BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION, d/b/a AVISTA UTILITIES

Respondent.

DOCKETS UE-240006 & UG-240007 (Consolidated)

CROSS-EXAMINATION EXHIBIT OF ADRIEN M. MCKENZIE ON BEHALF OF THE WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL PUBLIC COUNSEL UNIT

AMM-__X

Direct Testimony of Adrien M. McKenzie, Exh AMM-1T, Wash. Utils. & Transp. Comm'n v. Avista Corp. Docket UE-220053 (Jan. 25, 2024)

September 16, 2024

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-22_____

DOCKET NO. UG-22_____

DIRECT TESTIMONY OF

ADRIEN M. MCKENZIE, CFA

REPRESENTING AVISTA CORPORATION

DIRECT TESTIMONY OF ADRIEN M. MCKENZIE

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1		I. <u>INTRODUCTION</u>
2	Q.	Please state your name and business address.
3	А.	Adrien M. McKenzie, 3907 Red River, Austin, Texas, 78751.
4	Q.	In what capacity are you employed?
5	А.	I am President of Financial Concepts and Applications, Inc. ("FINCAP"),
6	Inc., a firm p	providing financial, economic, and policy consulting services to business and
7	government.	
8	Q.	Please describe your educational background and professional
9	experience.	
10	А.	A description of my background and qualifications, including a resume
11	containing the	e details of my experience, is attached as Exh. AMM-2.
12		A. <u>Overview</u>
13	Q.	What is the purpose of your testimony in this case?
14	А.	The purpose of my testimony is to present to the Washington Utilities and
15	Transportatio	n Commission (the "Commission" or "WUTC") my independent evaluation of
16	the fair rate of	of return on equity ("ROE") for the jurisdictional electric and natural gas utility
17	operations of	Avista Corp. ("Avista" or "the Company"). In addition, I also examine the
18	reasonablenes	ss of Avista's capital structure, considering both the specific risks faced by the
19	Company and	d other industry guidelines.

- 1
- 2

Q. Please summarize the information and materials you rely on to support the opinions and conclusions contained in your testimony.

3 To prepare my testimony, I use information from a variety of sources that A. 4 would normally be relied upon by a person in my capacity. I am familiar with the 5 organization, finances, and operations of Avista from my participation in prior proceedings 6 before the WUTC, the Idaho Public Utilities Commission, and the Oregon Public Utility 7 Commission. In connection with the present filing, I consider and rely upon corporate 8 disclosures, publicly available financial reports and filings, and other published information 9 relating to Avista. I have also visited the Company's main offices and had discussions with 10 management in order to better familiarize myself with Avista's utility operations. My 11 evaluation also relies upon information relating to current capital market conditions and 12 specifically to current investor perceptions, requirements, and expectations for electric and 13 natural gas utilities. These sources, coupled with my experience in the fields of finance and 14 utility regulation, have given me a working knowledge of the issues relevant to investors' 15 required return for Avista, and they form the basis of my analyses and conclusions.

16

Q.

How is your testimony organized?

17 A. After first summarizing my conclusions and recommendations, my testimony 18 reviews the operations and finances of Avista and industry-specific risks and capital market 19 uncertainties perceived by investors. With this as a background, I present the application of 20 well-accepted quantitative analyses to estimate the current cost of equity for a reference 21 group of comparable-risk utilities ("Utility Group"). These include the discounted cash flow 22 ("DCF") model, the Capital Asset Pricing Model ("CAPM"), the empirical form of the 23 CAPM ("ECAPM"), an equity risk premium approach based on allowed ROEs for electric

utilities, and reference to expected rates of return for electric utilities, which are all methods
that are commonly relied on in regulatory proceedings. Based on the cost of equity
estimates indicated by my analyses, the Company's ROE is evaluated taking into account
the specific risks and potential challenges for Avista's utility operations in Washington, as
well as flotation costs, which are properly considered in setting a fair ROE for the Company.

In addition, I corroborate my utility quantitative analyses by applying the DCF
model to a group of low risk non-utility firms. Finally, my testimony addresses the impact
of regulatory mechanisms, including the implications of the Company's proposed multi-year
rate plan ("MYRP"), on an evaluation of a fair ROE for Avista.

10

Q. What is the role of the ROE in setting a utility's rates?

A. The ROE is the cost of attracting and retaining common equity investment in the utility's physical plant and assets. This investment is necessary to finance the asset base needed to provide utility service. Investors commit capital only if they expect to earn a return on their investment commensurate with returns available from alternative investments with comparable risks. Moreover, a fair and reasonable ROE is integral in meeting sound regulatory economics and the standards set forth by the U.S. Supreme Court. The *Bluefield*¹ case set the standard against which just and reasonable rates are measured:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties. . . . The return should be reasonable, sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management,

¹ Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n, 262 U.S. 679 (1923). ("Bluefield")

- 1 to maintain and support its credit and enable it to raise money necessary for the proper discharge of its public duties.² 2
- 3 The *Hope*³ case expanded on the guidelines as to a reasonable ROE, reemphasizing
- 4 its findings in *Bluefield* and establishing that the rate-setting process must produce an end-
- 5 result that allows the utility a reasonable opportunity to cover its capital costs. The Court
- 6 stated:

7 From the investor or company point of view it is important that there be 8 enough revenue not only for operating expenses but also for the capital costs 9 of the business. These include service on the debt and dividends on the stock. 10 ... By that standard, the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. 11 That return, moreover, should be sufficient to assure confidence in the 12 financial integrity of the enterprise, so as to maintain credit and attract 13 14 capital.⁴

- 15 In summary, the Supreme Court's findings in Hope and Bluefield established that a just and
- 16 reasonable ROE must be sufficient to: 1) fairly compensate the utility's investors, 2) enable
- 17 the utility to offer a return adequate to attract new capital on reasonable terms, and 3)
- 18 maintain the utility's financial integrity. These standards should allow the utility to fulfill its
- 19 obligation to provide reliable service while meeting the needs of customers through

- 20 necessary system replacement and expansion, but they can only be met if the utility has a
- 21 reasonable opportunity to actually earn its allowed ROE.
- 22 While the Hope and Bluefield decisions did not establish a particular method to be followed in fixing rates (or in determining the allowed ROE),⁵ these and subsequent cases 23 enshrined the importance of an end result that meets the opportunity cost standard of
- 24

⁴ *Id*.

