 **Q. WHAT ASSUMPTIONS HAVE YOU MADE IN YOUR CAPM ANALYSIS?**

10 A. **Exhibit AWEC/104** details my CAPM results. I performed my calculation relying on the
 11 Kroll and Damodaran market risk premiums detailed in **Table 6**. For simplicity, my analysis
 12 evaluates three beta point estimates based on the beta ranges shown in **Table 5** above: a low
 13 beta of 0.56; a medium beta of 0.75; and a high beta of 0.90. Correspondingly, my analysis
 14 uses the current 30-year T-Bond yield of 4.52% as the risk free rate.¹⁷ As a second data point,
 15 I have used a 4.01% risk free rate corresponding to the forward market expected T-bond yield

¹⁷ From <https://www.bloomberg.com/markets/rates-bonds/government-bonds/us> (accessed Feb 28, 2025).

1 for February 2026.¹⁸ **Figure 1** details the forward market expectation of 30-year treasury
2 yields:

Figure 1
Market Forward 30-year Treasury Yields¹⁹

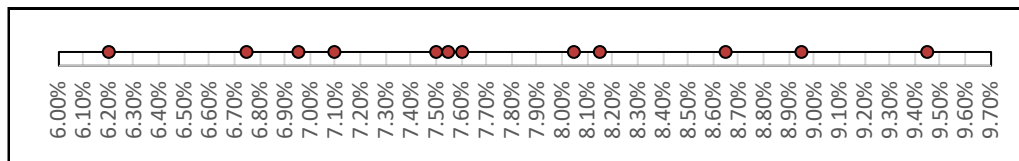


3 Of note, when calculating market risk premiums, Kroll uses 20-year T-Bonds and
4 Damodara uses 10-year T-Bonds as the risk-free rate. Since the current yield curve has 10- and
5 20-year T-Bond yields, which are approximately the same or lower than the 30-year T-Bond
6 yield, I have not made a corresponding adjustment for the difference in risk free rate tenor, as
7 doing so would further reduce the market risk premium calculation.

8 **Q. BASED UPON THESE FORECASTS, WHAT CAPM MODEL RESULTS HAVE YOU**
9 **CALCULATED?**

10 A. **Exhibit AWEC/104** details the CAPM model results based upon the above referenced
11 analysis. These results are summarized in **Figure 2**, below.

Figure 2
AWEC CAPM ROE Results Summary



¹⁸ Source <https://econforecasting.com/forecast/t30y> (accessed Feb 28, 2025)

¹⁹ *Id.*

1 As shown above, my analysis results in a wide range of potential ROE estimates,
2 ranging from 6.20% to 9.45%, with an average of 7.75%

3 **Q. BASED ON THESE ANALYSES WHAT RETURN ON EQUITY DO YOU**
4 **RECOMMEND?**

5 A. I recommend a 9.2% ROE for Avista. I pick this value for two reasons. The first reason is
6 gradualism. While the models point to a lower ROE, from a practical perspective it may be
7 desirable to avoid large changes to ROE over a short period of time. I effectively limited the
8 change in ROE to 10 basis points per year. Second, a 9.2% ROE falls within the upper range
9 of my analysis, and is higher than the Commission's preferred, multi-stage DCF analysis.
10 Accordingly, I view it to be a reasonable estimate of Avista's cost of equity, providing it with a
11 reasonable return on its investment.

12 **Q. WHAT IS THE IMPACT OF THIS RECOMMENDATION?**

13 A. This recommendation results in a \$3,225,339 reduction to Avista's revenue requirement.

14 III. REVENUE REQUIREMENT

15 a. Rate Base Period and Capital Attestation

16 **Q. WHAT RATE BASE VALUATION PERIOD HAS AVISTA PROPOSED?**

17 A. Avista has proposed to use a rate base valuation based on its forecast of plant in service as of
18 August 31, 2025. Consistent with long-standing state policy, Avista has not included any plant
19 forecast to be placed into service following the rate effective date of this case.

20 **Q. WHAT IS THE BASIS FOR THIS APPROACH?**

21 A. Oregon does not allow utilities to include plant in revenue requirement that has not been
22 demonstrated to be used and useful by the rate effective date. This principle has been
23 established firmly in Oregon statutes. Specifically, ORS 757.355(1) provides that a "public
24 utility may not, directly or indirectly, by any device, charge, demand, collect or receive from

1 any customer rates that include the costs of construction, building, installation or real or
2 personal property not presently used for providing utility service to the customer.” Avista’s
3 proposal would potentially align with this requirement, although there is still uncertainty as to
4 what plant will be placed into service, since it relies on a forecast.

5 **Q. HAVE YOU REVIEWED AVISTA’S CAPITAL FORECAST?**

6 A. Yes. Avista’s capital forecast was provided in the workpapers of Avista Witness Benjamin.
7 AWEC submitted several data requests that asked for an updated list of capital placed into
8 service, as well as an updated forecast of capital additions. In AWEC Data Request 10, Avista
9 was requested to provide actual transfers to plant for 2024, and in AWEC Data Request 11,
10 Avista was requested to update its capital forecast model to reflect the actual transfers to plant.

11 **Q. WHAT DID THE AVISTA RESPONSES SAY?**

12 A. While Avista provided detail of its actual transfers to plant for 2024 in response to AWEC
13 Data Request 10, it declined to update its forecast based on the actual values. In its response,
14 Avista stated that “[t]he Company will update Ms. Benjamin’s workpapers, 2.07-2.08 Capital
15 Additions Model (2024) incorporating actual transfers to plant through January 2025 and
16 updated expected transfers to plant through August 2025, sometime in the first half of April.”
17 The workpapers provided in Avista’s responses showed that there were material variances
18 between Avista's capital forecast and its actual transfers to plant. Additionally, Avista stated
19 that it plans to file a new capital forecast sometime before its Rebuttal Testimony. Avista’s
20 failure to provide its new capital forecast before the non-company parties file testimony,
21 however, makes it difficult to analyze Avista’s filed case and makes it impossible to verify the
22 reasonableness of the capital forecast in the initial filing. It is apparent that Avista no longer

1 supports its filed capital forecast, although it is not yet known what capital forecast Avista is
2 proposing.

3 **Q. CONSIDERING THIS, HOW HAVE YOU CONSIDERED AVISTA'S CAPITAL**
4 **FORECAST?**

5 A. Considering Avista's responses to AWEC's data requests, I am unable to verify the
6 reasonableness of its capital forecast. Accordingly, I will review Avista's revised capital
7 forecast when it is provided, and supplement my recommendations, as necessary.

8 **Q. IS IT REASONABLE FOR AVISTA TO RELY ON A FORECAST?**

9 A. If a forecast is to be used, there needs to be assurance that the forecasted plant in service is
10 actually placed into service by the rate effective date in order to satisfy the used and useful
11 standard. This has been accomplished in most proceedings by performing a prudence review
12 in the docket and then requiring a subsequent attestation that the forecasted plant in service was
13 transferred to plant as forecast.

14 **Q. DO YOU RECOMMEND A CAPITAL ATTESTATION BE SUBMITTED IN THIS**
15 **DOCKET?**

16 A. Yes.

17 **Q. WHAT PARAMETERS DO YOU PROPOSE WITH RESPECT TO THE CAPITAL**
18 **ATTESTATION?**

19 A. I recommend applying the capital attestation procedures the Commission recently required for
20 Portland General Electric in Docket No UE 435.²⁰ Considering Avista's smaller size, however,
21 I recommend the project-by-project review be applied to all projects where the Oregon
22 allocated portion exceeds \$100,000. The \$3,000,000 threshold that was used for PGE
23 represented approximately 0.1% of PGE's revenue requirement, which if applied equivalently

²⁰ *In re Portland General Electric Company Request for a General Rate Revision*, Docket No UE 435, Order 24-454 ¶ 11

1 to Avista, would result in a threshold of approximately \$85,000, which I have rounded to six
2 digits. Thus, the elements of the capital attestation that I propose are as follows:

- 3 • A capital attestation for all projects over \$100,000;
- 4 • Projects under \$100,000 will be reviewed in aggregate as a single project,
5 on a portfolio basis;
- 6 • Since Avista has not yet provided the forecast it intends to use for rates,
7 all projects would be included in the attestation;
- 8 • The attestation would be submitted at the time of Avista's compliance
9 filing, with a supplemental attestation if necessary shortly thereafter; and,
- 10 • The review would "be on a project-by-project basis with no netting of
11 over and underspending between projects."²¹

12 **b. Accumulated Depreciation**

13 **Q. HOW DID AVISTA CALCULATE DEPRECIATION EXPENSE?**

14 A. Using the plant balances calculated as of the rate effective date, Avista calculates a forward-
15 looking depreciation expense calculated over the 12-months ending August 31, 2026.

16 **Q. WHAT IS ACCUMULATED DEPRECIATION?**

17 A. As depreciation expenses are incurred, they are applied to accumulated depreciation.

18 Accumulated depreciation is a balance sheet account that offsets the amount of rate base
19 included in revenue requirement, and thus, provides a benefit to ratepayers. Accordingly, it is
20 important for there to be consistency between accumulated depreciation and depreciation
21 expenses. If there is not consistency, then it will result in ratepayers paying for the cost of
22 depreciation expenses, but not getting the corresponding reduction to rate base from
23 accumulated depreciation. This would be the equivalent of paying down the principal balance
24 of a loan, but not receiving any interest reductions from the lower principle balance. In other

²¹ *Id.* at 36.

1 words, ratepayers would be paying a cost, but not receiving the corresponding benefit of that
2 cost, which is not fair, just or reasonable.

3 **Q. IS AVISTA’S CALCULATION OF ACCUMULATED DEPRECIATION CONSISTENT**
4 **WITH ITS CALCULATION OF DEPRECIATION EXPENSE?**

5 A. No. While Avista calculated forward looking depreciation expense for 12-months ending
6 August 31, 2026, it calculated accumulated depreciation forecast as of a static point in time on
7 August 31, 2025. Accordingly, ratepayers are not provided the benefit of accumulated
8 depreciation accrued over the 12-months ending August 31, 2026 included in Avista’s revenue
9 requirement. In this case, Avista has used the accumulated depreciation balances at the
10 beginning of the rate period, but has calculated depreciation expense on a forward looking basis
11 over the duration of the rate period. This approach is not consistent, and it means ratepayers
12 will be otherwise paying for depreciation expense but not receiving the benefit of those
13 payments as a reduction to rate base.

14 **Q. IS AVISTA USING “END OF PERIOD” RATE BASE?**

15 A. No. While Avista refers to its method as an end of period rate base, that is not an accurate
16 characterization of its method. Avista has used forecast plant-in-service as of August 31, 2025;
17 whereas its forecast test period, including depreciation expense, is based on the 12-months
18 ending August 31, 2026. Therefore, the rate base is based on the beginning of the test period,
19 not the end. The Commission has historically been flexible with respect to the test period
20 selection by utilities. The only significant limitation is that, regardless of the test period
21 selected, the utility must comply with Oregon’s used and useful requirements, and not include
22 plant in service after the rate effective date. However, if a utility selects a test period that
23 extends one year beyond the rate effective date, as Avista has, it still is necessary to calculate
24 accumulated depreciation over the period that depreciation expenses are calculated. This is true

1 even with the limitations on the plant balances that are allowable in rates under Oregon’s used
2 and useful statute. Avista could have used a test period based on the 12-months ending August
3 31, 2025, including depreciation expense calculated over that period. In that case, using the
4 accumulated depreciation expected on August 31, 2025 based on an end of period calculation,
5 would be a consistent approach. But that is not what Avista has done.

6 **Q. HOW DO YOU RECOMMEND CORRECTING THIS INCONSISTENCY?**

7 A. I recommend that accumulated depreciation and depreciation expenses be measured
8 consistently, over the same time period. Specifically, I recommend that accumulated
9 depreciation be measured on an average basis over the 12-months ending August 31, 2026.

10 **Q. WHAT IS THE IMPACT OF THIS RECOMMENDATION?**

11 A. Applying consistent assumptions for depreciation expense and accumulated depreciation
12 results in an approximate \$963,947 reduction to revenue requirement.

13 **c. Transportation Depreciation**

14 **Q. WHAT ISSUE HAVE YOU IDENTIFIED RELATED TO TRANSPORTATION**
15 **DEPRECIATION EXPENSE?**

16 A. Under the FERC uniform system of accounts, transportation depreciation expenses are
17 recorded to clearing accounts, not as a general depreciation expense Section 403 (B) of the gas
18 uniform system of accounts states “[d]epreciation expense applicable to transportation
19 equipment, shop equipment, tools, work equipment, power operated equipment and other
20 general equipment may be charged to clearing accounts as necessary in order to obtain a proper
21 distribution of expenses between construction and operation”²² In workpaper, “2.07-2.08
22 Capital Additions Model (2024),” however, Avista included capital additions associated with
23 transportation equipment and also included general depreciation expense associated with those

²² 18 C.F.R. 201 § 403 (2024).

1 additions. Since transportation depreciation expense was not included in the test period
2 depreciation expense, however, this resulted in an inflated adjustment.

3 **Q. WHAT IS THE IMPACT OF REMOVING TRANSPORTATION EQUIPMENT FROM**
4 **THE ADJUSTMENT?**

5 A. This correction results in a \$276,876 reduction to revenue requirement.

6 **d. Lead Lag Study**

7 **Q. WHAT ISSUE HAVE YOU IDENTIFIED RELATED TO WORKING CAPITAL O&M**
8 **EXPENSE?**

9 A. In Avista's working capital adjustment 2.10, it provides a lead lag study to justify the inclusion
10 of approximately \$4,065,754 in rate base associated with working capital. This was based on a
11 cash working capital percentage of 4.28% multiplied by its forecasted operating expenses in
12 the test period.

13 **Q. HOW DID AVISTA CALCULATE THE CASH WORKING CAPITAL**
14 **PERCENTAGE?**

15 A. Consistent with Commission's preferred approach for calculating working capital, Avista
16 performed a lead lag study using data from the test period. Based upon this data, Avista
17 calculated a cash working capital percentage of 2.71%.²³

18 **Q. WHY DID AVISTA NOT USE THE 2.71% IN ITS CASH WORKING CAPITAL**
19 **CALCULATION?**

20 A. Instead of using the 2.71% cash working capital percentage that Avista calculated, it elected to
21 use an average over its prior three studies, going back to 2020.²⁴ By doing this, Avista was
22 able to calculate a much higher percentage of 4.28%. Avista, however, provided no
23 explanation for why this approach was reasonable.

²³ Avista/500, Garbarino/31:22-28.

²⁴ Avista/500, Garbarino/32:4-9.