 2 Id.

³ Federal Power Comm'n v. Hope Natural Gas Co. (320 U.S. 391, 1944). ("Hope")

⁵ Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. at 602 (1944) (finding, "the Commission was not bound to the use of any single formula or combination of formulae in determining rates." and, "[I]t is not theory but the impact of the rate order which counts.")

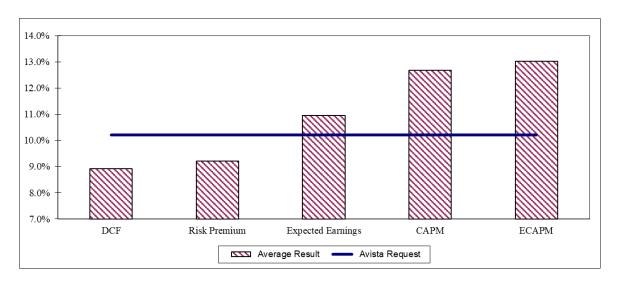
1 finance. Under this doctrine, the required return is established by investors in the capital 2 markets based on expected returns available from comparable risk investments. Coupled 3 with modern financial theory, which has led to the development of formal risk-return models 4 (e.g., DCF and CAPM), practical application of the *Bluefield* and *Hope* standards involves 5 the independent, case-by-case consideration of capital market data in order to evaluate an 6 ROE that will produce a balanced and fair end result for investors and customer 7 **B.** Summary of Conclusions 8 0. Please summarize the results of your analyses. 9 In order to reflect the risks and prospects associated with Avista's A. 10 jurisdictional utility operations, my analyses focus on a proxy group of 16 utilities with 11 comparable investment risks. Because investors' required return on equity is unobservable 12 and no single method should be viewed in isolation, I apply the DCF, CAPM, ECAPM, and 13 risk premium methods to estimate a fair ROE for Avista, as well as referencing the expected 14 earnings approach. The results of my analyses are presented on Exh. AMM-4. 15 **Q**. What are your findings regarding a fair ROE for Avista? 16 Based on the results of my analyses and the economic requirements necessary A. 17 to support continuous access to capital under reasonable terms, I recommend a 10.25 percent

18 ROE for Avista. The bases for my conclusion are summarized below:

1 2 3 4	• Based on the results of my analyses shown on Exh. AMM-4, and giving less weight to extremes at the high and low ends of the range, I conclude that the cost of equity for the proxy group of utilities is in the 9.5 percent to 10.9 percent range.
5 6	• I recommend a cost of equity of 10.2 percent , which falls at the midpoint of this range.
7 8 9	• Based on an accounting of the issuance costs specific to Avista's historical sales of common stock, my testimony supports a flotation cost adjustment of 5 basis points.
10 11	• After making a flotation cost adjustment, my recommended ROE is 10.25 percent .
12 13 14 15	• Considering capital market expectations, the exposures faced by Avista, and the economic requirements necessary to maintain financial integrity and support additional capital investment even under adverse circumstances, it is my opinion that 10.25 percent represents a reasonable ROE for Avista.
16	Figure 1, below, summarizes the cost of equity estimates produced by my alternative
17	analyses and compares them with my 10.25 percent ROE recommendation:

 18
 FIGURE 1

 19
 RESULTS OF ANALYSES VS. ROE RECOMMENDATION



20

- Q. What other evidence do you consider in evaluating your ROE
- 21 recommendation in this case?

22

A. My recommendation is reinforced by the following findings:

- 1 The reasonableness of a 10.25 percent ROE for Avista is supported by the need to consider the challenges to the Company's credit standing: 2 3 The pressure of funding significant capital expenditures of approximately \$445 million per year through 2026 heighten the uncertainties associated 4 5 with Avista, especially given that the Company's existing rate base is 6 approximately \$3.8 billion. 7 • As demonstrated in Mr. Kalich's testimony based on data for 2021, Avista's reliance on hydroelectric generation and increasing dependence on 8 9 natural gas fueled capacity exposes the Company to relatively greater risks 10 of power cost volatility, even with the Energy Recovery Mechanism ("ERM"). 11
 - Avista's opportunity to actually earn a fair ROE and mitigate exposure to earnings attrition is an important objective.
 - My conclusion that a 10.25 percent ROE for Avista is a reasonable estimate of investors' required return is also reinforced by the greater uncertainties associated with Avista's relatively small size.
- Investors recognize that constructive regulation is a key ingredient in supporting utility credit standing and financial integrity and providing Avista with the opportunity to earn a return that adequately reflects its risks is an essential ingredient to support the Company's financial position, which ultimately benefits customers by ensuring reliable service at lower long-run costs.
- Continued support for Avista's financial integrity, including the opportunity to actually earn a reasonable ROE, is imperative to ensure that the Company has the capability to maintain and build its credit standing while confronting potential challenges associated with funding infrastructure development necessary to meet the needs of its customers.
- As my testimony documents, the electric utilities in my proxy group operate under a wide variety of regulatory mechanisms, including decoupling and infrastructure cost trackers. Similarly, the vast majority of these proxy firms operate in regulatory jurisdictions that allow for future test years, formula rates, and MYRPs. As a result, there is no basis to distinguish Avista from the proxy group used as the basis of my analyses.
- Finally, by proposing a two-year rate plan, the Company is at increased risk of an earnings shortfall if the underlying assumptions are not realized, or the allowed ROE fails to reflect capital market requirements over the duration of the MYRP.
- 36 These findings indicate that the 10.25 percent ROE requested by Avista is reasonable and
- 37 should be approved.

12

13

14

15 16 1

Q. What else is relevant in weighing your quantitative results?

A. As my testimony documents, no single methodology used to estimate the cost of equity is inherently superior, and the results of alternative quantitative approaches should serve as an integral part of the decision-making underlying the determination of a just and reasonable ROE. In this light, it is important to consider alternatives to the DCF model. As shown in Figure 1, alternative risk premium models (i.e., the CAPM and utility risk premium approaches) produce ROE estimates that generally exceed the DCF results. My expected earnings approach corroborated these outcomes.

9

10

Q. What do the DCF results for your select group of non-utility firms indicate with respect to your evaluation?

A. Average DCF estimates for a low-risk group of firms in the competitive sector of the economy range from 10.2 percent to 10.8 percent, and average 10.4 percent. These results confirm that a 10.25 percent ROE is reasonable to maintain Avista's financial integrity, provide a return commensurate with investments of comparable risk, and support the Company's ability to attract capital.