1 **Q. DID AVISTA PRESENT THE OLDER LEAD LAG STUDIES IN THIS DOCKET?**

2 A. No. The prior cases involving older lead lag studies were all settled cases, and I don't recall
3 any agreement in those cases as to the reasonableness of those studies. Thus, it is not clear
4 why Avista relies on those older studies in this docket.

5 **Q. IS IT REASONABLE TO USE AN AVERAGE OF PRIOR STUDIES?**

6 A. No. Avista's cash working capital needs to be based on the study that it submitted in this case
7 and based on the test period data that it relied upon. Working capital requirements can be
8 dynamic over time, changing as things such as gas prices and operations and maintenance
9 expenses change. We could not, for example, take the average revenue requirement from
10 Avista's last three general rate cases and use that as the basis for setting rates in this case.
11 Revenue requirement assumptions need to be based on contemporaneous data. To the extent
12 that there is an aspect of a lead lag study that Avista believes is not representative of future
13 conditions in the test period, those aspects need to be identified and evaluated, just as any other
14 pro forma adjustment is evaluated when setting revenue requirement.

15 **Q. WHAT DO YOU RECOMMEND?**

16 A. I recommend using the 2.71% cash working capital percentage from Avista's study as the basis
17 for the cash working capital balance included in rate base, subject to a further adjustment
18 below.

19 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

20 A. This recommendation results in a \$145,661 reduction to revenue requirement.

1 **e. Lead Lag Study -O&M Expense**

2 **Q. HAVE YOU IDENTIFIED ANY OTHER PROBLEMS WITH AVISTA’S LEAD LAG**
3 **STUDY?**

4 A. Yes. The lead lag study functions by evaluating the timing of when an operating cost is
5 incurred (and thus, the timing that it is included in revenue requirement), and the timing of
6 when the cash is paid with respect to a particular expense item. Some expense items are paid
7 in advance, such as insurance and certain information technology expenses. Other expenses
8 are paid in arrears, such as labor expenses and many routine O&M expenses. When Avista
9 calculated the payment lag days for O&M expenses, however, it made an error by comparing
10 the timing of the invoice date to the timing of the payment.

11 **Q. WHY WAS IT AN ERROR TO COMPARE TO THE INVOICE DATE?**

12 A. An invoice is typically received after the services underlying the O&M expenses are
13 performed. A contractor may perform services over the course of a month, but the contractor
14 will typically not send out an invoice until after the services are performed, often at the end of
15 a month. Avista, when calculating the lag for O&M expenses considered only the payment
16 lag, and did not consider the service lag, the time between when the services were performed
17 and when the invoice was issued. As Avista explained in response to AWEC Data Request 32,
18 Avista incurs the costs when the services are performed “expenditures are generally recorded
19 when services are received.”

20 **Q. HOW DO YOU RECOMMEND CORRECTING THIS ERROR?**

21 A. I recommend including an additional 15-days of service lag onto O&M expenses to account for
22 the timing difference between when the O&M services are performed and when the contractor
23 issues an invoice.

1 **Q. WHAT IS THE IMPACT OF THIS RECOMMENDATION?**

2 A. This recommendation results in a further \$358,492 reduction to the cash working capital
3 balance, and an \$34,991 reduction to revenue requirement.

4 **f. Operations and Maintenance Expense**

5 **Q. WHAT ISSUE HAVE YOU IDENTIFIED RELATED TO O&M EXPENSE?**

6 A. In Adjustment 2.00 Avista forecasted operating expenses for the 12-month period ending
7 August 31, 2026. This adjustment started with Avista's results for the 12 months ending
8 December 31, 2023. Avista then applied escalation factors of 3% for 2024, 2.5% for 2025 and
9 2.6% for 2026.

10 **Q. WHAT CONCERNS DO YOU HAVE WITH THIS APPROACH?**

11 A. In preparing its revenue requirement, Avista applies a number of adjustments for known and
12 measurable changes, such as benefits expenses and insurance expenses. For all other costs,
13 where Avista was unable to identify a known and measurable adjustment, it applies a generic
14 escalation factor. This is particularly problematic in this case, since Avista filed its case based
15 on severely outdated results. The result is that Avista accumulates nearly three years of
16 generic escalation in its generic operating expenses.

17 **Q. WHAT RECOMMENDATION DO YOU HAVE WITH RESPECT TO GENERIC**
18 **O&M ESCALATION?**

19 A. Generic O&M escalation does not represent a known and measurable adjustment. While it is
20 expected that there will be inflationary pressures, it is difficult to make assumptions about how
21 Avista's costs will change over a three-year period. Considering this uncertainty, I recommend
22 limiting the O&M escalation to 9 months following the end of the historical period. This is
23 consistent with FERC's approach, which under 18 CFR § 154.303(c), allows for an
24 "adjustment period [that] is a period of up to 9 months immediately following the base period."

1 **Q. WHY IS IT IMPORTANT TO LIMIT THE ADJUSTMENT PERIOD?**

2 A. Utilities possess more information than Staff, intervenors and the Commission about their
3 expected costs. They also have the ability to file a rate case with whatever historical period
4 they choose. If a utility decides to file a case with stale, outdated data, it should not be
5 provided with the opportunity to escalate that data over a long period of time into a future test
6 period, when actual more recent costs could have been used, and could result in a different
7 outcome.

8 **Q. WHAT IS THE IMPACT OF THIS RECOMMENDATION?**

9 A. Limiting the escalation to 9 months beyond the base period reduces the non-labor O&M
10 escalation by \$491,540, and a reduction to revenue requirement of \$508,786.

11 **g. Labor Expense**

12 **Q. WHAT LABOR EXPENSE DID AVISTA INCLUDE IN REVENUE REQUIREMENT?**

13 A. Avista's forecasted labor expense was calculated in Garbarino workpaper "2.03 Non-Exec
14 Labor and 2.04 Exec Labor Adj (OR 2024)." Avista's calculation is somewhat complicated
15 because it first performs a calculation of its own estimate of labor expenses in the forecast
16 period, and then makes a subsequent adjustment based on the method used by Staff in prior
17 cases. The net impact of Avista's adjustment is a \$1,221,000 increase to revenue requirement
18 for non-executive employees and a \$46,000 increase to labor expenses for executive
19 employees. Avista's method is generally based on the application of various escalation factors
20 to its historical cost data. Like O&M expenses, Labor Expenses are escalated over a long
21 period of time, consisting of four years of wage increases. It includes assumptions about four
22 years of wage increases, including those from 2023, 2024, 2025 and 2026.

1 **Q. ARE FUTURE WAGE INCREASES KNOWN AND MEASURABLE?**

2 A. While the 2025 wage increases have been approved by Avista's board, the 2026 increases have
3 only been acknowledged. The board will make the final decision whether to approve those
4 increases in early 2026. This was documented in Avista's response to AWEC Data
5 Request 30.

6 **Q. HOW DO YOU RECOMMEND HANDLING THE WAGE INCREASE?**

7 A. I recommend limiting the wage increase to the 2025 wage level included in Avista's model.
8 The 2026 wage increase is too preliminary to consider in rates, and like the O&M expenses
9 identified above, it is problematic for Avista to escalate its wages so far beyond the historical
10 base period. Further, the 2026 wage escalation only impacts part of the Test Period, as it
11 would otherwise be effective in March of 2026.

12 **Q. WHAT IS THE IMPACT OF REMOVING THE 2026 WAGE ESCALATION?**

13 A. Avista had included \$163,408 of incremental expense associated with the 2026 wage increase.
14 Removing that amount results in a \$169,141 reduction to revenue requirement.

15 **h. Legal Expenses**

16 **Q. WHAT LEGAL EXPENSES HAS AVISTA INCLUDED IN REVENUE**
17 **REQUIREMENT?**

18 A. Avista's legal expenses for the base period were provided in Avista's confidential response to
19 AWEC Data Request 31, including legal expenses detailed by legal matter. To avoid having to
20 submit a confidential filing, I have not attached that detail to this testimony, although AWEC
21 will submit it as a cross exhibit at a later stage in this proceeding.

22 **Q. DO YOU AGREE WITH THE LEGAL EXPENSES THAT AVISTA INCLUDED IN**
23 **REVENUE REQUIREMENT?**

24 A. No. Without getting into confidential matters, the majority of legal expenses Avista included
25 in revenue requirement were related to state policy issues. While AWEC generally supports

1 Avista advocating with respect to those issues, those type of expenses are typically paid for by
2 shareholders, not ratepayers. And at a minimum, the policy-related expenses are not recurring,
3 and therefore, necessary to remove from revenue requirement on that basis.

4 **Q. WHAT AMOUNT OF EXPENSES DO YOU RECOMMEND REMOVING?**

5 A. I have identified \$107,188 in expenses that I recommend be removed from revenue
6 requirement.

7 **Q. WHAT IS THE IMPACT OF THIS RECOMMENDATION?**

8 A. Inclusive of revenue sensitive costs, this recommendation reduces revenue requirement by
9 \$110,948.

10 **i. Board of Directors' Fees and Expense**

11 **Q. WHAT AMOUNT OF BOARD OF DIRECTORS' FEES AND EXPENSE DID AVSITA**
12 **INCLUDE IN REVENUE REQUIREMENT?**

13 A. Based on its response to Staff Standard Data Request 57, Avista included approximately
14 \$243,109 in Board of Directors' fees and expenses.²⁵ Of this amount, approximately \$218,229
15 was related to Directors' Fees, with the remainder attributable to expenses. The expenses
16 include a variety of Directors' charges, such as a \$1,203 charge for "DEBBIE DEUBEL-
17 GRAND HYATT AT SFO" and \$11,754 in hotel charges at the "INTERCONTINENTAL
18 WILLARD," a luxury hotel in Washington DC.

19 **Q. WHAT IS THE COMMISSION'S POLICY REGARDING BOARD OF DIRECTORS'**
20 **FEES AND EXPENSES?**

21 A. The Commission recently decided in Docket UE 435 that "because we find [board of director]
22 expense to be most similar to stock incentives or performance-based incentives that incent

²⁵ Obtained by filtering the attachment to Staff Data Request 57 under Project Description for "Board Of Director Activities"

1 financial benefits to shareholders, we find a 75/25 split between shareholders and ratepayers is
2 appropriate, with shareholders responsible for 75 percent and 25 percent included in rates.”²⁶

3 **Q. WHAT PORTION OF THE BOARD OF DIRECTORS’ EXPENSE HAS AVISTA**
4 **INCLUDED IN REVENUE REQUIREMENT?**

5 A. The descriptions in the transactional data suggest that Avista has included 97% of the expense,
6 including both the Directors’ fees and the Directors’ expense. However, I was unable to verify
7 the portion that Avista had removed from revenue requirement.

8 **Q WHAT DO YOU RECOMMEND?**

9 A. I recommend following the Commissions decision in PGE’s 2025 GRC and splitting these
10 expenses 75/25 between shareholders and ratepayers.

11 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

12 A. My recommendation results in a \$182,332 reduction to expense and a \$188,729 reduction to
13 revenue requirement.

14 **j. R&D Tax Credit**

15 **Q. WHAT AMOUNT OF COSTS DID AVISTA RECORD RELATED TO R&D TAX**
16 **CREDITS?**

17 A. In the base period Avista recorded an \$80,000 charge for an R&D Tax Credit study. Of that
18 amount, approximately \$7,344 was allocated to Oregon. This charge was identified in Avista’s
19 response to Staff Data Request 57.

20 **Q. DID AVISTA INCLUDE AN R&D TAX CREDIT IN ITS REVENUE REQUIREMENT?**

21 A. Avista’s results did not include a provision for R&D tax credits.

²⁶ Docket No. UE 435, Order 24-454 ¶ 10.

1 **Q. WHAT DO YOU RECOMMEND?**

2 A. I recommend that R&D tax credits be considered in revenue requirement. Since this issue was
3 noted shortly before filing testimony, I did not issue discovery on this issue to determine the
4 amount of credits Avista has historically claimed. Notwithstanding, if Avista spent \$80,000 to
5 perform an R&D tax credit study, one must assume that the tax credit benefits are several
6 multiples of that amount. For purposes of this testimony, I have removed the cost associated
7 with the R&D tax credit study, although my principal recommendation is to include the tax
8 credit benefits in revenue requirement. The impact of removing the study costs was a \$7,602
9 reduction to revenue requirement.

10 **k. General Rate Case Costs**

11 **Q. WHAT GENERAL RATE CASE COSTS DID AVSITA INCLUDE IN REVENUE**
12 **REQUIREMENT?**

13 A. Avista recorded \$299,131 of General Rate Case Activities in 2023.²⁷ Of this amount,
14 approximately \$20,930 were for expenses paid to third party consultants, and the remainder
15 were primarily labor expenses directly assigned to Oregon. These costs relate to expenditures
16 for preparing and litigating Avista's prior 2023 general rate case

17 **Q. HOW DO YOU RECOMMEND HANDLING THESE EXPENSES?**

18 A. Since Avista has been in a pattern of filing a rate case every other year in Oregon, I
19 recommend spreading those costs over a two-year period.

20 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

21 A. Spreading the 2023 GRC costs over a two year period results in a \$154,813 reduction to
22 revenue requirement.

²⁷ Obtained from Avista's Response to Staff Data Request 57 by filtering Project Description for "GDOR General Rate Case Activ"

1 **IV. UM 2124 TAX STRATEGY CUSTOMER CREDIT**

2 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION RELATED TO THE TAX**
3 **STRATEGY CUSTOMER TAX CREDIT.**

4 A. In Docket No. UM 2124, the Commission approved deferred accounting for the flow through
5 of savings associated with a tax accounting method change for deducting certain capitalized
6 overhead expenditures—called Industry Director Directive No. 5 (IDD #5) expenditures—and
7 the method for deducting meter expenditures. This accounting change resulted in a large up-
8 front tax benefit as well as ongoing tax savings that were to be returned to customers. In
9 Docket UG 433, parties agreed that Avista would amortize the then-effective balance over a
10 10-year period for the benefit of ratepayers.²⁸

11 **Q. DID AVISTA AGREE TO PASS BACK THE ONGOING TAX SAVINGS?**

12 A. No. While the distribution of the balances due to customers at the time of Docket UG 433 are
13 being amortized, the ongoing tax savings have continued to accrue to the deferral balance.

14 **Q. WHAT IS THE CURRENT BALANCE?**

15 A. Avista provided the balance information in response to AWEC Data Request 17. **Table 6,**
16 below, provides detail of the annual balances and amortizations since the deferral was initiated.

²⁸ Docket No. UG 433, Second Stipulation at ¶ 8.