16

17

Q. What other factors should be considered in evaluating the ROE requested by Avista in this case?

A. Apart from the results of the quantitative methods summarized above, it is crucial to recognize the importance of supporting the Company's financial position so that Avista remains prepared to respond to unforeseen events that may materialize in the future. Past erosion in Avista's credit standing highlights the imperative of continuing to build the Company's financial strength in order to attract the capital needed to maintain reliable

service at a reasonable cost for customers.⁶ The reasonableness of the Company's requested
 ROE is further reinforced by the operating risks associated with Avista's reliance on
 hydroelectric generation and the higher uncertainties associated with Avista's relatively
 small size. The risks to Avista's investors are accentuated in the context of the two-year
 MYRP.

6

7

Q. Does an ROE of 10.25 percent represent a reasonable cost for Avista's customers to pay?

8 A. Investors make investment capital available to Avista only if the Yes. 9 expected returns justify the risk. Customers will enjoy reliable and efficient service so long 10 as investors are willing to make the capital investments necessary to maintain and improve 11 Avista's utility system. Providing an adequate return to investors is a necessary cost to 12 ensure that capital is available to Avista now and in the future. If regulatory decisions 13 increase risk or limit returns to levels that are insufficient to justify the risk, investors will 14 look elsewhere to invest capital.

15

Q. What other factors support the need for a higher ROE than is currently

16 **approved for the Company?**

A.

17

- Each of the following considerations indicate that Avista's current ROE is
- 18 insufficient:
- 19 20

• Uncertainty regarding the course of inflation has become magnified, which heightens concerns over future cost pressure for the Company.

⁶ Moody's downgraded Avista from Baa1 to Baa3 in December 2018. Moody's Investors Service, *Moody's downgrades Avista Corp. to Baa2, outlook stable*, Rating Action (Dec. 20, 2018). More recently, S&P concluded that "there is minimal cushion between Avista's financial measures and the ratings downside trigger ..." S&P Global Ratings, *Avista Corp.*, RatingsDirect (Aug. 5, 2021)

1 2	• As discussed in the testimony of Mr. Everitt, COVID-19 has negatively impacted workplace efficiency and employee retention and recruitment.
3 4	• As discussed in the testimony of Dr. Forsyth, supply chain disruptions also increase uncertainty over input prices in the utility sector.
5 6 7	• My testimony documents (<i>e.g.</i> , Figures 7 and 8) that expectations for tightening monetary policies and higher interest rates support an increase in the Company's allowed ROE, particularly in light of the two-year horizon of the MYRP.
8 9 10	• Avista's market capitalization makes it one of the smallest investor-owned utilities (see Figure 3), which heightens the need to support capital attraction relative to its much larger counterparts in the industry.
11 12	• In the midst of the foregoing, Avista will be required to refund a substantial portion of its outstanding long-term debt.
13 14	• As documented in the testimony of Mr. Everitt, pressures on wage and salary expectations continue to increase.
15	In addition, my testimony documents that objective measures of investment risk for
16	Avista support a higher ROE relative to others in the industry:
17 18	• More than its peers, Avista has seen a dramatic increase in its beta value since 2020.
19 20	• The Company's existing credit ratings are sub-par for the industry and an insufficient ROE would further undermine Avista's credit standing.
21	Because Avista will have to shoulder these risks over the course of a two-year rate plan,
22	there is little margin for error based on changed circumstances. All of these considerations
23	warrant an increase from the 9.4 percent ROE currently authorized for Avista.
24	Q. What is your conclusion as to the reasonableness of the Company's
25	capital structure?
26	A. Based on my evaluation, I conclude that a common equity ratio of 48.5
27	percent represents a reasonable basis from which to calculate Avista's overall rate of return.
28	This conclusion is based on the following findings:

1 2 3 4	• Avista's requested capitalization is consistent with the Company's need to support its credit standing and financial flexibility as it seeks to raise additional capital to fund significant system investments, refinance maturing debt obligations, and meet the requirements of its service territory.
5 6 7 8	• Avista's proposed common equity ratio is consistent with the range of capitalizations for the proxy utilities and their utility operating subsidiaries, both for the most recent fiscal year-end available and based on near-term expectations of The Value Line Investment Survey ("Value Line").
9 10 11 12	• The requested capitalization reflects the importance of an adequate equity layer to accommodate Avista's operating risks and recognize the impact of off-balance sheet commitments such as purchased power agreements, which carry with them some level of imputed debt.
13	II. <u>RISKS OF AVISTA</u>
14	Q. What is the purpose of this section?
15	A. As a predicate to my capital market analyses, this section examines the
16	investment risks that investors consider in evaluating their required rate of return for Avista.
17	A. Operating Risks
18	Q. How does Avista's generating resource mix affect investors' risk
19	perceptions?
20	A. Because approximately 49 percent of Avista's total energy requirements are
21	provided by hydroelectric facilities,7 the Company is exposed to a level of uncertainty not
22	faced by most utilities. While hydropower confers advantages in terms of fuel cost savings
23	and diversity, reduced hydroelectric generation due to below-average water conditions
24	forces Avista to rely more heavily on wholesale power markets or more costly thermal
25	generating capacity to meet its resource needs. As S&P Global Ratings (formerly Standard
26	& Poor's Corporation) ("S&P") has observed:

⁷ Avista Corp. SEC Form 10-K for fiscal year ended Dec. 31, 2020 at 8.

A reduction in hydro generation typically increases an electric utility's costs by requiring it to buy replacement power or run more expensive generation to serve customer loads. Low hydro generation can also reduce utilities' opportunity to make off-system sales. At the same time, low hydro years increase regional wholesale power prices, creating potentially a double impact – companies have to buy more power than under normal conditions, paying higher prices.⁸

8 Similarly, Moody's Investors Service ("Moody's") concluded that, "Avista's high 9 dependency on hydro resources (approximately 50% of its production comes from hydro 10 fueled electric generation resources) is viewed as a supply concentration risk which also 11 lends to the potential for metric volatility, especially since hydro levels, due to weather, is a 12 factor outside of management's control."⁹ More recently, S&P reiterated that a key risk for 13 the Company is its "heavy dependence on hydroelectric generation, which introduces some 14 fuel replacement risk."¹⁰

15 Investors recognize that volatile energy markets, unpredictable stream flows, and 16 Avista's reliance on wholesale purchases to meet a significant portion of its resource needs 17 can expose the Company to the risk of reduced cash flows and unrecovered power supply 18 costs. Avista's reliance on purchased power to meet shortfalls in hydroelectric generation 19 magnifies the importance of strengthening financial flexibility, which is essential to 20 guarantee access to the cash resources and interim financing required to cover inadequate 21 operating cash flows. The significance of Avista's financial strength is further enhanced by 22 the WUTC's instruction to avoid adjustments to the power cost baseline absent

⁸ Standard & Poor's Corporation, *Pacific Northwest Hydrology And Its Impact On Investor-Owned Utilities' Credit Quality*, RatingsDirect (Jan. 28, 2008).