Table 6
UM 2124 Deferral History (Whole Dollars)

	Year	Beg. Balance	Increm. Deferral	Amort.	Ending Balance
1					
2	2020	21,446,298	-	-	21,446,298
3	2021	21,446,298	880,199	-	22,326,497
4	2022	22,326,497	1,475,002	(802,472)	22,999,027
5	2023	22,999,027	1,664,886	(2,225,629)	22,438,284
6	2024	22,438,284	1,735,775	(2,244,500)	21,929,559
7	Total	21,446,298	5,755,862	(5,272,601)	21,929,559

As shown above the initial balance was \$21,446,298, and notwithstanding the agreement to amortize the funds back to rate payers over ten-years, the balance has actually grown to \$21,929,559. This growth is due to the fact that the incremental deferrals in the balance have exceeded the amounts that have been amortized and returned to ratepayers.

Q. HOW DO YOU RECOMMEND HANDLING THE UM 2124 DEFERRAL IN THIS CASE?

A. Given that the balance has not declined since the amortization began in UG 433, I recommend that a one-time, extra amortization of the balance be refunded to ratepayers. This will have the effect of materially reducing the rate impact associated with Avista's request to increase rates in this case.

Q. WHAT AMOUNT OF AMORTIZATION DO YOU RECOMMEND?

A. I recommend a one-time amortization of \$4,093,097. This amount was derived from Avista's workpaper provided in response to AWEC Data Request 17. This represents the amount of additional funds that have been deferred since the ten-year amortization commenced.

Q. HOW IS THE UM 2124 DEFERRAL SPREAD TO CUSTOMER CLASSES?

A. In UG 433, it was agreed that, since much of the benefit is related to meters, a higher portion of the amortization would be applied to small customer classes. Specifically, it was agreed that

1 35% of the benefit would be allocated based on customer counts and 65% allocated based on
2 revenues. Metering costs make up a higher portion of the costs allocated to small customer
3 classes, and thus, allocating a higher portion of the deferral to those customers follows the
4 principle of cost causation.

5 **Q. DO YOU SUPPORT CONTINUING THAT APPROACH IN THIS CASE?**

6 A. AWEC is supportive of following the principles of cost causation. This includes both the UM
7 2124 deferral, as well as the margin rate increase and rate spread under consideration, as
8 discussed below.

9 **V. RATE SPREAD**

10 **Q. WHAT RATE SPREAD HAS AVISTA PROPOSED?**

11 A. Avista has proposed a rate spread which applies the average overall rate increase to Residential
12 Schedule 410 and Large General Service Schedule 424. Subsequently, Avista applied 50% of
13 the average rate increase to Interruptible Service Schedule 440, and 75% of the average rate
14 increase to Schedules 411, 444, and 456. Subsequently, the remaining revenues were spread to
15 General Service Schedule 420.²⁹

16 **Q. DO YOU SUPPORT THIS PROPOSAL?**

17 A. No. This proposal does not conform with the LRIC study and fails to recognize the magnitude
18 of the margin-to-cost imbalances for Schedule 456.

19 **Q. WHAT DID AVISTA'S COST OF SERVICE STUDY SHOW?**

20 A. The results of Avista's LRIC study is detailed in **Table 7**, below.

²⁹ Avista/900, Miller/8:15-22.

Table 7
Avista Margin to Cost Ratios

	<u>Schedule</u>	<u>Margin to Cost</u>
1	SCH 410	0.97
2	SCH 411	1.41
3	SCH 420	0.97
4	SCH 424	1.09
5	SCH 440	1.65
6	SCH 444	1.37
7	SCH 456	1.37

1 As shown above, the rates for Schedule 456 are significantly above their cost of
2 service. They would need to be reduced by approximately 27% to bring those customers
3 margin to cost ratio to parity even under Avista’s cost of service study.

4 **Q. DO YOU AGREE WITH AVISTA’S COST OF SERVICE STUDY?**

5 A. No. I disagree with several aspects of Avista’s cost of service study. These disagreements,
6 however, are largely immaterial to establishing rate spread in this case. This is because my
7 adjustments to Avista’s cost of service study would show that Schedule 456 should be reduced
8 even more to bring those customers margin to cost ratio to parity.

9 **Q. WHAT SPECIFICALLY IS YOUR CONCERN?**

10 A. Principally, my concern is the treatment of interruptible loads. Avista accounts for
11 interruptible loads by discounting the demand-related portion of mains investment allocated to
12 interruptible customers by 50%. The 50% is based on the recommendation of Staff in Docket
13 UG 366.³⁰ Of note, however, interruptible customers continue to be allocated 100% of
14 volumetric-related mains costs. Thus, interruptible customers continue to pay for a substantial

³⁰ Avista/800, Anderson/9:15-16.

1 portion of the core system mains costs by receiving 50% of the demand-related costs and 100%
2 of the volumetric-related costs.

3 **Q. HOW DO INTERRUPTIBLE CUSTOMERS IMPACT THE SYSTEM?**

4 A. Avista discussed how it plans for interruptible customers in the testimony of Witness Miller,
5 who stated “[f]rom an IRP peak planning perspective the Company designs its system to meet
6 the needs of its firm customers on a design day and assumes that all interruptible customers are
7 fully curtailed for peak planning purposes.”³¹ He continued “[s]imply put, the Company does
8 not design, or build, its distribution system to accommodate the needs of interruptible
9 customers.”³² Thus, the demand of the system is not being driven by the needs of interruptible
10 customers.

11 **Q. HOW DO YOU RECOMMEND HANDLING INTERRUPTIBLE DEMANDS IN THE**
12 **LONG RUN INCREMENTAL COST STUDY?**

13 A. The 50% value is somewhat arbitrary. Since interruptible customers are not introducing any
14 demand costs on the system, the most appropriate assumption would be to remove all demand-
15 related system core main costs from their cost allocation, and only allocate the volumetric
16 related main costs to those customers. For purposes of this testimony, however, I have adopted
17 a middle ground approach and adjusted the 50% value that has been used in the past to be
18 based on Avista’s load factor. Avista’s system load factor represents the portion of its system
19 requirements that are driven by volumetric demands as opposed to design day demands.
20 Avista’s load factor was approximately 32.3%. Thus, instead of assigning 50% of the system
21 mains value to interruptible customers, I recommend that 32.4% be assigned to interruptible
22 customers to account for their volumetric usage of the system.

³¹ Avista/900, Miller/15:17-19.

³² Avista/900, Miller 15:19-21.

1 **Q. WHAT IS THE IMPACT OF THIS METHOD?**

2 A. The results of using the system load factor as the discount percentage is detailed in **Table 8**,
3 below.

Table 8
AWEC Margin to Cost Ratios

	<u>Schedule</u>	<u>Margin to Cost</u>
1	SCH 410	0.97
2	SCH 411	1.41
3	SCH 420	0.97
4	SCH 424	1.09
5	SCH 440	1.79
6	SCH 444	1.37
7	SCH 456	1.50

4 As shown above, with this change the margin to cost ratio of interruptible Schedules
5 456 and 440 increased even further.

6 **Q. CONSIDERING THESE RESULTS, WHAT RATE SPREAD DO YOU**
7 **RECOMMEND?**

8 A. First, I recommend that the LRIC be used as the starting point for determining rate spread.
9 Given the magnitude of the disparity in margin to cost ratios for large customer classes, I
10 recommend that those customers' rates be reduced. Notwithstanding, considering the impact
11 of such a reduction on other schedules, I recommend a floor be applied at a 5% reduction to
12 those customer's rates. I recognize that this would be a departure from prior Commission
13 decisions, in which the floor in a rate spread has been set at zero. However, it is important to
14 address the parity issues here, especially since the rate increase is not as significant as in recent
15 cases.

1 **Q. HOW DO YOU RECOMMEND THE RATES OF OTHER CUSTOMERS BE**
2 **HANDLED?**

3 A. I recommend that the excess revenues from applying the floor at a 5% reduction be applied to
4 all other rate schedules based on the number of customers in that class. This generally aligns
5 with a policy of applying a floor, in which each customer receives the benefit of applying the
6 floor relative to their classes full cost of service.

7 **Q. DO YOU RECOMMEND A RATE CAP, OR CUSTOMER IMPACT OFFSET BE**
8 **APPLIED IN THIS CASE?**

9 A. No. A customer impact offset adjustment under my rate spread proposal would be unnecessary
10 since, the largest margin rate increase is only approximately 1.3 times the system average. It is
11 further unnecessary because of the customer tax credit amortization that I propose.

12 **Q. HAVE YOU ALSO CONSIDERED THE CUSTOMER TAX CREDIT IN YOUR RATE**
13 **SPREAD PROPOSAL?**

14 A. Yes. Increasing the amortization for the customer tax credit primarily benefits small customer
15 rate schedules, including Schedule 410. Thus, while these schedules are allocated a higher
16 proportional margin rate increase under my proposal, the net impact is smaller because those
17 customers receive a higher rate offset from the customer tax credit.

18 **Q. WHAT ARE THE RESULTS OF YOUR PROPOSAL?**

19 A. The results of my proposal are detailed in **Exhibit AWEC/106**. In that exhibit I provide
20 calculations of my proposed rate spread using both Avista's revenue requirement, as well as
21 AWEC's recommended revenue requirement discussed above. The results of my rate-spread
22 proposal, using both Avista's revenue requirement and AWEC's revenue requirement are
23 summarized in **Tables 9** and **10**, below.

Table 9
Proposed Rate Spread at Avista Revenue Requirement

	Schedule	Avista Billed	AWEC		
			Billed	Tax Credit	Net
1	SCH 410	6.8%	7.4%	-4.0%	3.4%
2	SCH 411	5.0%	-3.6%	-4.1%	-7.7%
3	SCH 420	7.2%	8.5%	-2.7%	5.9%
4	SCH 424	3.1%	0.1%	-1.1%	-1.0%
5	SCH 440	2.4%	-2.6%	-1.6%	-4.2%
6	SCH 444	2.5%	-1.8%	-1.2%	-3.1%
7	SCH 456	7.0%	-5.0%	-3.2%	-8.2%
8	Total	6.6%	6.6%	-3.5%	3.1%

Table 10
Proposed Rate Spread at AWEC Revenue Requirement

	Schedule	AWEC		
		Billed	Tax Credit	Net
1	SCH 410	1.8%	-4.0%	-2.2%
2	SCH 411	-3.6%	-4.1%	-7.7%
3	SCH 420	3.6%	-2.7%	1.0%
4	SCH 424	-2.2%	-1.1%	-3.3%
5	SCH 440	-2.6%	-1.6%	-4.2%
6	SCH 444	-1.8%	-1.2%	-3.1%
7	SCH 456	-5.0%	-3.2%	-8.2%
8	Total	1.8%	-3.5%	-1.7%

1 As shown above, the combination of both AWEC’s rate spread and the customer tax
2 credit result in a net rate reduction for most schedules, with a net reduction to overall rates.

3 **VI. SCHEDULE 456 RATE DESIGN**

4 **Q. WHAT WAS THE REQUIREMENT REGARDING THE EVALUATION OF A**
5 **CONTRACT DEMAND CHARGE FOR SCHEDULE 456 FROM DOCKET NO. UG**
6 **461?**

7 **A.** In Docket No. 461, Avista and parties agreed that in Avista’s next general rate case, that it
8 would present a rate design that included a contract demand charge for Schedule 456

1 customers.³³ This requirement came in part from AWEC’s testimony, where the use of the
2 contract demand charge for Schedule 456, rather than actual demands, in the cost of service
3 study was questioned. To the extent that contract demand was appropriate as the basis for cost
4 assignment in the cost of service study, it followed that the rates needed to be designed in the
5 same manner based on the use of a contract demand charge. In the context of the stipulation in
6 that case, parties did not reach a resolution of the issue, but Avista agreed that it would
7 evaluate the issue in its next case, which is this case.

8 **Q. WHAT DID AVISTA CONCLUDE BASED ON ITS EVALUATION?**

9 A. Avista concluded that a contract demand charge was not appropriate to use for Schedule 456
10 because the contract demand was not tied to the actual demands of Schedule 456 customers.
11 The contract demands are a value in transportation customers contracts, which are not updated
12 annually based on the customer’s expected usage, but a rough estimate of what the customer
13 expected to use at the time its service agreement was executed. In response to AWEC Data
14 Request 2, Avista explained the following:

15 Contract quantity demand is determined based on each individual customers need
16 and the Company’s ability to provide natural gas to each customer. Contract
17 quantity can be updated as needs change over time. Maximum Daily Quantity
18 and Annual Quantity enables Avista Utilities to evaluate the availability of
19 distribution system capacity to serve the load.

20 **Q. DID AVISTA ALSO AGREE THAT IT WAS NOT APPROPRIATE TO USE**
21 **CONTRACT DEMANDS IN THE LRIC STUDY?**

22 A. Yes. In addition to concluding that a contract demand charge was not appropriate for Schedule
23 456 customers, Avista concluded that it was not appropriate to use as the basis for assigning
24 mains costs to Schedule 456 customers, and instead proposed using actual measured demands.

³³ Docket No UG 461, Second Settlement Stipulation ¶ 10 (Aug 3, 2023).

1 **Q. DO YOU AGREE WITH THE RESULTS OF AVISTA’S EVALUATIONS?**

2 A. Generally, yes. By comparing the Schedule 456 customers actual usage against their contract
3 demands, it is apparent that the contract demand levels included in their contracts were more of
4 a formality, rather than a binding agreement as to the amount of throughput to which they were
5 limited or committed. Accordingly, I continue to recommend not using contract demand in the
6 cost of service study.

7 **Q. DOES AVISTA’S METHOD OF MEASURING CUSTOMER CLASS DEMANDS**
8 **NEED TO BE IMPROVED?**

9 A. Yes. Avista uses average monthly throughput as the basis for estimating design day demands.
10 While Avista applies a regression analysis using that data to estimate the design day demands
11 of different classes, the average monthly throughput relative to the average heating degree days
12 does not necessarily inform an accurate regression. While I have not raised this as an issue in
13 this case, I mention it here, because I think it is an area where Avista could improve its cost of
14 service study going forward.

15 **Q. DOES THIS CONCLUDE YOUR OPENING TESTIMONY?**

16 A. Yes.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
UG 519**

In the Matter of)
)
Avista Corporation, d/b/a Avista Utilities,)
)
Request for a General Rate Revision.)

**EXHIBIT 101 – QUALIFICATION STATEMENT
TO THE
OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS**

March 4, 2024

MW Analytics

ENERGY & UTILITIES

Bradley Mullins
Principal Consultant
brmullins@mwanalytics.com

MW Analytics is the professional practice of Bradley Mullins, a consultant and expert witness that represents utility customers in regulatory proceedings before state utility commissions throughout the western United States. Mr. Mullins started MW Analytics in 2013 and, since then, has sponsored expert witness testimony in over 100 regulatory proceedings on a variety of subject matters, including revenue requirements, regulatory accounting, pricing, cost allocation, depreciation and new resource additions. MW Analytics also assists utility customers with informal regulatory, legislative energy policy matters, as well as providing advisory and other energy consulting services.