⁹ Moody's Investors Service, *Credit Opinion: Avista Corp.*, Global Credit Research (Mar. 17, 2011).

¹⁰ S&P Global Ratings, Avista Corp., RatingsDirect (May 29, 2020).

- "extraordinary circumstances," which heightens the Company's exposure to deferred energy 2 costs and reduced cash flows.¹¹
 - 3

4

1

How has global warming impacted investors' assessment of Avista's risk 0. exposure?

5 The risk posed by climate-related weather events has served to magnify A. 6 concerns over Avista's exposure to below-average water conditions. S&P concluded that 7 "water-intensive assets like power plants [are] especially vulnerable in the absence of adaptation," and concluded that "water stress is also a serious threat" for Avista.¹² In 8 9 addition, rising temperatures and reduced rainfall have led to increasing exposure to 10 wildfires, particularly for utilities in the western U.S. In this regard, S&P classifies Avista as one of the top 10 utilities with the highest average exposure to wildfires.¹³ While noting that 11 12 the risks of such events are generally manageable under recovery mechanisms that allow 13 related costs to be recuperated, S&P also observed that:

- 14 In the most extreme events, including those of late, utility companies' 15 exposure to acute and chronic climate risks can damage assets or disrupt supplies, which can weaken their financial position and ultimately credit 16 quality.14 17
- 18

Do financial pressures associated with Avista's planned capital 0.

- 19 expenditures also impact investors' risk assessment?
- 20

A. Yes. Avista will require capital investment to meet customer growth, provide

21 for necessary maintenance and replacements of its natural gas utility systems, as well as

¹¹ Dockets UE-170485 and UG-170486 (consolidated), Order 07 at para. 160.

¹² S&P Global Ratings, Keeping The Lights On: U.S. Utilities' Exposure To Physical Climate Risks,

RatingsDirect (Sep. 16, 2021).

 $^{^{13}}$ Id.

 $^{^{14}}$ Id.

fund new investment in electric generation, transmission and distribution facilities and increase wildfire resiliency. As discussed in the testimony of Mr. Thies, Avista's capital additions are expected to total approximately \$445 million annually through 2026. This represents a substantial investment given Avista's current rate base of approximately \$3.8 billion. In addition, Avista must also fund debt maturities of approximately \$250 million in 2022.¹⁵

7 Continued support for Avista's financial integrity and flexibility will be instrumental 8 in attracting the capital necessary to fund these projects and debt repayments in an effective 9 manner. Investors are aware of the challenges posed by significant capital expenditure 10 requirements, especially in light of ongoing capital market and economic uncertainties. 11 Moody's has noted that, "The company's financial buffer will be limited over the next 12 several years" and that a key measure of cash flow sufficiency is expected to weaken "below our indicated financial metric threshold for a possible downgrade."¹⁶ 13 Similarly, S&P 14 concluded that "there is minimal cushion between Avista's financial measures and the ratings downside trigger . . . "¹⁷ 15

16

Q. Do utilities such as Avista continue to face environmental risks?

A. Yes. Environmental concerns are leading to a profound transformation in the electric utility industry. The generation segment is undergoing material changes in fuel mix, as natural gas and renewable sources increasingly supplant coal. Over the next decade, renewable sources are widely expected to account for a rising share of the electricity generated in the U.S., including a significant expansion in distributed generation, which will

¹⁵ Moody's Investors Service, Avista Corp., update to credit analysis, Credit Opinion (Aug. 10, 2021). ¹⁶ Id.

¹⁷ S&P Global Ratings, Avista Corp., RatingsDirect (Aug. 5, 2021).

1 accompany declining costs and increased efficiency of energy storage technologies. 2 Accommodating this effort to decarbonize generation will also require significant 3 investment to modernize the transmission grid. And while this disruption offers the potential 4 for growth through increased capital investment, it also conveys higher risks, such as the 5 potential for stranded costs. With respect to Avista, the Company is faced with achieving 6 100 percent clean electricity by 2045 and a carbon-neutral electricity supply by the end of 7 2027. S&P noted that the "environmental footprint is a significant risk factor." As S&P 8 explained, "[t]his reflects the potential for ongoing cost of operating fossil units in the face 9 of disruptive technology advances and the potential for changing environmental regulations that may require significant capital investments."¹⁸ 10 11 **B.** Regulatory Mechanisms 12 0. What regulatory mechanisms are applicable to Avista's electric utility 13 operations in Washington? 14 A. In addition to the ERM, Avista operates under revenue decoupling and the 15 WUTC has authorized the establishment of a regulatory asset account to capture and track COVID-19-related incremental costs and benefits and a balancing account for wildfire costs. 16 17 In addition, the Company is proposing to implement a MYRP in this proceeding. 18 **Q**. Did you consider the implications of these regulatory mechanisms in 19 **vour evaluation?** 20 A. Yes. Adjustment mechanisms, cost trackers, and future test years have been 21 increasingly prevalent in the utility industry in recent years, along with alternatives to

¹⁸ S&P Global Ratings, *Avista Corp. Ratings Affirmed; Off Watch Positive; Outlook Stable*, Research Update (Dec. 10, 2018).

1 traditional ratemaking such as formula rates and MYRPs. As summarized on Exh. AMM-5, 2 the companies in my Utility Group operate under a wide variety of cost adjustment mechanisms, which encompass revenue decoupling and adjustment clauses designed to 3 4 address rising capital investment outside of a traditional rate case and increasing costs of 5 environmental compliance measures, as well as riders to recover the cost of environmental 6 compliance measures, bad debt expenses, certain taxes and fees, post-retirement employee 7 benefit costs and transmission-related charges. RRA Regulatory Focus concluded in its 8 recent review of adjustment clauses that:

9 More recently and with greater frequency, commissions have approved 10 mechanisms that permit the costs associated with the construction of new 11 generation capacity or delivery infrastructure to be reflected in rates, 12 effectively including these items in rate base without a full rate case. In some 13 instances, these mechanisms may even provide the utilities a cash return on 14 construction work in progress.

15 ... [C]ertain types of adjustment clauses are more prevalent than others. For
 16 example, those that address electric and fuel and gas commodity charges are
 17 in place in all jurisdictions. Also, about two-thirds of all utilities have riders
 18 in place to recover costs related to energy efficiency programs, and roughly
 19 half of the utilities utilize some type of decoupling mechanism.¹⁹

With respect to formula rates and MYRPs, a report prepared for the DOE noted that "[MYRPs] are used in many states today to regulate utilities," and observed that seventeen states currently have approved MYPs for electric and gas utilities, including California, Florida, Georgia, New York, and Washington.²⁰ Meanwhile, formula rates have been used at FERC as the basis to establish rates for interstate electric transmission service for decades, with EEI reporting their adoption

¹⁹ S&P Global Market Intelligence, *Adjustment Clauses, A State-by-State Overview*, RRA Regulatory Focus (Nov. 12, 2019).

²⁰ U.S. Department of Energy, *State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities*, GRID Modernization Laboratory Consortium (Jul. 2017) at 2.3. See also, ScottMadden, *Innovative Ratemaking – Multiyear Rate Plans* (Feb. 2014).

in eight retail jurisdictions.²¹ As documented on Exh. AMM-5, the majority of firms 1 2 included in the Utility Group operate in states that have approved formula rates or 3 MYRPs for utilities under their jurisdiction.

4 Thus, while investors would consider Avista's regulatory mechanisms-5 including its proposed MYRP-to be supportive of the Company's financial 6 integrity, this does not provide a basis to distinguish the risks of Avista from the utilities in my proxy group.²² As discussed above, the two-year horizon of the 7 8 proposed MYRP carries its own set of risks, given the potential for actual experience 9 to deviate from the underlying assumptions of the plan.

- 10

C. Other Factors

11 0. Would investors consider the potential impact of Avista's exposure to 12 earnings shortfalls?

Yes. The deterioration of actual return below the allowed return that occurs 13 A. 14 when the relationships between revenues, costs, and rate base used to establish rates (e.g., 15 using a historical test year without adequate adjustments) do not reflect the actual costs 16 incurred to serve customers can lead to earnings shortfalls. Investors are concerned with 17 what they can expect in the future, not what they might expect in theory if a historical test 18 year were to repeat. To be fair to investors and to benefit customers, a regulated utility must 19 have a reasonable opportunity to actually earn a return that will maintain financial integrity,

²¹ Edison Electric Institute, Alternative Regulation for Emerging Utility Challenges: 2015 Update (Nov. 11, 2015).

²² This conclusion is reinforced by the history of deferred power cost balances and rate lag associated with the ERM, which disadvantages Avista relative to other utilities. See, e.g., S&P Global Ratings, Avista Corp. Ratings Affirmed: Off Watch Positive: Outlook Stable, Research Update (Dec. 10, 2018) (noting that Avista is "somewhat exposed to potential excess power costs, typically tied to an earnings sharing mechanism in Washington.").

facilitate capital attraction, and compensate for risk. In other words, it is the end result in
 the future that determines whether or not the *Hope* and *Bluefield* standards are met.

Ratemaking practices that allow the utility an opportunity to actually earn its authorized ROE are consistent with fundamental regulatory principles. The Supreme Court has reaffirmed that the end result test must be applied to the actual returns that investors expect if they put their money at risk to finance utilities.²³ That end result would maintain the utility's financial integrity, ability to attract capital and offer investors fair compensation for the risk they bear. S&P notes that a key risk to the Company is "minimal cushion at the current rating level" and that "we expect regulatory lag to persist until 2023."²⁴

10 Q. Has Avista experienced attrition with respect to its Washington 11 operations?

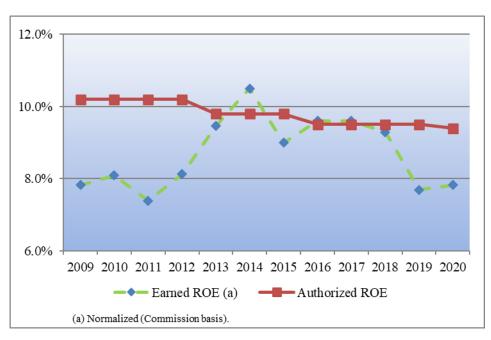
A. Yes. Regulatory lag and attrition have been consistent issues for Avista. Figure 2 below compares the Company's actual earned ROE attributable to its Washingtoniurisdictional utility operations with its authorized ROE over the 2009-2020 period:²⁵

²³ Verizon Communications, et al v. Federal Communications Commission, et al, 535 U.S. 467 (2002).

²⁴ S&P Global Ratings, Avista Corp., RatingsDirect (May 29, 2020).

²⁵ Actual ROE presented on a normalized basis, which primarily reflects the impact of the benefit/cost associated with the ERM deadband.

FIGURE 2 ACTUAL VS. AUTHORIZED ROE



3	As shown above, Avista's earned ROE has fallen below its authorized ROE in nine
4	of the past eleven years, in many cases by a substantial margin, ²⁶ especially without the
5	means to address regulatory lag since 2018. As Value Line reported to investors:
6	The company's utilities, as a group, are not earning an adequate
7	ROE. This is most critical in Washington, which comprised 62% of Avista
8	Utilities' rate base as of year-end 2020. ²⁷
9	The credit rating agencies have also recognized the negative implications of attrition for the
10	Company. Moody's noted that, "Because of historical test year requirements, Avista
11	experiences cash flow lag,"28 while S&P reported the prospect of "continued regulatory
12	lag." ²⁹

²⁶ In the three years in which the Company's actual ROE was equal to or greater than the authorized ROE,

²⁷ Value Line Investment Survey, Avista Corp. (Apr. 23, 2021) (emphasis original).

²⁸ Moody's Investors Service, Avista Corp., update to credit analysis, Credit Opinion (Aug. 10, 2021).

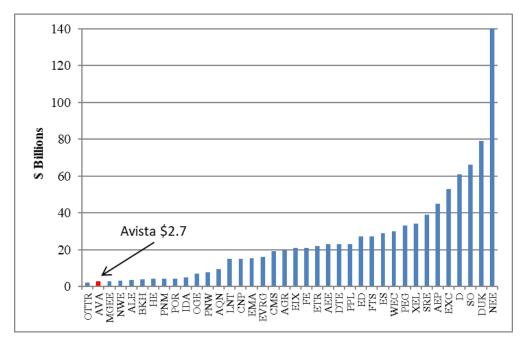
²⁹ S&P Global Ratings, Avista Corp., RatingsDirect (Aug. 5, 2021).