Education

- Master of Accounting, Tax Emphasis, University of Utah, 2007
- Bachelor of Finance, University of Utah, 2006
- Bachelor of Accounting, University of Utah, 2006

Relevant Prior Experience

PacifiCorp, Portland, Oregon: Net Power Cost Consultant 2010 – 2013

- Analyst responsible for power cost modeling and forecasting
- Supported regulatory filings, including drafting prewritten testimony, preparing annual power cost deferral filings, and developing qualifying facility avoided cost calculations

Deloitte, San Jose, California: Tax Senior 2007 – 2009

- Staff accountant responsible for preparing corporate tax returns for multinational corporate clients and partnership tax returns for hedge fund clients
- Joined national tax practice specialized in research and development tax credits

Recent Expert Witness Testimony

Docket	Party	Topics
<i>In Re the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Service Rates by Approximately \$123.5 Million per Year or 14.7 Percent, to Establish an Insurance Cost Adjustment Rider, to Revise the Energy Cost Adjustment Mechanism, to Approve the Wildfire Mitigation Plan, and to Approve a Voluntary Renewable Energy Credit Program, Wy.PSC Docket No 20000-671-ER-24 (Record No 17659)</i>	Wyoming Industrial Energy Consumers	Net Power Cost
<i>In re Cascade Natural Gas Corporation, 2024 General Rate Case, Wa.UTC Docket No. UE-240008</i>	Alliance of Western Energy Consumers	Revenue Requirement
<i>In re the Application of Rocky Mountain Power to Increase Current Rates by \$84.3 Million to Recover Deferred Net Power Costs Under Tariff Schedule 95 Energy Cost Adjustment Mechanism and to Increase Current Rates By \$2.1 Million Under Tariff Schedule 93, REC and SO2 Revenue Adjustment Mechanism, Wy.PSC Docket No 20000-664-EM-24 (Record No 17547)</i>	Wyoming Industrial Energy Consumers	Power Cost Deferral
<i>In re Puget Sound Energy, 2024 General Rate Case, Wa.UTC Docket No. UE-240004 (Cons.)</i>	Alliance of Western Energy Consumers	Revenue Requirement
<i>In re Portland General Electric Company, Requests for a General Rate Revision, Or.PUC Docket No UE 343</i>	Alliance of Western Energy Consumers	Revenue Requirement
<i>In re Avista 2024 General Rate Case, Wa.UTC Docket No. UE-240006 (Cons.)</i>	Alliance of Western Energy Consumers	Revenue Requirement

Qualification Statement

Docket	Party	Topics
<i>In re Portland General Electric Company, 2025 Annual Update Tariff, Or.PUC Docket No UE 346</i>	Alliance of Western Energy Consumers	Power Cost Forecasting
<i>In re PacifiCorp 2025 Transition Adjustment Mechanism, Or.PUC Docket No. UE 434</i>	Alliance of Western Energy Consumers	Power Cost Forecasting
<i>In re the Application of Sierra Pacific Power Company d/b/a NV Energy for authority to adjust its annual revenue requirement for general rates charged to all classes of electric customers and for relief properly related thereto, PUC Nv. Docket No. 24-02026</i>	Smart Energy Alliance	Revenue Requirement
<i>In re Joint Application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy for Approval of the Cost Recovery for the 2023 Natural Disaster Protection Plan Regulatory Asset Account, PUC Nv. Docket No. 24-03006</i>	Smart Energy Alliance and Wynn Las Vegas, LLC	Wildfire Mitigation
<i>In re the Petition of PacifiCorp d/b/a Pacific Power & Light Company, 2022 Power Cost Adjustment Mechanism Annual Report., Wa.UTC Docket UE-230482.</i>	Alliance of Western Energy Consumers	Power Cost Deferral
<i>In re Northwest Natural Gas Company, dba NW Natural, Request for a General Rate Revision, Or.PUC Docket no. UG 490</i>	Alliance of Western Energy Consumers	Revenue Requirement
<i>Application of Nevada Power Company d/b/a NV Energy for authority to adjust its annual revenue requirement for general rates charged to all classes of electric customers and for relief properly related thereto, PUC Nv. Docket No. 23-06007; Application of Nevada Power Company d/b/a NV Energy for approval of new and revised depreciation and amortization rates for its electric and common accounts, PUC Nv. 23-06008.</i>	Circus Circus Las Vegas, LLC, HR Nevada, LLC, and Smart Energy Alliance	Revenue Requirement, Depreciation
<i>In re the Application of Rocky Mountain Power To Increase Current Rates By \$50.3 Million To Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 Energy Cost Adjustment Mechanism And To Decrease Current Rates By \$1.5 Million Pursuant to Tariff Schedule 93, REC and SO2 Revenue Adjustment Mechanism, Wy.PSC Docket No. 20000-642-EM23</i>	Wyoming Industrial Energy Consumers	Power Cost Deferral
<i>In re the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Service Rates by Approximately \$140.2 Million Per Year or 21.6 Percent and to Revise the Energy Cost Adjustment Mechanism, Wy.PSC Docket No. 20000-633-ER-23</i>	Wyoming Industrial Energy Consumers	Power Costs
<i>In re of Avista Corporation, d.b.a. Avista Utilities, Request for a General Rate Revision, Or.PUC Docket No. UG 461</i>	Alliance of Western Energy Consumers	Revenue Requirement
<i>In re Joint Application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy for Approval of the Cost Recovery of the Regulatory Assets Relating to the Development and Implementation of their Joint Natural Disaster Protection Plan., PUC Nv. Docket No. 23-03004</i>	Smart Energy Alliance and Wynn Las Vegas, LLC	Wildfire Mitigation
<i>In re of PacifiCorp, dba Pacific Power, 2024 Transition Adjustment Mechanism, Or.PUC Docket No. UE 420</i>	Alliance of Western Energy Consumers	Power Costs
<i>In re the Application of Avista Corporation dba Avista Utilities Requesting Authority to Revise Its Natural Gas Book Depreciation Rates and Deferred Accounting, Or.PUC Docket No UM 2277</i>	Alliance of Western Energy Consumers	Depreciation
<i>In re Joint Application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy for Approval of their Joint Natural Disaster Protection Plan, PUC Nv. Docket No. 23-03003</i>	Caesars Enterprise Services, LLC; MGM Resorts International; Wynn Las Vegas, LLC; and Smart Energy Alliance	Wildfire Mitigation

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
UG 519**

In the Matter of)
)
Avista Corporation, d/b/a Avista Utilities,)
)
<u>Request for a General Rate Revision.</u>)

**EXHIBIT 102 – REVENUE REQUIREMENT CALCULATIONS
TO THE
OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS**

March 4, 2024

Revenue Requirement Calculations

Natural Gas Revenue Requirement Summary (\$000)

Line	Adj. No.	Description	Revenue Requirement			Impact of AWEC Adjustments			
			Net Oper. Income	Rate Base	Rev. Req. Def. / (Suf.)	Pre-Tax Net Oper. Income	Net Oper. Income	Rate Base	Rev. Req. Def. / (Suf.)
1		Filed Revenue Requirement	\$24,199	\$389,378	7,822				
<i>Adjustments:</i>									
2	a	Cost of Capital	\$24,199	\$389,378	4,597	-	-	-	(3,225)
3	b	Test Period Accum. Depr.	\$24,199	\$379,502	3,633	-	-	(\$9,876)	(964)
4	c	Transp. Depr.	\$24,400	\$379,502	3,356	267	201		(277)
5	d	CWC - Lead Lag Study	\$24,400	\$378,010	3,211	-	-	(1,492)	(146)
6	e	CWC - O&M Service Lag	\$24,400	\$377,651	3,176	-	-	(358)	(35)
7	f	O&M Escalation	\$24,768	\$377,651	2,667	492	369	-	(509)
8	g	Labor Expense	\$24,891	\$377,651	2,498	163	123	-	(169)
9	h	Legal Expense	\$24,971	\$377,651	2,387	107	80	-	(111)
10	i	BOD Expense	\$25,108	\$377,651	2,198	182	137	-	(189)
11	j	R&D Tax Credit	\$25,113	\$377,651	2,190	7	6	-	(8)
12	j	Rate Case Expense	\$25,225	\$377,651	2,036	150	112	-	(155)
13		Interest Coordination	\$25,153	\$377,651	2,136		(72)	-	100
14		Adjusted Results	\$25,153	\$377,651	2,136	1,369	954	(11,727)	(5,687)

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON**

UG 519

In the Matter of)
)
Avista Corporation, d/b/a Avista Utilities,)
)
Request for a General Rate Revision.)

**EXHIBIT 103 – AVISTA RESPONSES TO AWEC DATA REQUESTS
TO THE
OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS**

March 4, 2024

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	Oregon	DATE PREPARED:	01/21/2025
CASE NO:	UG 519	WITNESS:	Joel Anderson
REQUESTER:	AWEC	RESPONDER:	Steve Vincent
TYPE:	Data Request	DEPT:	OR Business
REQUEST NO.:	AWEC – 2	TELEPHONE:	(541) 858-4773
		EMAIL:	steve.vincent@avistacorp.com

REQUEST:

Please explain how the contract quantity demand for each Schedule 456 customer is determined.

RESPONSE:

Contract quantity demand is determined based on each individual customers need and the Company's ability to provide natural gas to each customer. Contract quantity can be updated as needs change over time. Maximum Daily Quantity and Annual Quantity enables Avista Utilities to evaluate the availability of distribution system capacity to serve the load.

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	Oregon	DATE PREPARED:	01/21/2025
CASE NO:	UG 519	WITNESS:	Tia Benjamin
REQUESTER:	AWEC	RESPONDER:	Tia Benjamin
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 10	TELEPHONE:	(509) 495-2225
		EMAIL:	tia.benjamin@avistacorp.com

REQUEST:

Reference Benjamin workpaper “2.07-2.08 Capital Additions Model (2024)” Tab “TTP Detail 24-25”:

For each project identified therein as being transferred to plant in 2024, please provide the actual monthly transfers to plant for the project. If any new projects not identified on the list were transferred to plant, please detail those as well.

RESPONSE:

Please see UG 519_CONF_AVAtoAWEC_DR10R_Attach1_01212025 where the Company has provided actual transfers to plant for 2024 on a system and Oregon allocated basis. The Company will update Ms. Benjamin’s workpapers, 2.07-2.08 Capital Additions Model (2024) incorporating actual transfers to plant through January 2025 and updated expected transfers to plant through August 2025, sometime in the first half of April.

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	Oregon	DATE PREPARED:	01/21/2025
CASE NO:	UG 519	WITNESS:	Tia Benjamin
REQUESTER:	AWEC	RESPONDER:	Tia Benjamin
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 11	TELEPHONE:	(509) 495-2225
		EMAIL:	tia.benjamin@avistacorp.com

REQUEST:

Reference Benjamin workpaper “2.07-2.08 Capital Additions Model (2024)”:

Please provide an updated version of the referenced workpaper using actual transfers to plant, actual accumulated depreciation, and actual accumulated deferred income taxes through the latest month available.

RESPONSE:

The Company will provide an update to Ms. Benjamin’s workpapers, 2.07-2.08 Capital Additions Model (2024) with actuals through January 2025 and updated expected transfers to plant through August 2025. When updating the model, the Company will update pro forma transfers to plant, retirements, accumulated depreciation and ADFIT.

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	Oregon	DATE PREPARED:	02/12/2025
CASE NO:	UG 519	WITNESS:	Marcus Garbarino
REQUESTER:	AWEC	RESPONDER:	Megan Kennedy
TYPE:	Data Request	DEPT:	Tax
REQUEST NO.:	AWEC – 017	TELEPHONE:	(509) 495-8144
		EMAIL:	megan.kennedy@avistacorp.com

REQUEST:

Please provide the amortization schedule and balance calculations for the Oregon customer tax strategy deferral related to IID#5 and meters expenditures.

RESPONSE:

See attachment “UG 519_NONC_AVAtoAWEC_DR17R_Attach1_02122025” for the actual Oregon tax customer credit amortization schedule and balance calculations as of 12/31/2024.

OR Gas Sch 486
Tax Customer Credit

Month	254393 Beg Bal	Deferral / True Up	Amort	254393 End Bal	190393	Rate Base
202009	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202010	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202011	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202012	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202101	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202102	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202103	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202104	(21,446,298)			(21,446,298)	4,503,723	(16,942,575)
202105	(21,446,298)	(50,603.35)		(21,496,901)	4,514,349	(16,982,552)
202106	(21,496,901)	(50,603.35)		(21,547,504)	4,524,976	(17,022,528)
202107	(21,547,504)	(50,603.35)		(21,598,108)	4,535,603	(17,062,505)
202108	(21,598,108)	(50,603.35)		(21,648,711)	4,546,229	(17,102,482)
202109	(21,648,711)	(50,603.35)		(21,699,314)	4,556,856	(17,142,458)
202110	(21,699,314)	(44,805.17)		(21,744,120)	4,566,265	(17,177,855)
202111	(21,744,120)	(50,603.35)		(21,794,723)	4,576,892	(17,217,831)
202112	(21,794,723)	(531,773.78)		(22,326,497)	4,688,564	(17,637,932)
202201	(22,326,497)	(111,795.21)		(22,438,292)	4,712,041	(17,726,251)
202202	(22,438,292)	(111,795.21)		(22,550,087)	4,735,518	(17,814,569)
202203	(22,550,087)	(111,795.21)		(22,661,882)	4,758,995	(17,902,887)
202204	(22,661,882)	(111,795.21)		(22,773,678)	4,782,472	(17,991,205)
202205	(22,773,678)	(111,795.21)		(22,885,473)	4,805,949	(18,079,524)
202206	(22,885,473)	(111,795.21)		(22,997,268)	4,829,426	(18,167,842)
202207	(22,997,268)	(111,795.21)		(23,109,063)	4,852,903	(18,256,160)
202208	(23,109,063)	(111,795.21)	1,335.71	(23,219,523)	4,876,100	(18,343,423)
202209	(23,219,523)	(120,346.81)	52,629.22	(23,287,240)	4,890,320	(18,396,920)
202210	(23,287,240)	(111,795.21)	98,510.18	(23,300,525)	4,893,110	(18,407,415)
202211	(23,300,525)	(111,795.21)	298,066.33	(23,114,254)	4,853,993	(18,260,261)
202212	(23,114,254)	(236,703.31)	351,930.97	(22,999,027)	4,829,796	(18,169,231)
202301	(22,999,027)	(30,904.55)	366,103.86	(22,663,827)	4,759,404	(17,904,424)
202302	(22,663,827)	(30,904.55)	300,340.91	(22,394,391)	4,702,822	(17,691,569)
202303	(22,394,391)	(30,904.55)	330,756.17	(22,094,539)	4,639,853	(17,454,686)
202304	(22,094,539)	(30,904.55)	194,821.28	(21,930,623)	4,605,431	(17,325,192)
202305	(21,930,623)	(30,904.55)	99,962.31	(21,861,565)	4,590,929	(17,270,636)
202306	(21,861,565)	(30,904.55)	64,908.86	(21,827,560)	4,583,788	(17,243,773)
202307	(21,827,560)	(30,904.55)	56,465.83	(21,801,999)	4,578,420	(17,223,579)
202308	(21,801,999)	(30,904.55)	58,629.80	(21,774,274)	4,572,598	(17,201,676)
202309	(21,774,274)	(33,586.09)	70,130.87	(21,737,729)	4,564,923	(17,172,806)
202310	(21,737,729)	(30,904.55)	132,121.33	(21,636,512)	4,543,668	(17,092,845)
202311	(21,636,512)	(30,904.55)	257,493.40	(21,409,924)	4,496,084	(16,913,840)
202312	(21,409,924)	(1,322,254.84)	293,894.09	(22,438,284)	4,712,040	(17,726,245)
202401	(22,438,284)	(62,680.77)	325,304.51	(22,175,661)	4,656,889	(17,518,772)
202402	(22,175,661)	(62,680.77)	291,533.81	(21,946,808)	4,608,830	(17,337,978)
202403	(21,946,808)	(62,680.77)	282,769.96	(21,726,718)	4,562,611	(17,164,107)
202404	(21,726,718)	(62,680.77)	181,862.48	(21,607,537)	4,537,583	(17,069,954)
202405	(21,607,537)	(62,680.77)	116,874.07	(21,553,343)	4,526,202	(17,027,141)
202406	(21,553,343)	(62,680.77)	67,219.34	(21,548,805)	4,525,249	(17,023,556)
202407	(21,548,805)	(62,680.77)	55,204.60	(21,556,281)	4,526,819	(17,029,462)
202408	(21,556,281)	(62,680.77)	61,140.47	(21,557,821)	4,527,142	(17,030,679)
202409	(21,557,821)	197,556.92	71,318.02	(21,288,946)	4,470,679	(16,818,268)
202410	(21,288,946)	(62,680.77)	124,423.61	(21,227,203)	4,457,713	(16,769,491)
202411	(21,227,203)	(62,680.77)	297,607.42	(20,992,277)	4,408,378	(16,583,899)
202412	(20,992,277)	(1,306,523.93)	369,241.96	(21,929,559)	4,605,207	(17,324,351)

OR Gas Sch 486

Tax Customer Credit

Factor for Rev Req

0.7306%

Month	Net Tariff Rev Credit (pre-tax)	AMA Rate Base	Cumulative Change to Rate Base	Allowed Return on Rate Base	Cumulative Return	A/R	Rev Net of Related Expenses
202009							
202010							
202011							
202012							
202101							
202102							
202103							
202104							
202105							
202106							
202107							
202108							
202109							
202110							
202111							
202112							
202201							
202202							
202203							
202204							
202205							
202206							
202207							
202208	1,716	(17,736,456)	(87,263)	(392)	(392)	(1,716)	1,716
202209	53,464	(17,840,431)	(140,760)	(859)	(1,251)	(53,464)	53,464
202210	99,526	(17,943,932)	(151,255)	(1,045)	(2,296)	(99,526)	99,526
202211	298,467	(18,038,598)	(4,101)	(412)	(2,708)	(298,467)	298,467
202212	351,562	(18,104,170)	86,929	379	(2,329)	(351,562)	351,562
202301	364,350	(18,133,731)	351,736	1,805	(524)	(364,350)	364,350
202302	296,988	(18,136,030)	564,591	3,450	2,926	(296,988)	296,988
202303	325,832	(18,112,230)	801,474	5,067	7,993	(325,832)	325,832
202304	188,732	(18,065,804)	930,968	6,265	14,258	(188,732)	188,732
202305	93,308	(18,004,350)	985,524	6,847	21,105	(93,308)	93,308
202306	57,999	(17,932,144)	1,012,387	7,109	28,214	(57,999)	57,999
202307	49,400	(17,850,617)	1,032,581	7,270	35,484	(49,400)	49,400
202308	51,417	(17,760,020)	1,054,484	7,421	42,905	(51,417)	51,417
202309	62,737	(17,661,442)	1,083,354	7,607	50,512	(62,737)	62,737
202310	124,306	(17,555,664)	1,163,315	8,041	58,554	(124,306)	124,306
202311	248,695	(17,444,789)	1,342,320	9,053	67,607	(248,695)	248,695
202312	288,186	(17,370,230)	529,915	5,873	73,479	(288,186)	288,186
202401	320,639	(17,335,704)	504,727	4,814	78,293	(320,639)	320,639
202402	287,165	(17,304,902)	535,529	4,508	82,801	(287,165)	287,165
202403	278,215	(17,278,062)	562,369	4,700	87,501	(278,215)	278,215
202404	177,474	(17,255,319)	585,111	4,528	92,029	(177,474)	177,474
202405	112,554	(17,234,539)	605,892	4,457	96,486	(112,554)	112,554
202406	62,928	(17,215,217)	625,213	4,428	100,913	(62,928)	62,928
202407	50,819	(17,197,953)	642,477	4,524	105,438	(50,819)	50,819
202408	56,613	(17,182,740)	657,690	4,672	110,110	(56,613)	56,613
202409	65,729	(17,160,843)	679,588	5,767	115,877	(65,729)	65,729
202410	119,411	(17,132,597)	707,833	5,172	121,049	(119,411)	119,411
202411	291,784	(17,105,377)	735,054	6,008	127,057	(291,784)	291,784
202412	367,362	(17,074,884)	765,547	1,940	128,997	(367,362)	367,362

OR Gas Sch 486

Tax Customer Credit 21% 96.9198% Rev Related Exp Factor

Month	FIT Payable	FIT	254393	190393	410
202009					
202010					
202011					
202012					
202101					
202102					
202103					
202104					
202105					
202106					
202107					
202108					
202109					
202110					
202111					
202112					
202201					
202202					
202203					
202204					
202205					
202206					
202207					
202208	360	(360)	1,336	(280)	(1,055)
202209	11,227	(11,227)	52,629	(11,052)	(41,577)
202210	20,900	(20,900)	98,510	(20,687)	(77,823)
202211	62,678	(62,678)	298,066	(62,594)	(235,472)
202212	73,828	(73,828)	351,931	(73,906)	(278,025)
202301	76,513	(76,513)	366,104	(76,882)	(289,222)
202302	62,368	(62,368)	300,341	(63,072)	(237,269)
202303	68,425	(68,425)	330,756	(69,459)	(261,297)
202304	39,634	(39,634)	194,821	(40,912)	(153,909)
202305	19,595	(19,595)	99,962	(20,992)	(78,970)
202306	12,180	(12,180)	64,909	(13,631)	(51,278)
202307	10,374	(10,374)	56,466	(11,858)	(44,608)
202308	10,798	(10,798)	58,630	(12,312)	(46,318)
202309	13,175	(13,175)	70,131	(14,727)	(55,403)
202310	26,104	(26,104)	132,121	(27,745)	(104,376)
202311	52,226	(52,226)	257,493	(54,074)	(203,420)
202312	60,519	(60,519)	293,894	(61,718)	(232,176)
202401	67,334	(67,334)	325,305	(68,314)	(256,991)
202402	60,305	(60,305)	291,534	(61,222)	(230,312)
202403	58,425	(58,425)	282,770	(59,382)	(223,388)
202404	37,270	(37,270)	181,862	(38,191)	(143,671)
202405	23,636	(23,636)	116,874	(24,544)	(92,331)
202406	13,215	(13,215)	67,219	(14,116)	(53,103)
202407	10,672	(10,672)	55,205	(11,593)	(43,612)
202408	11,889	(11,889)	61,140	(12,839)	(48,301)
202409	13,803	(13,803)	71,318	(14,977)	(56,341)
202410	25,076	(25,076)	124,424	(26,129)	(98,295)
202411	61,275	(61,275)	297,607	(62,498)	(235,110)
202412	77,146	(77,146)	369,242	(77,541)	(291,701)

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	Oregon	DATE PREPARED:	02/12/2025
CASE NO:	UG 519	WITNESS:	Marcus Garbarino
REQUESTER:	AWEC	RESPONDER:	Lindsey Thomas
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 030	TELEPHONE:	(509) 495-2225
		EMAIL:	lindsey.thomas@avistacorp.com

REQUEST:

Please provide documentation supporting all board approved labor rate increases for calendar years 2024, 2025, and 2026.

RESPONSE:

Please see the Company's response in AWEC DR 030C for the requested information. AWEC DR 030C is **CONFIDENTIAL SUBJECT TO GENERAL PROTECTIVE ORDER**.

- See UG 519_CONF_AVAtoAWEC_DR030R_Attach1_02122025 for documentation supporting the actual board approved non-bargaining labor rate increase for 2024.
- See UG 519_CONF_AVAtoAWEC_DR030R_Attach2_02122025 for documentation supporting the actual board approved non-bargaining labor rate increase for 2025.
- See UG 519_CONF_AVAtoAWEC_DR030R_Attach3_02122025 for documentation supporting the minimum board approved non-bargaining labor rate increase for 2026.

For documentation supporting bargaining labor rate increases, please see Staff DR 095.

Additionally, please see Staff DR 226 Supplemental for updated Adj. 2.03 (Test Year Non-Executive Labor Adjustment) and Adj. 2.04 (Test Year Executive Labor Adjustment) workpapers reflecting the actual 2025 Board of Director approved non-bargaining labor increase as provided in UG 519_CONF_AVAtoAWEC_DR030R_Attach2_02122025.

AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	02/12/2025
CASE NO:	UG 519	WITNESS:	Marcus Garbarino
REQUESTER:	AWEC	RESPONDER:	Joel Anderson/Kaylene Schultz
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 31	TELEPHONE:	(509) 495-2811
		EMAIL:	joel.anderson@avistacorp.com

REQUEST:

Please provide Avista's legal expenses included in revenue requirement detailed by legal matter.

RESPONSE:

Please see the Company's response in AWEC DR 031C for the requested information. AWEC DR 031C is **CONFIDENTIAL SUBJECT TO GENERAL PROTECTIVE ORDER**.

Please see UG 519_CONF_AVAtoAWEC_DR31R_Attach1_02122025 for the requested information. In this attachment, the Company has provided legal expense transaction detail for the Base Year (12ME 12.2023), as well as a description of legal expenses summarized by legal matter (transaction description) greater than or equal to \$1,000 (Oregon share). Further descriptions of de minimis values, those less than \$1,000 (Oregon share), are available upon request.

Base Year legal expenses are included in the Company's pro forma Adj. 2.00 – Test Period Expense Adjustment.

As noted in UG 519_CONF_AVAtoAWEC_DR31R_Attach1_02122025, the Company inadvertently recorded \$1,245 (Oregon's share) of legal expenses associated with representation in litigation with a third party developer concerning underground locate requirements that is Washington specific and will remove during the pendency of this case. The effect of this adjustment reduces expense by approximately \$1,000, lowering revenue requirement by \$1,000 in this case.

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	Oregon	DATE PREPARED:	02/12/2025
CASE NO:	UG 519	WITNESS:	Marcus Garbarino
REQUESTER:	AWEC	RESPONDER:	Lindsey Thomas
TYPE:	Data Request	DEPT:	Regulatory Affairs
REQUEST NO.:	AWEC – 032	TELEPHONE:	(509) 495-2225
		EMAIL:	lindsey.moon@avistacorp.com

REQUEST:

Reference Garbarino Workpaper “2.09 Incentive Pay Adjustment (UG-519)”: Please provide detail supporting all stock compensation incurred in the test period and included in the referenced adjustment. Please provide separate detail for executives and regular employees.

RESPONSE:

In Garbarino Workpaper “2.09 Incentive Pay Adjustment (UG-519)” on tab “(A-1) Adjustment”, it is noted on row 25 that “LTIP Restricted Share Units for Exec and Non-Exec are recorded to Non-Utility as of 1/1/2023”. Therefore, there was no stock compensation included in the referenced adjustment. In prior rate cases, a portion of the costs were charged to utility and was subsequently removed. Additionally, please refer to Mr. Garbarino’s testimony, at page 21, where the following has been noted:

“...we have followed Commission policy and removed 100% of base year Executive Short-Term Incentive Plan incentive expenses and 50% of employee base year merit-based incentives. Long-Term Incentive Plan costs, related to Performance Shares and Restricted Stock Unit 4 (RSU) are borne entirely by shareholders and are not included in this filing.”



June 6, 2024

Kroll Lowers its Recommended U.S. Equity Risk Premium to 5.0%, Effective June 5, 2024

Executive Summary

Kroll regularly reviews fluctuations in global economic and financial market conditions that may warrant changes to our equity risk premium (ERP) and accompanying risk-free rate recommendations. The risk-free rate and ERP are key inputs used to calculate the cost of equity capital in the context of the Capital Asset Pricing Model (CAPM) and other models used to develop discount rates. We also update country risk data on a quarterly basis for 175+ countries using various models.

The Kroll Recommended U.S. ERP is decreasing from 5.5% to 5.0% when developing USD-denominated discount rates as of June 5, 2024, and thereafter, until further notice.

Notwithstanding the current recommendation, we are monitoring economic and geopolitical events that may change our views and impact our guidance toward the end of 2024 and into 2025. In particular, the U.S. Presidential Election in November 2024 has the potential to cause turmoil in U.S. and global financial markets. Of particular concern is any potential promise of a significant increase in government spending and a corresponding rise in the U.S. budget deficit, which could place upward pressure on long-term interest rates and disrupt financial markets. Other global geopolitical events that warrant close watch include, but are not limited to, the impact of general elections in other major economies (e.g., Mexico, India, UK), trade conflicts between the U.S. and China, rising tensions in the Middle East and the protracted Russia's war on Ukraine.

Background

The Kroll U.S. Recommended ERP was last changed on June 8, 2023, when it was lowered from 6.0% to 5.5%. This ERP guidance was applicable when developing USD-denominated discount rates and was to be used in conjunction with our U.S. risk-free guidance—the higher of the spot 20-year U.S. Treasury yield (prevailing as of the valuation date) and the Kroll normalized U.S. risk-free rate of 3.5%.