Q. Would investors consider Avista's relative size in their assessment of the Company's risks and prospects?

A. Yes. A firm's relative size has important implications for investors in their evaluation of alternative investments, and it is well established that smaller firms are more risky than larger firms. Avista's market capitalization is compared with the publicly traded electric utilities followed be Value Line in the following figure:³⁰

7 8

FIGURE 3 COMPARISON OF MARKET CAPITALIZATION



9 As shown above, within this universe of publicly traded utilities, there is only one other firm

10 smaller than Avista.

11

The magnitude of the size disparity between Avista and other firms in the utility

12 industry has important practical implications with respect to the risks faced by investors. All

³⁰ This comparison includes Algonquin Power and Utilities, Inc. and Emera, Inc. As discussed in Exh. AMM-3, both of these companies would be regarded as electric utilities by investors.

else being equal, it is well accepted that smaller firms are more risky than their larger counterparts, due in part to their relative lack of diversification and lower financial resiliency.³¹ These greater risks imply a higher required rate of return, and there is ample empirical evidence that investors in smaller firms realize higher rates of return than in larger firms.³² Accepted financial doctrine holds that investors require higher returns from smaller companies, and unless that compensation is provided in the rate of return allowed for a utility, the legal tests embodied in the *Hope* and *Bluefield* cases cannot be met.

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D. <u>Support for Avista's Credit Standing</u>

Q. What credit ratings have been assigned to Avista?

10 A. S&P has assigned Avista a corporate credit rating of "BBB", while Moody's
11 has set Avista's Issuer Rating at "Baa2".

Q. What considerations impact investors' assessment of the firms in the utility industry?

A. Numerous factors have the potential to impact investors' perceptions of the relative risks inherent in the utility industry and have implications for the financial standing of the utilities themselves. These include the possibility of volatile fuel or purchased power costs, uncertain environmental mandates and associated costs, the implications of declining demand associated with economic weakness (related to the ongoing COVID-19 pandemic, for instance) or structural changes in usage patterns, pressures associated with mandates

³¹ It is well established in the financial literature that smaller firms are more risky than larger firms. *See, e.g.*, Eugene F. Fama and Kenneth R. French, *The Cross-Section of Expected Stock Returns*, Journal of Finance (June 1992); George E. Pinches, J. Clay Singleton, and Ali Jahankhani, *Fixed Coverage as a Determinant of Electric Utility Bond Ratings*, Financial Management (Summer 1978).

³² See for example Rolf W. Banz, *The Relationship Between Return and Market Value of Common Stocks*, Journal of Financial Economics (September 1981) at 16.

concerning renewable resources, and increased reliance on distributed generation or other
 alternatives to the incumbent utility. Apart from these considerations, utilities may face
 increasing costs of operating their systems, as well as the financial pressures associated with
 large capital expenditure programs, which are magnified during periods of turmoil in capital
 markets.

6

7

Q. What are the implications for Avista, given the potential for further dislocations in the capital markets?

8 A. The pressures of significant capital expenditure requirements, along with the 9 need to refinance maturing long-term debt obligations, reinforce the importance of 10 supporting improvement in Avista's credit standing. Mr. Thies discusses the need for the 11 Company to refinance \$263.5 million of long-term bonds between now and 2024, which 12 equates to approximately 12 percent of all outstanding long-term debt. Investors understand 13 from past experience in the utility industry that large capital needs can lead to significant 14 deterioration in financial integrity that can constrain access to capital, especially during 15 times of unfavorable capital market conditions. Considering the potential for financial 16 market instability, competition with other investment alternatives, and investors' sensitivity 17 to the potential for market volatility, greater credit strength is a key ingredient in maintaining 18 access to capital at reasonable cost. As Mr. Thies confirms in his testimony, ongoing 19 regulatory support will be a key driver in maintaining and enhancing Avista's financial 20 health.

1 Q. Throughout your testimony you refer repeatedly to the concepts of 2 "financial strength," "financial integrity," and "financial flexibility." Would you 3 briefly describe what you mean by these terms?

A. These terms are generally synonymous and refer to the utility's ability to attract and retain the capital that is necessary to provide service at reasonable cost, consistent with the Supreme Court standards. Avista's plans call for a continuation of capital investments to preserve and enhance service reliability for its customers. The Company must generate adequate cash flow from operations to fund these requirements and for repayment of maturing debt, together with access to capital from external sources under reasonable terms, on a sustainable basis.

11 Rating agencies and potential debt investors tend to place significant emphasis on 12 maintaining strong financial metrics and credit ratings that support access to debt capital 13 markets under reasonable terms. This emphasis on financial metrics and credit ratings is 14 shared by equity investors who also focus on cash flows, capital structure and liquidity, 15 Investors understand the important role that a supportive much like debt investors. 16 regulatory environment plays in establishing a sound financial profile that will permit the 17 utility access to debt and equity capital markets on reasonable terms in both favorable 18 financial markets and during times of potential disruption and crisis.

19

20

Q. What role does regulation play in ensuring that Avista has access to capital under reasonable terms and on a sustainable basis?

A. Regulatory signals are a major driver of investors' risk assessment for utilities. Investors recognize that constructive regulation is a key ingredient in supporting utility credit ratings and financial integrity, particularly during times of adverse conditions.

1 As Moody's noted, "the regulatory environment is the most important driver of our outlook 2 because it sets the pace for cost recovery,"³³ Similarly, S&P observed that, "Regulatory 3 advantage is the most heavily weighted factor when S&P Global Ratings analyzes a regulated utility's business risk profile."³⁴ Value Line summarizes these sentiments: 4 5 As we often point out, the most important factor in any utility's success, whether it provides electricity, gas, or water, is the regulatory climate in 6 which it operates. Harsh regulatory conditions can make it nearly impossible 7 for the best run utilities to earn a reasonable return on their investment.³⁵ 8 9 **Q**. Is Avista's ability to achieve supportive regulatory outcomes in 10 Washington an ongoing concern for investors? 11 A. Yes. Investors are keenly aware of regulatory actions and their implications 12 for the risks they face. For example, while recognizing that the signing of SB 5295 in May 13 2021, which paves the way for MYRPs and performance-based ratemaking, could have 14 positive implications for Washington's investor-owned utilities, investors also recognize that 15 the ultimate impact of these measures is uncertain. Moody's concluded that "the extent to 16 which the new law will enhance the Washington regulatory framework and improve utility 17 financial performance is subject to WUTC decisions, which have been historically inconsistent."³⁶ With respect to the Company specifically, Moody's noted that "improved 18 19 regulatory and financial outcomes [for Avista] remain subject to the bill's implementation by

³³ Moody's Investors Service, *Regulation Will Keep Cash Flow Stable As Major Tax Break Ends*, Industry Outlook (Feb. 19, 2014).