In the “Kroll Cost of Capital Recommendations and Potential Upcoming Changes – February 8, 2024 Update”, Kroll reaffirmed its Recommended U.S. ERP guidance at 5.5%. However, that communication also indicated that a “risk-on” attitude in U.S. equity markets meant that the ERP was likely to come down in 2024. At the time, we balanced new stock market record highs (which were partly boosted by optimism around generative artificial intelligence (GenAI), an expected improvement in earnings growth and a resilient U.S. economy), with the potential negative impact from restrictive monetary policies (keeping interest rates higher for a longer period of time) and the risk of major geopolitical events broadening to the global economy (e.g., escalating conflicts in the Middle East).

At this juncture, the U.S. economy continues to be resilient, but there are signs that the labor market is cooling, and consumer spending is slowing. These latest indicators actually increase the probability of a soft-landing scenario (i.e., lower inflation, lower real growth, but no recession) and create the conditions for the U.S. central bank (the Federal Reserve Bank, or the Fed) to start cutting interest rates. This, in turn, is likely to create more favorable financing conditions and continue to support U.S. equity markets.

Based on current economic and financial market conditions, the Kroll Recommended ERP is being lowered from 5.5% to 5.0% when developing USD-denominated discount rates as of June 5, 2024, and thereafter, until further notice. In addition, we continue to recommend using the spot 20-year U.S. Treasury yield as the proxy for the risk-free rate if the prevailing spot yield as of the valuation date is higher than the Kroll normalized U.S. risk-free rate of 3.5%.

The decision to lower the U.S. ERP Recommendation is based on the following trends in economic indicators and financial market conditions:

- In late 2023 and early in 2024, investors began pricing several cuts in the Fed funds rate—the central bank’s policy interest rate—which helped fuel a surge in equity markets. However, a surprising resilience in the U.S. economy and a sudden increase in inflation readings in December 2023 and again in February and March 2024, led to a delay in expectations on the number and timing of Fed rate cuts in 2024. Markets reacted by pricing a single-rate cut later this year (contrary to prior expectations of three cuts taking place earlier in the year), with some economists even suggesting a rate hike as a possibility. More recently, however, economic activity has shown signs of slowing down. First quarter real GDP growth was downwardly revised to 1.3%, partly due to a deceleration in consumer spending, as pandemic-related excess savings have been mostly depleted and the overhang of inflation has diminished purchasing power. This slowdown (together with the inflation and unemployment trends discussed below), actually makes it more likely that the Fed will begin cutting interest rates earlier this year relative to recent expectations.

- Major equity indices have recently reached new all-time highs, supported by investors' continued optimism. The surge in technology stocks due to potential productivity gains from GenAI has broadened to other sectors in the economy. Since their respective cycle lows in late October 2023 through May 28, 2024, the S&P 500 Index (a market-cap-weighted index) has increased 28.9% in price terms, whereas the NASDAQ Composite surged by 35.1%. The S&P 500 Equal-Weight Index also gained 22.9% since its October low. For perspective, a 20% or higher increase in equity markets relative to recent lows is considered to be a "bull" market. In addition, during the month of May 2024, all major equity indices reached all-time highs: the S&P 500 Index hit a new record on May 21, 2024, while the NASDAQ Composite did so on May 28, 2024. The Dow Jones Industrial Average (DJIA), an equal-weighted index that no longer attracts significant global investment allocations, surpassed the psychological level of 40,000 for the first time on May 17, 2024.¹
- The VIX (the volatility index on the S&P 500), also referred to as the "fear index," has been generally low during 2024. Since the beginning of 2024 through May 28, the index has averaged 14.1, with a low of 11.9 reached on May 21, 2024—the lowest level since November 2019. These levels are also much lower than the long-term historical average of 20.1 and the average observed since the height of COVID-19. For perspective, during 2022 and 2023, the VIX averaged 25.6 and 16.8, respectively.
- U.S. corporate credit spreads have been fairly tight and are currently lower than in June 2023, when we last changed our ERP recommendation. They are also significantly lower than their long-term historical average (from late 1996 through the present). The underlying corporate yields on investment-grade and speculative-grade bonds have generally been on a downward trend since 2023.
- ERP indications from forward-looking models based on Professor Aswath Damodaran are at similar levels as when we last changed our U.S. ERP recommendation, while the Default Spread model points to a sustained decline in ERP.

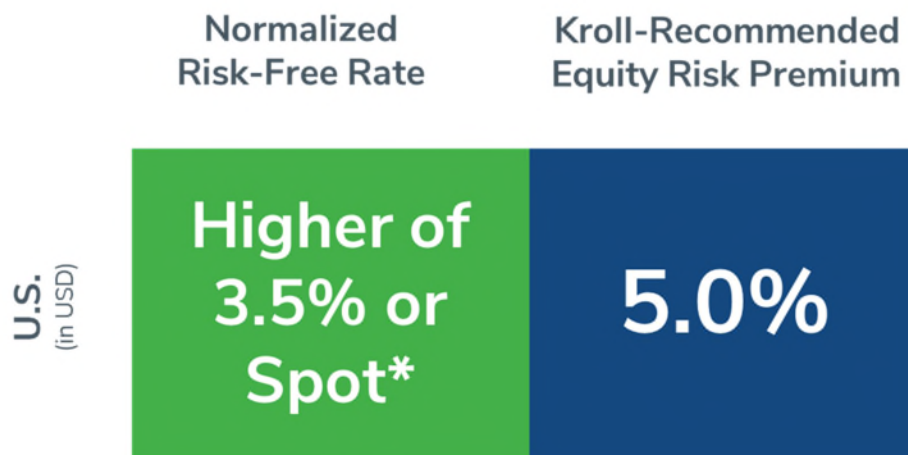
¹ According to an analysis by S&P Dow Jones Indices, at the end of 2019, there were over USD 11.2 trillion index-linked products and derivative contracts benchmarked to the S&P 500, which included USD 4.6 trillion passively tracking the index. In comparison, there were USD 32 billion benchmarked to the DJIA, which included USD 28 billion in passive assets. For more details see "Comparing Iconic Indices: The S&P 500® and DJIA®", S&P Dow Jones Indices – A Division of S&P Global, June 2021. Available here: <https://www.spglobal.com/spdji/en/documents/education/education-comparing-iconic-indices-the-sp-500-and-djia.pdf>.

- Even though the U.S. unemployment rate has increased recently, it is still relatively low on a historical basis: in April 2024, the unemployment rate ticked up to 3.9%, from 3.8% in March 2024 and from 3.4% in April 2023, a post-pandemic low. For perspective, unemployment rates of 3.4% were last observed in the late 1960s. The persistence of low unemployment is one of the major reasons why economists believe that a soft landing is achievable, and the probability of a U.S. recession in the near term is relatively low. During past recessions, the unemployment rate saw significant increases. In the U.S., the average unemployment rate during a recession is 6.3%, which is far above the current level.
- Inflation, as measured by Consumer Price Index (CPI), is still above the Fed's 2.0% target, but far below its multiple-decades high of 9.1% (before seasonal adjustments) in the 12-month period ending in June 2022. The process of disinflation has been a bumpy one, supporting the Fed's decision to keep interest rates at their current high level for a longer period. In June 2023, CPI inflation reached a local low of 3.0%, only to continue moving range-bound between 3.1% and 3.7%. The latest CPI inflation was 3.4% as of April 2024, a downtick from the prior month and a welcome reading after two consecutive months of rate acceleration. The Fed's preferred gauge for inflation, the Personal Consumer Expenditures (PCE) Price Index, has actually accelerated in March to 2.7% and remained at that level in April 2024. The core PCE index (i.e., excluding food and energy) dropped to 2.8% in February, but has remained at that level since then. Nevertheless, wage price pressures appear to be easing and the cooling job market may bode well for inflation trends.

Notwithstanding these positive factors that support a decrease in the U.S. ERP, we are monitoring economic and geopolitical events that may change our views and impact our guidance toward the end of 2024 and into 2025. In particular, the U.S. Presidential Election in November 2024 has the potential to cause turmoil in U.S. and global financial markets. The growing level of government debt in the U.S., especially in an election year when candidates propose different fiscal packages to sway voters, may worsen the fiscal position for the country and create upward pressures on long-term interest rates. The acrimonious political debate regarding the debt ceiling that took place in the first half of 2023 was a contributing factor to Fitch Ratings' decision to lower its U.S. sovereign credit rating from AAA to AA+. S&P Global Ratings had already downgraded the U.S. credit rating to AA+ back in 2011 under similar circumstances. Moreover, Moody's Investor Services, the last major credit agency assigning the coveted Aaa rating to the U.S., has lowered its outlook, citing political and financial concerns. Therefore, this will be an area that will warrant close monitoring. Other geopolitical events with potential for escalation to global markets will also be monitored.

Summary of U.S. Cost of Capital Recommendations

- Kroll is lowering its Recommended U.S. ERP from 5.5% to 5.0% when developing USD-denominated discount rates as of June 5, 2024, and thereafter, until further notice. This is matched with the higher of the spot 20-year U.S. Treasury yield as of the valuation date and the Kroll normalized U.S. risk-free rate of 3.5%.



* We recommend using the spot 20-year U.S. Treasury yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our recommended U.S. normalized risk-free rate of 3.5%. This guidance is effective when developing USD-denominated discount rates as of June 16, 2022, and thereafter.

- Regarding risk-free rates, as investors attempt to predict the pace and magnitude of potential rate cuts by major central banks, we continue to observe high levels of volatility in spot yields of government bonds of major economies. Long-term bonds yields may continue to fluctuate considerably in the near future, before stabilizing. During these periods, project teams may need to consider using a moving average of spot yields to mitigate the impact of this volatility in their valuation analyses (e.g., weekly or monthly averages).
- Notwithstanding the current recommendations, we are monitoring economic and geopolitical events that may change our views and impact our guidance toward the end of 2024 and into 2025. In particular, the U.S. Presidential Election in November 2024 has the potential to cause disruption in U.S. and global financial markets. Of particular concern is any potential promise of significant increases in government spending that lead to a significant rise in the budget deficit, which could place upward pressures on long-term interest rates and disrupt equity markets. Other global geopolitical events that warrant close watch include, but are not limited to, the impact of general elections in other major economies (e.g., Mexico, India, UK), trade conflicts between the U.S. and China, rising tensions in the Middle East and the protracted Russia's war on Ukraine.

Please contact our support team with any questions: costofcapital.support@kroll.com

Third-Party Risk Premium Estimates

Start of month	S&P 500	T.Bond Rate	Ten-year average CF	CF (Trailing 12 month)	Normalized CF	Expected growth rate	ERP (T12 m with sustainable payout)		ERP (Smoothed)	ERP (Normalized)	ERP (Net Cash Yield)	ERP (Covid Adjusted)	Expected Return
							ERP (T12m)	ERP (Normalized)					
9/1/2008	1252	3.72%						4.22%					7.94%
10/1/2008	1166	3.83%						4.51%					8.34%
11/1/2008	969	3.95%						5.90%					9.85%
12/1/2008	896	2.92%						6.60%					9.52%
1/1/2009	903	2.21%		52.58		4%		6.43%					8.64%
2/1/2009	826	2.87%		52.58		4%		6.87%					9.74%
3/1/2009	735	3.02%		52.58		4%		7.68%					10.70%
4/1/2009	798	2.71%		51.55		4%		7.01%					9.72%
5/1/2009	873	3.16%		51.55		4%		6.32%					9.48%
6/1/2009	919	3.47%		51.55		4%		5.94%					9.41%
7/1/2009	919	3.53%		50.95		4%		5.86%					9.39%
8/1/2009	987	3.52%		50.95		4%		5.46%					8.98%
9/1/2009	1021	3.40%		50.95		4%		5.30%					8.70%
10/1/2009	1057	3.30%		48.52		4%		4.86%					8.16%
11/1/2009	1036	3.39%		48.52		4%		4.97%					8.36%
12/1/2009	1096	3.24%		48.52		4.00%		4.73%					7.97%
1/1/2010	1115	3.84%		40.38		7.21%		4.36%					8.20%
2/1/2010	1074	3.58%		40.38		7.21%		4.56%					8.14%
3/1/2010	1104	3.61%		40.38		7.21%		4.44%					8.05%
4/1/2010	1169	3.83%		40.34		7.21%		4.16%					7.99%
5/1/2010	1187	3.65%		40.34		7.21%		4.54%					8.19%
6/1/2010	1089	3.30%		40.34		7.21%		4.79%					8.09%
7/1/2010	1031	2.96%		42.44		7.21%		5.10%					8.06%
8/1/2010	1106	2.91%		42.44		7.21%		4.78%					7.69%
9/1/2010	1049	2.47%		42.44		7.21%		5.10%					7.57%
10/1/2010	1141	2.51%		48.20		7.21%		5.31%					7.82%
11/1/2010	1183	2.60%		48.20		7.21%		5.11%					7.71%
12/1/2010	1181	2.80%		48.20		7.21%		5.08%					7.88%
1/1/2011	1258	3.29%		53.96		6.95%		5.20%					8.49%
2/1/2011	1286	3.38%		53.96		6.95%		5.07%					8.45%
3/1/2011	1327	3.42%		53.96		6.95%		4.90%					8.32%
4/1/2011	1326	3.47%		58.54		6.95%		5.31%					8.78%
5/1/2011	1364	3.29%		58.15		6.95%		5.16%					8.45%
6/1/2011	1345	3.06%		58.15		6.95%		5.27%					8.33%
7/1/2011	1321	3.17%		62.24		6.95%		5.72%					8.89%
8/1/2011	1292	2.80%		62.24		6.95%		5.92%					8.72%
9/1/2011	1219	2.23%		62.24		6.95%		6.39%					8.62%
10/1/2011	1131	1.92%		68.65		6.95%		7.64%					9.56%
11/1/2011	1253	2.05%		68.65		5.50%		6.49%					8.54%
12/1/2011	1247	2.07%		68.65		5.50%		6.51%					8.58%
1/1/2012	1258	1.87%	59.01	72.23		7.18%		7.32%	6.01%				9.19%
2/1/2012	1312	1.81%	59.01	72.23		7.18%		7.04%	5.78%				8.85%
3/1/2012	1366	1.98%	59.01	72.23		7.18%		6.73%	5.52%				8.71%
4/1/2012	1408	2.21%	66.29	74.07		7.18%		6.64%	5.96%				8.85%
5/1/2012	1398	1.92%	66.29	74.07		7.18%		6.76%	6.06%				8.68%
6/1/2012	1310	1.55%	66.29	74.07		7.18%		7.28%	6.54%				8.83%
7/1/2012	1362	1.65%	64.06	71.55		6.56%		6.59%	5.91%				8.24%
8/1/2012	1379	1.47%	64.06	71.55		6.56%		6.55%	5.88%				8.02%
9/1/2012	1407	1.55%	64.06	71.55		6.56%		6.41%	5.75%				7.96%
10/1/2012	1441	1.62%	67.74	72.74		6.56%		6.35%	5.92%				7.97%
11/1/2012	1412	1.75%	67.74	72.74		6.56%		6.44%	6.01%				8.19%
12/1/2012	1416	1.62%	67.74	72.74		6.56%		6.45%	6.02%				8.07%
1/1/2013	1426	1.76%	69.46	72.25		5.27%		6.00%	5.78%				7.76%
2/1/2013	1498	2.00%	69.46	72.25		5.27%		5.67%	5.46%				7.67%
3/1/2013	1515	1.88%	69.46	72.25		5.32%		5.65%	5.43%				7.53%

Third-Party Risk Premium Estimates

Start of month	S&P 500	T.Bond Rate	Ten-year average CF	CF (Trailing 12 month)	Normalized CF	Expected growth rate	ERP (T12 m with sustainable payout)		ERP (Normalized)			Expected Return
							ERP (T12m)	ERP (Smoothed)	ERP (Net Cash Yield)	ERP (Covid Adjusted)		
4/1/2013	1569	1.85%	76.76	75.31		5.31%	5.68%	5.79%				7.53%
5/1/2013	1598	1.65%	76.76	75.31		5.23%	5.60%	5.71%				7.25%
6/1/2013	1631	2.14%	76.76	75.31		5.43%	5.45%	5.55%				7.59%
7/1/2013	1606	2.49%	78.66	78.58		5.57%	5.73%	5.74%				8.22%
8/1/2013	1686	2.57%	78.66	78.58		5.60%	5.46%	5.46%				8.03%
9/1/2013	1633	2.79%	78.66	78.58		5.69%	5.62%	5.61%				8.41%
10/1/2013	1682	2.61%	82.35	80.33		5.62%	5.59%	5.73%				8.20%
11/1/2013	1757	2.55%	82.35	80.33		5.59%	5.36%	5.49%				7.91%
12/1/2013	1806	2.75%	82.35	80.33		5.67%	5.19%	5.32%				7.94%
1/1/2014	1848	3.04%	90.52	84.16		4.28%	4.96%	5.33%				8.00%
2/1/2014	1783	2.65%	90.52	84.16		4.13%	5.17%	5.56%				7.82%
3/1/2014	1859	2.66%	90.52	84.16		4.13%	4.96%	5.33%				7.62%
4/1/2014	1874	2.72%	95.39	88.13		4.15%	5.15%	5.57%				7.87%
5/1/2014	1884	2.65%	95.39	88.13		4.13%	5.12%	5.54%				7.77%
6/1/2014	1924	2.48%	95.39	88.13		4.06%	5.03%	5.45%				7.51%
7/1/2014	1960	2.52%	99.78	96.01		4.07%	5.38%	5.59%				7.90%
8/1/2014	1931	2.56%	99.78	96.01		4.09%	5.45%	5.67%				8.01%
9/1/2014	2003	2.35%	99.78	96.01		4.00%	5.28%	5.48%				7.63%
10/1/2014	1973	2.49%	100.41	97.52		4.04%	5.43%	5.59%		4.87%		7.92%
11/1/2014	2018	2.34%	100.41	97.52		4.00%	5.32%	5.48%		4.78%		7.66%
12/1/2014	2068	2.17%	100.41	97.52		3.93%	5.21%	5.36%		4.68%		7.38%
1/1/2015	2059	2.17%	107.97	100.50		5.58%	5.78%	6.21%		5.21%		7.95%
2/1/2015	1995	1.70%	107.97	100.50		5.38%	6.01%	6.45%		5.42%		7.71%
3/1/2015	2105	2.00%	107.97	100.50		5.51%	5.67%	6.09%		5.11%		7.67%
4/1/2015	2068	1.93%	108.59	101.98		5.48%	5.86%	6.24%		5.32%		7.79%
5/1/2015	2086	2.05%	108.59	101.98		5.53%	5.80%	6.17%		5.27%		7.85%
6/1/2015	2107	2.13%	108.59	101.98		5.56%	5.74%	6.10%		5.21%		7.87%
7/1/2015	2063	2.36%	108.34	101.58		5.65%	5.81%	6.19%		5.23%		8.17%
8/1/2015	2104	2.18%	108.34	101.58		5.58%	5.90%	6.27%		5.14%		8.08%
9/1/2015	1972	2.22%	108.34	101.58		6.32%	6.28%	6.69%		5.65%		8.50%
10/1/2015	1920	2.06%	100.83	104.20	74.24	6.25%	6.63%	6.42%	4.69%	5.96%		8.69%
11/1/2015	2079	2.15%	100.83	104.20	74.24	6.29%	6.12%	5.92%	4.38%	5.50%		8.27%
12/1/2015	2080	2.21%	100.83	104.20	74.24	6.32%	6.11%	5.92%	4.38%	5.43%		8.32%
1/1/2016	2044	2.27%	107.33	106.10	74.24	5.55%	5.16%	6.12%	6.19%	4.30%	5.46%	8.39%
2/1/2016	1940	1.92%	107.33	106.10	74.24	5.38%	5.61%	6.47%	6.54%	4.55%	5.92%	8.39%
3/1/2016	1932	1.74%	107.33	106.10	74.24	5.29%	5.72%	6.51%	6.58%	4.58%	5.96%	8.25%
4/1/2016	2060	1.77%	108.35	108.16	74.24	5.32%	5.15%	6.24%	6.23%	4.30%	5.62%	8.01%
5/1/2016	2065	1.83%	108.35	108.99	82.17	5.33%	5.11%	6.22%	6.25%	4.73%	5.69%	8.05%
6/1/2016	2097	1.83%	108.35	108.88	82.17	5.33%	5.03%	6.12%	6.16%	4.66%	5.54%	7.95%
7/1/2016	2099	1.47%	111.06	110.61	82.17	5.15%	5.08%	6.27%	6.30%	4.68%	5.68%	7.74%
8/1/2016	2174	1.45%	111.06	110.61	82.17	5.14%	4.92%	6.06%	6.08%	4.52%	5.49%	7.51%
9/1/2016	2171	1.59%	111.06	110.61	82.17	5.21%	4.86%	6.06%	6.08%	4.52%	5.56%	7.65%
10/1/2016	2168	1.60%	112.42	114.73	82.17	5.21%	4.91%	6.16%	6.29%	4.52%	5.64%	7.76%
11/1/2016	2126	1.84%	112.42	114.73	82.17	5.32%	4.89%	6.26%	6.39%	4.60%	5.79%	8.10%
12/1/2016	2199	2.39%	112.42	114.73	82.17	5.62%	4.50%	6.02%	6.14%	4.42%	5.52%	8.41%
1/1/2017	2239	2.45%	117.78	108.67	85.67	5.54%	4.50%	5.69%	6.16%	4.50%	5.10%	8.14%
2/1/2017	2279	2.47%	117.78	108.67	85.67	5.55%	4.41%	5.59%	6.05%	4.42%	5.10%	8.06%
3/1/2017	2364	2.39%	117.78	108.67	85.67	5.51%	4.29%	5.39%	5.84%	4.26%	4.93%	7.78%
4/1/2017	2363	2.39%	124.27	108.43	86.97	5.51%	4.51%	5.38%	6.16%	4.33%	4.90%	7.77%
5/1/2017	2384	2.30%	124.27	108.43	86.97	5.46%	4.51%	5.34%	6.11%	4.30%	4.87%	7.64%
6/1/2017	2412	2.21%	124.27	108.43	86.97	5.42%	4.49%	5.29%	6.05%	4.25%	4.84%	7.50%
7/1/2017	2423	2.30%	127.46	105.68	86.97	5.46%	4.62%	5.13%	6.17%	4.23%	4.68%	7.43%
8/1/2017	2470	2.30%	127.46	105.68	86.97	5.46%	4.54%	5.03%	6.05%	4.15%	4.69%	7.33%
9/1/2017	2418	2.12%	127.46	105.68	86.97	5.37%	4.60%	5.04%	6.06%	4.16%	4.62%	7.16%
10/1/2017	2519	2.33%	132.51	105.49	86.97	5.48%	4.63%	4.92%	6.16%	4.07%	4.50%	7.25%

Third-Party Risk Premium Estimates

Start of month	S&P 500	T.Bond Rate	Ten-year average CF	CF (Trailing 12 month)	Normalized CF	Expected growth rate	ERP (T12 m with sustainable payout)		ERP (Smoothed)	ERP (Normalized)		ERP (Net Cash Yield)	ERP (Covid Adjusted)	Expected Return
							ERP (T12m)	ERP (Normalized)						
11/1/2017	2575	2.37%	132.51	105.49	86.97	5.50%	4.52%	4.81%	6.03%	3.98%	4.43%			7.18%
12/1/2017	2648	2.42%	132.51	105.49	86.97	5.52%	4.38%	4.68%	5.86%	3.87%	4.26%			7.10%
1/1/2018	2674	2.41%	134.09	108.28	84.88	7.05%	4.75%	5.08%	6.27%	3.99%	4.63%			7.49%
2/1/2018	2824	2.74%	134.09	108.28	84.88	7.17%	4.37%	4.78%	5.90%	3.76%	4.44%			7.52%
3/1/2018	2714	2.87%	134.09	108.28	84.88	7.22%	4.49%	4.96%	6.12%	3.90%	4.56%			7.83%
4/1/2018	2641	2.74%	132.62	110.03	88.80	7.17%	4.95%	5.19%	6.23%	4.20%	4.75%			7.93%
5/1/2018	2648	2.95%	132.62	110.03	88.80	7.24%	4.85%	5.16%	6.19%	4.17%	4.78%			8.11%
6/1/2018	2705	2.87%	132.62	110.03	88.80	7.22%	4.78%	5.06%	6.07%	4.09%	4.65%			7.93%
7/1/2018	2718	2.85%	136.51	117.55	88.80	7.21%	4.99%	5.37%	6.22%	4.08%	4.97%			8.22%
8/1/2018	2816	2.96%	136.51	117.55	88.80	7.25%	4.78%	5.18%	6.00%	3.93%	4.85%			8.14%
9/1/2018	2902	2.86%	136.51	117.55	88.80	7.21%	4.68%	5.04%	5.84%	3.82%	4.72%			7.90%
10/1/2018	2914	3.07%	146.33	126.70	88.80	7.28%	4.99%	5.38%	6.20%	3.79%	5.02%			8.45%
11/1/2018	2712	3.16%	146.33	126.70	88.80	7.32%	5.32%	5.76%	6.64%	4.06%	5.38%			8.92%
12/1/2018	2760	2.99%	146.33	126.70	88.80	7.26%	5.29%	5.68%	6.55%	4.00%	5.32%			8.67%
1/1/2019	2507	2.68%	120.81	136.65	93.70	4.12%	5.55%	5.96%	5.27%	4.09%	5.60%			8.64%
2/1/2019	2704	2.63%	120.81	136.65	93.70	4.11%	5.16%	5.53%	4.89%	3.80%	5.25%			8.16%
3/1/2019	2785	2.72%	120.81	136.65	93.70	4.14%	4.98%	5.36%	4.74%	3.68%	5.05%			8.08%
4/1/2019	2834	2.40%	138.09	150.50	97.45	4.07%	5.08%	5.75%	5.36%	3.80%	5.41%			8.15%
5/1/2019	2945	2.51%	138.09	150.50	97.45	4.11%	4.99%	5.62%	5.16%	3.66%	5.29%			8.13%
6/1/2019	2752	2.14%	138.09	150.50	97.45	3.62%	5.38%	5.93%	5.44%	3.87%	5.57%			8.07%
7/1/2019	2942	2.00%	143.32	153.47	98.00	3.44%	5.11%	5.67%	5.30%	3.63%	5.34%			7.67%
8/1/2019	2980	2.02%	143.32	153.47	98.00	3.45%	5.04%	5.59%	5.23%	3.58%	5.31%			7.61%
9/1/2019	2926	1.50%	143.32	153.47	98.00	3.24%	5.32%	5.75%	5.37%	3.68%	5.40%			7.25%
10/1/2019	2977	1.67%	145.02	151.20	98.07	3.31%	5.20%	5.55%	5.33%	3.61%	5.22%			7.22%
11/1/2019	3038	1.68%	145.02	151.20	98.07	3.31%	5.09%	5.44%	5.22%	3.54%	5.16%			7.12%
12/1/2019	3141	1.78%	145.02	151.20	98.07	3.35%	4.89%	5.25%	5.04%	3.41%	4.90%			7.03%
1/1/2020	3231	1.92%	157.4	150.50	98.01	3.96%	5.06%	5.20%	5.43%	3.39%	4.86%			7.12%
2/1/2020	3226	1.51%	157.4	150.50	98.01	3.79%	5.22%	5.24%	5.48%	3.42%	4.94%			6.75%
3/1/2020	2954	1.13%	157.4	150.50	98.01	3.36%	5.77%	5.69%	5.94%	3.72%	5.36%			6.82%
4/1/2020	2585	0.68%	125.9	146.30	98.36	3.18%	6.52%	6.16%	5.31%	4.16%	5.76%	6.02%		6.84%
5/1/2020	2912	0.64%	125.9	146.30	98.36	3.16%	6.03%	5.65%	4.99%	3.93%	5.31%	5.39%		6.29%
6/1/2020	3044	0.66%	125.9	146.56	101.46	3.33%	5.81%	5.45%	4.81%	3.79%	5.09%	5.35%		6.11%
7/1/2020	3100	0.66%	154.67	146.87	99.97	3.33%	5.68%	5.37%	5.65%	3.67%	5.01%	5.23%		6.03%
8/1/2020	3271	0.55%	154.67	146.87	99.97	3.28%	5.43%	5.10%	5.37%	3.48%	4.77%	5.01%		5.65%
9/1/2020	3500	0.72%	154.67	146.87	99.97	3.35%	5.00%	4.74%	4.99%	3.24%	4.32%	4.62%		5.46%
10/1/2020	3363	0.69%	167.68	137.64	98.88	3.81%	5.29%	4.74%	5.76%	3.42%	4.29%	4.97%		5.43%
11/1/2020	3270	0.88%	167.68	137.64	98.88	3.86%	5.35%	4.85%	5.90%	3.50%	4.44%	5.02%		5.73%
12/1/2020	3622	0.84%	167.68	137.64	98.88	4.37%	4.97%	4.49%	5.46%	3.24%	4.60%	4.73%		5.33%
1/1/2021	3756	0.93%	187.39	127.78	98.73	5.42%	4.94%	4.20%	6.12%	3.26%	3.80%	4.72%		5.13%
2/1/2021	3714	1.11%	187.39	127.78	98.73	8.09%	4.75%	4.76%	6.91%	3.70%	4.31%	4.80%		5.87%
3/1/2021	3811	1.43%	187.39	127.78	98.73	8.44%	4.52%	4.63%	6.72%	3.60%	4.19%	4.56%		6.06%
4/1/2021	3973	1.75%	193.22	118.65	108.83	8.76%	4.22%	4.14%	6.66%	3.81%	3.67%	4.26%		5.89%
5/1/2021	4182	1.63%	193.22	118.65	108.83	8.97%	4.07%	3.99%	6.42%	3.67%	3.55%	4.11%		5.62%
6/1/2021	4204	1.58%	193.22	118.65	108.83	9.69%	4.20%	4.10%	6.59%	3.77%	3.61%	4.24%		5.68%
7/1/2021	4298	1.47%	209.00	116.17	110.79	9.79%	4.31%	3.96%	7.01%	3.78%	3.48%	4.38%		5.43%
8/1/2021	4395	1.23%	209.00	116.17	110.79	9.77%	4.31%	3.91%	6.91%	3.73%	3.47%	4.38%		5.14%
9/1/2021	4523	1.31%	209.00	116.17	110.79	12.31%	4.61%	4.21%	7.40%	4.02%	3.81%	4.70%		5.52%
10/1/2021	4308	1.52%	209.49	129.76	112.58	12.30%	4.84%	4.87%	7.71%	4.25%	4.46%	4.93%		6.39%
11/1/2021	4605	1.56%	209.49	129.76	112.58	12.39%	4.53%	4.58%	7.25%	3.99%	4.22%	4.62%		6.14%
12/1/2021	4567	1.45%	209.49	129.76	112.58	13.20%	4.77%	4.79%	7.56%	4.17%	4.39%	4.85%		6.24%
1/1/2022	4766	1.51%	231.8	147.24	113.62	6.47%	4.90%	4.24%	6.62%	3.29%	3.94%	Ended		5.75%
2/1/2022	4515	1.79%	23.18	147.24	113.62	7.15%	5.17%	4.56%	7.11%	3.53%	4.31%			6.35%
3/1/2022	4374	1.83%	231.8	147.24	113.62	7.17%	5.37%	4.75%	7.40%	3.68%	4.47%			6.58%
4/1/2022	4530	2.33%	210.4	165.26	126.32	7.37%	5.00%	4.73%	5.99%	3.63%	4.51%			7.06%
5/1/2022	4132	2.89%	210.4	165.26	126.32	7.67%	5.23%	5.14%	6.52%	3.95%	4.89%			8.03%