³⁴ S&P Global Ratings, Assessing U.S. Investors-Owned Utility Regulatory Environments, RatingsExpress (Aug. 10, 2016).

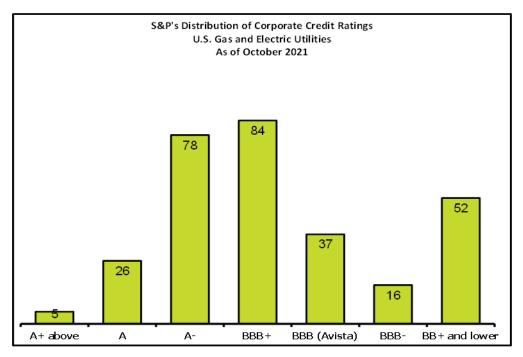
³⁵ Value Line Investment Survey, *Water Utility Industry* (Jan. 13, 2017) at p. 1780.

³⁶ Moody's Investors Service, *Puget Sound Energy, Inc. and Avista Corp., Legislation supporting multi-year rate plans has credit positive implications for Washington's investor owned utilities*, Issuer Comment (May 10, 2021).

the WUTC,"³⁷ and concluded that "[u]ncertainty over the implementation of new, potentially
 positive legislative provisions" was a key credit challenge for the Company.³⁸

Further strengthening Avista's financial integrity is imperative to ensure that the Company has the capability to maintain an investment grade rating while confronting large capital expenditures and other potential challenges. As noted in Mr. Thies' testimony, credit ratings for other utilities are predominantly in the A- or BBB+ categories, with his Illustration No. 3 being excerpted as Figure 4, below:





10 S&P recently reported that of the 247 regulated utilities covered in its survey, only 51 had a

11 weaker credit profile than Avista.³⁹ Continued regulatory support will be instrumental in

8

9

³⁷ *Id*.

³⁸ Moody's Investors Service, Avista Corp., update to credit analysis, Credit Opinion (Aug. 10, 2021).

achieving Avista's objective of a BBB+ rating from S&P, which is consistent with the
 average credit standing in the electric utility industry.

3

Q. Do customers benefit by enhancing the utility's financial flexibility?

A. Yes. Providing an ROE that is sufficient to maintain Avista's ability to attract capital under reasonable terms, even in times of financial and market stress, is not only consistent with the economic requirements embodied in the U.S. Supreme Court's *Hope* and *Bluefield* decisions, it is also in customers' best interests. Customers enjoy the benefits that come from ensuring that the utility has the financial wherewithal to take whatever actions are required to ensure safe and reliable service.

- 10
- 11

E. <u>Outlook for Capital Costs</u>

Q. Please summarize current economic and capital market conditions.

12 U.S. real GDP contracted 3.5 percent during 2020, including a decline of 31.2 A. 13 percent in the second quarter and a rebound of 33.8 percent in the third quarter. With the 14 easing of lockdowns accompanying the COVID-19 vaccine rollout, the economic outlook 15 improved significantly during 2021, with annualized GDP growth of 6.3 percent, 6.7 percent 16 and 2.1 percent in the first, second and third quarters of 2021. Indicators of employment 17 have also continued to strengthen, with the national unemployment rate in November 2021 18 falling slightly to 4.2 percent. While marking a significant recovery from the peak of 14.7 19 percent reached in April 2020, the jobless rate remains above the level immediately 20 preceding the COVID-19 pandemic.

³⁹ S&P Global Ratings, *Issuer Ranking: North American Electric, Gas, And Water Regulated Utilities, Strongest To Weakest*, RatingsDirect (Nov. 3, 2021).

1	Meanwhile, inflation as measured by the Consumer Price Index ("CPI") rose to 6.8
2	percent in November 2021. This represents the fastest pace of price inflation since 1982 and
3	the sixth straight month in which CPI inflation exceeded 5 percent. Similarly, the Personal
4	Consumption Expenditure Price Index expanded at an annual rate of 5.7 percent in
5	November 2021, its highest level since November 1990. Continuation of hyper-stimulative
6	monetary and fiscal policies have led to increasing concern that inflation may remain
7	significantly above the 2 percent longer-run benchmark cited by the Federal Reserve. The
8	November 2021 Survey of Consumer Expectations conducted by the New York Fed reported
9	that expectations for year-ahead inflation rose to 6.0 percent, which is the highest reading on
10	record in the survey's eight-year history. ⁴⁰ Meanwhile, the Social Security Administration
11	announced that beneficiaries would receive a cost-of-living adjustment of 5.9 percent for
12	2022, up from 1.3 percent a year earlier. ⁴¹ After abandoning the word "transitory" for
13	describing the nature of the current high inflation rate, ⁴² Fed Chair Jerome Powell noted that
14	"overall inflation is running well above our 2 percent longer-run goal and will likely
15	continue to do so well into next year" and that "[w]hile the drivers of higher inflation have
16	been predominantly connected to the dislocations caused by the pandemic, price increases
17	have now spread to a broader range of goods and services."43

https://www.newyorkfed.org/newsevents/news/research/2021/20211213.

⁴¹ Social Security Administration, Fact Sheet: 2022 Social Security Changes,

https://www.ssa.gov/news/press/factsheets/colafacts2022.pdf.

⁴⁰ Federal Reserve Bank of New York, *Inflation Expectations Increase in Short-Term, Decline in Medium-Term; Consumers' Spending Expectations Rise*, Press Release (Dec. 13, 2021),

⁴² https://www.reuters.com/article/usa-fed-instant/feds-powell-floats-dropping-transitory-label-for-inflation-idUSKBN2IF1S0.

⁴³ Federal Reserve, *Transcript of Chair Powell's Press Conference* (Dec. 15, 2021),

https://www.federal reserve.gov/mediacenter/files/FOMC presconf 2021 1215.pdf.