Third-Party Risk Premium Estimates

Start of month	S&P 500	T.Bond Rate	Ten-year average CF	CF (Trailing 12 month)	Normalized CF	Expected growth rate	ERP (T12 m with sustainable payout)		ERP (Smoothed)	ERP (Normalized)	ERP (Net Cash Yield)	ERP (Covid Adjusted)	Expected Return
							ERP (T12m)	ERP (T12m)					
6/1/2022	4132	2.86%	210.4	165.26	126.32	7.30%	5.17%	5.07%	6.42%	3.89%	4.93%	7.93%	
7/1/2022	3785	3.02%	175.8	191.83	126.44	7.79%	5.69%	6.01%	5.90%	4.27%	5.66%	9.03%	
8/1/2022	4130	2.65%	175.8	191.83	126.44	7.07%	5.26%	5.42%	5.33%	3.85%	5.17%	8.07%	
9/1/2022	3955	3.19%	175.8	191.83	126.44	6.62%	5.10%	5.45%	5.35%	3.87%	5.18%	8.64%	
10/1/2022	3596	3.82%	166.5	183.60	126.10	6.72%	5.30%	6.21%	5.64%	4.28%	5.91%	10.03%	
11/1/2022	3872	4.05%	166.5	183.60	126.10	5.75%	4.59%	5.48%	4.97%	3.77%	5.23%	9.53%	
12/1/2022	4080	3.61%	166.5	183.60	126.10	5.66%	4.55%	5.26%	4.78%	3.62%	5.02%	8.87%	
1/1/2023	3840	3.88%	179.21	181.66	147.57	6.41%	5.11%	5.94%	5.85%	4.83%	5.68%	9.82%	
2/1/2023	4077	3.52%	179.21	181.66	147.57	5.92%	4.89%	5.54%	5.46%	4.50%	5.31%	9.06%	
3/1/2023	3970	3.92%	179.21	181.66	147.57	5.74%	4.78%	5.58%	5.50%	4.53%	5.34%	9.50%	
4/1/2023	4109	3.47%	187.83	176.45	152.70	5.73%	4.88%	5.44%	5.72%	4.64%	5.19%	8.91%	
5/1/2023	4169	3.42%	187.83	176.45	152.70	5.42%	4.77%	5.30%	5.57%	4.52%	5.09%	8.72%	
6/1/2023	4180	3.64%	187.83	176.45	152.70	5.43%	4.65%	5.25%	5.52%	4.48%	5.03%	8.89%	
7/1/2023	4450	3.81%	203.42	171.87	152.36	7.08%	4.59%	5.00%	5.90%	4.44%	4.78%	8.81%	
8/1/2023	4589	3.97%	203.42	171.87	152.36	7.11%	4.38%	4.83%	5.70%	4.29%	4.62%	8.80%	
9/1/2023	4508	4.11%	203.42	171.87	152.36	7.14%	4.40%	4.90%	5.79%	4.35%	4.67%	9.01%	
10/1/2023	4288	4.58%	196.00	166.82	152.98	7.63%	4.47%	4.84%	5.68%	4.44%	4.61%	9.42%	
11/1/2023	4194	4.93%	196.00	166.82	152.98	7.58%	4.39%	4.88%	5.72%	4.48%	4.69%	9.81%	
1-Dec-23	4568	4.33%	196.00	166.82	152.98	7.32%	4.25%	4.53%	5.31%	4.15%	4.31%	8.86%	
1-Jan-24	4770	3.88%	218.02	164.25	153.14	8.74%	4.57%	4.60%	6.07%	4.29%	4.43%	8.48%	
1-Feb-24	4846	3.94%	218.02	164.25	153.14	8.53%	4.45%	4.50%	5.95%	4.20%	4.31%	8.44%	
1-Mar-24	5096	4.27%	218.02	164.25	153.14	8.90%	4.18%	4.33%	5.72%	4.04%	4.14%	8.60%	
1-Apr-24	5254	4.21%	233.26	164.79	159.33	9.05%	4.13%	4.23%	5.95%	4.11%	4.03%	8.44%	
1-May-24	5036	4.69%	232.26	164.79	159.33	9.39%	4.15%	4.40%	6.19%	4.26%	4.23%	9.09%	
1-Jun-24	5278	4.38%	233.26	164.79	159.33	9.53%	4.12%	4.27%	6.01%	4.13%	4.06%	8.65%	
1-Jul-24	5460	4.36%	242.42	167.90	159.65	9.47%	3.98%	4.12%	5.90%	3.92%	3.92%	8.52%	
1-Aug-24	5522	4.09%	242.42	167.90	159.65	9.51%	4.06%	4.12%	5.91%	3.92%	3.96%	8.21%	
1-Sep-24	5648	3.90%	242.42	167.90	159.65	8.82%	4.05%	4.06%	5.83%	3.86%	3.87%	7.96%	
1-Oct-24	5762	3.81%	242.42	167.90	159.65	8.48%	3.96%	3.94%	5.98%	3.75%	3.76%	7.75%	
1-Nov-24	5705	4.28%	255.82	176.38	159.92	9.78%	4.06%	4.31%	6.22%	3.91%	4.19%	8.59%	
1-Dec-24	6032	4.18%	255.82	176.38	159.92	9.55%	3.85%	4.07%	5.87%	3.69%	3.89%	8.25%	
1-Jan-25	5882	4.58%	261.11	182.79	160.5	9.57%	4.00%	4.33%	6.15%	3.81%	4.15%	8.91%	
1-Feb-25	6041	4.54%	261.11	182.79	160.5	9.64%	3.95%	4.27%	6.06%	3.75%	4.06%	8.81%	

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
UG 519**

In the Matter of)
)
Avista Corporation, d/b/a Avista Utilities,)
)
Request for a General Rate Revision.)

**EXHIBIT 105 – CAPITAL ASSET PRICING MODEL ANALYSIS
TO THE
OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS**

March 4, 2024

<u>Risk Free Rate</u>		<u>Equity Risk Premium</u>		<u>Beta</u>	<u>Cost of</u>
<u>Source</u>	<u>Value</u>	<u>Source</u>	<u>Value</u>	<u>Range</u>	<u>Equity</u>
Actual	4.52	Kroll	5.50	0.560	7.60
Actual	4.52	Kroll	5.50	0.750	8.65
Actual	4.52	Kroll	5.50	0.900	9.45
Actual	4.52	NYU	3.95	0.560	6.75
Actual	4.52	NYU	3.95	0.750	7.50
Actual	4.52	NYU	3.95	0.900	8.05
Forecast	4.01	Kroll	5.50	0.560	7.10
Forecast	4.01	Kroll	5.50	0.750	8.15
Forecast	4.01	Kroll	5.50	0.900	8.95
Forecast	4.01	NYU	3.95	0.560	6.20
Forecast	4.01	NYU	3.95	0.750	6.95
Forecast	4.01	NYU	3.95	0.900	7.55
Average	4.27		4.73	0.737	7.75
				Recommended	9.20

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
UG 519**

In the Matter of)
)
Avista Corporation, d/b/a Avista Utilities,)
)
Request for a General Rate Revision.)

**EXHIBIT 106 – AWEC RATE SPREAD PROPOSAL
TO THE
OPENING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE
ALLIANCE OF WESTERN ENERGY CONSUMERS**

March 4, 2024

AWEC Revenue Increase by Schedule - Avista Rev. Req.
Oregon - Gas
Pro Forma 12 Months Ended December 31, 2024
(000s of Dollars)

Line No.	Type of Service	Schedule Number	Distribution Revenue Under Present Rates	LRIC	Target Increase	Apply Floor	Allocate Floor	Proposed GRC Increase	Distribution Revenue Under Proposed Rates	Therms (000s)	Customers	Distribution Revenue Percentage Increase	Billed Revenue Under Present Rates	Proposed GRC Increase	Billed Revenue Under Proposed Rates	Billed Revenue Percentage Increase	Customer Tax Credit Amort.	Net Increase w/Amort	Net % Incr. After Amort
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)
1	Single-Family Residenti	410	\$51,786	13.2%	\$6,821		-\$1,596	\$5,225	\$57,011	51,600	90,809	10.1%	\$70,502	\$5,225	\$75,727	7.4%	(\$2,835)	\$2,390	3.39%
2	Multi-Family Residential	411	\$2,555	-22.3%	-\$569	\$441		-\$128	\$2,732	2,620	4,687	-5.0%	\$3,506	(\$128)	\$3,378	-3.6%	(\$143)	(\$270)	-7.71%
3	General Service	420	\$24,570	12.9%	\$3,181		-\$211	\$2,970	\$27,067	30,135	11,996	12.1%	\$34,798	\$2,970	\$37,768	8.5%	(\$931)	\$2,039	5.86%
4	Large General Service	424	\$842	0.4%	\$4		-\$2	\$2	\$920	5,439	99	0.2%	\$2,495	\$2	\$2,497	0.1%	(\$28)	(\$26)	-1.04%
5	Interruptible Service	440	\$2,369	-38.9%	-\$921	\$803		-\$118	\$2,478	20,101	46	-5.0%	\$4,589	(\$118)	\$4,471	-2.6%	(\$75)	(\$193)	-4.22%
6	Seasonal Service	444	\$31	-20.1%	-\$6	\$5		-\$2	\$33	175	6	-5.0%	\$84	(\$2)	\$82	-1.8%	(\$1)	(\$3)	-3.05%
7	Transportation Service	456	\$2,550	-27.0%	-\$688	\$560		-\$128	\$2,726	29,838	30	-5.0%	\$2,532	(\$128)	\$2,404	-5.0%	(\$81)	(\$208)	-8.22%
8	Total		\$84,703	9.2%	\$7,822	\$1,809	(\$1,809)	\$7,822	\$92,967	139,908	107,673	9.2%	\$118,505	\$7,822	\$126,327	6.6%	(\$4,093)	\$3,729	3.15%

AWEC Revenue Increase by Schedule -AWEC Rev. Req.
Oregon - Gas
Pro Forma 12 Months Ended December 31, 2024
(000s of Dollars)

Line No.	Type of Service	Schedule Number	Distribution Revenue Under Present Rates	LRIC	Target Increase	Apply Floor	Allocate Floor	Proposed GRC Increase	Distribution Revenue Under Proposed Rates	Therms (000s)	Customers	Distribution Revenue Percentage Increase	Billed Revenue Under Present Rates	Proposed GRC Increase	Billed Revenue Under Proposed Rates	Billed Revenue Percentage Increase	Customer Tax Credit Amort.	Net Increase w/Amort	Net % Incr. After Amort
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
1	Single-Family Residenti	410	\$51,786	6.5%	\$3,345		-\$2,041	\$1,304	\$53,090	51,600	90,809	2.5%	\$70,502	\$1,304	\$71,806	1.8%	(\$2,835)	(\$1,531)	-2.17%
2	Multi-Family Residential	411	\$2,555	-29.0%	-\$741	\$613		-\$128	\$2,732	2,620	4,687	-5.0%	\$3,506	(\$128)	\$3,378	-3.6%	(\$143)	(\$270)	-7.71%
3	General Service	420	\$24,570	6.2%	\$1,532		-\$270	\$1,262	\$27,067	30,135	11,996	5.1%	\$34,798	\$1,262	\$36,060	3.6%	(\$931)	\$331	0.95%
4	Large General Service	424	\$842	-6.3%	-\$53		-\$2	-\$55	\$920	5,439	99	-6.5%	\$2,495	(\$55)	\$2,440	-2.2%	(\$28)	(\$83)	-3.32%
5	Interruptible Service	440	\$2,369	-45.6%	-\$1,080	\$962		-\$118	\$2,478	20,101	46	-5.0%	\$4,589	(\$118)	\$4,471	-2.6%	(\$75)	(\$193)	-4.22%
6	Seasonal Service	444	\$31	-26.8%	-\$8	\$7		-\$2	\$33	175	6	-5.0%	\$84	(\$2)	\$82	-1.8%	(\$1)	(\$3)	-3.05%
7	Transportation Service	456	\$2,550	-33.7%	-\$859	\$731		-\$128	\$2,726	29,838	30	-5.0%	\$2,532	(\$128)	\$2,404	-5.0%	(\$81)	(\$208)	-8.22%
8	Total		\$84,703	2.5%	2,136	\$2,313	(\$2,313)	\$2,136	\$89,046	139,908	107,673	9.2%	\$118,505	\$2,136	\$120,641	1.8%	(\$4,093)	(\$1,957)	-1.65%