1 The underlying risk and unease have been felt worldwide as countries have struggled 2 to manage successive waves of the COVID-19 pandemic. In Britain, the economy and 3 financial markets have been challenged not only by policies to slow the rate of infections, 4 but also due to uncertainties regarding the impact of Brexit, which has led to shortages of 5 gasoline and consumer goods. The European Union experienced a 6.0 percent decline in 6 economic growth during 2020, although GDP is expected to expand by approximately 4.8 7 percent during 2021. Economic activity has been volatile in many emerging market 8 economies, including Brazil and Mexico. China's economic growth accelerated 9 dramatically during the first half of 2021. But concerns over a highly leveraged real estate 10 market and the emergence of the Omicron variant of COVID-19 threaten to derail recent 11 gains. Meanwhile, severe constraints in the global supply chain and a significant increase in 12 oil prices come on top of ongoing geopolitical tensions in the Middle East, which in the past 13 have led to concerns over possible disruptions in crude oil supplies and attendant price 14 volatility.

15

Q. How have common equity markets been impacted by COVID-19?

16 A. The threat posed by the coronavirus pandemic led to extreme volatility in the 17 capital markets as investors dramatically revised their risk perceptions and return requirements in the face of the severe disruptions to commerce and the world economy. 18 19 Despite the actions of the world's central banks to ease market strains and bolster the 20 economy, global financial markets experienced precipitous declines in asset values in March 21 2020. While the broader stock market has fully recovered and currently stands near all-time 22 highs, investors continue to face the prospect of volatility as capital markets respond to 23 uncertainties surrounding the trajectory of the economy in light of ongoing risks associated

1 with the COVID-19 pandemic. The Chicago Board Options Exchange Volatility Index 2 (commonly known as the "VIX"), which is a key measure of expectations of near-term 3 volatility and market sentiment, rose to levels not seen since the 2008-2009 Financial Crisis 4 during March 2020 and remains above pre-pandemic levels. 5 **Q**. Have utilities and their investors faced similar turmoil? 6 Yes. Concerns over weakening credit quality prompted S&P to revise its A. outlook for the regulated utility industry from "stable" to "negative."⁴⁴ As S&P explained: 7 8 Even before the current downturn and COVID-19, a confluence of factors, 9 including the adverse impacts of tax reform, historically high capital spending, and associated increased debt, resulted in little cushion in ratings 10 for unexpected operating challenges.⁴⁵ 11 12 While recognizing that regulatory protections have helped to mitigate the worst of 13 the coronavirus pandemic, S&P concluded that credit quality in the U.S. utility industry 14 weakened during 2020, noting that "[a]t the beginning of the year about 18% of the industry 15 had a negative outlook or ratings on CreditWatch with negative implications. By the end of the year that percentage had doubled, to about 36%."46 S&P further observed that "[o]ne of 16 the enduring effects of COVID-19 was regulatory lag,"⁴⁷ and noted that "2021 could become 17 18 the second consecutive year that downgrades outpace upgrades" in the utility sector.⁴⁸

⁴⁴ S&P Global Ratings, *COVID-10: The Outlook For North American Regulated Utilities Turns Negative*, RatingsDirect (Apr. 2, 2020).

⁴⁵ S&P Global Ratings, North American Regulated Utilities Face Tough Financial Policy Tradeoffs To Avoid Ratings Pressure Amid The COVID-19 Pandemic, RatingsDirect (May 11, 2020).

⁴⁶ S&P Global Ratings, North American Regulated Utilities' Negative Outlook Could See Modest Improvement, RatingsDirect (Jan. 20, 2021).

⁴⁷ S&P Global Ratings, *North America Regulated Utilities-An Industry With A Negative Outlook Despite Its Predictable Cash Flows*, Industry Top Trends 2021 (Dec. 10, 2020).

⁴⁸ S&P Global Ratings, *Report: North American Regulated Utilities' Credit Quality Begins The Year On A Downward Path*, RatingsDirect (Apr. 7, 2021). More recently, S&P observed that utilities' operating cash flows continue to lag pre-pandemic levels. S&P Global Ratings, *Although U.S. Regulated Utilities' Operating Cash Flows Are Set To Rebound From COVID-10, Credit Quality Remains Pressured*, RatingsDirect (Dec. 13, 2021).

1 Meanwhile, rising inflation expectations also pose a challenge for utilities. with S&P 2 recently noting that "the threat of inflation comes at a time when credit metrics are already under pressure relative to downside ratings thresholds."49 As Value Line concluded, 3 4 "Inflation clearly is worrisome."50 5 Q. Do changes in utility company beta values since the pandemic began 6 corroborate an increase in industry risk? 7 A. Yes. Beta measures a utility's stock price volatility relative to the overall 8 market and reflects the tendency of a stock's price to follow changes in the market. The 9 investment community relies on beta as an important guide to investors' risk perceptions. 10 As shown in Table 1, the current average beta for the Utility Group is 0.91 and the beta 11 value for Avista is 0.95. Prior to the pandemic, the average beta for the same group of companies was 0.66^{51} and the beta for Avista was 0.60^{52} 12 13 The significant shift in pre- and post-pandemic beta values for the Gas Group and Avista is further exemplified in Figure 5 below. As can be seen, the Electric Group's and 14 15 Avista's betas increased significantly with the beginning of the pandemic in March 2020 and 16 have continued to increase during 2021. This dramatic increase in a primary gauge of 17 investors' risk perceptions is further proof of the rise in the risk of gas company common 18 stocks.

⁴⁹ S&P Global Ratings, *Will Rising Inflation Threaten North American Investor-Owned Regulated Utilities' Credit Quality?* (Jul. 20, 2021).

⁵⁰ The Value Line Investment Survey, *Selection and Opinion* (Dec. 3, 2021).

⁵¹ The Value Line Investment Survey, *Summary & Index* (Jan. 24, 2020).

⁵² The Value Line Investment Survey, Avista Corp. (Jan. 24, 2020).



FIGURE 5 UTILITY GROUP AND AVISTA BETA VALUES

3 Q. What actions did the Federal Reserve take in response to the threat to 4 the economy posed by the COVID-19 pandemic?

5

1

2

A. In early 2020, the Federal Reserve quickly lowered its target Federal Funds rate to close to zero to support economic activity, stabilize markets and bolster the flow of credit to households, businesses, and communities. In March 2020, the Federal Reserve lowered the target range for its benchmark federal funds rate by a total of 150 basis points, to the current range of 0 percent to 0.25 percent.

In addition, the Federal Reserve reintroduced the quantitative easing measures initially adopted in response to the 2008 financial crisis by directing the purchase of Treasury securities and agency mortgage-backed securities "in the amounts needed to support the smooth functioning of markets,"⁵³ while continuing to reinvest all principal repayments from its existing holdings. The Federal Reserve also implemented wide-ranging

⁵³ Federal Reserve, *Press Release* (Mar. 23, 2020),

https://www.federalreserve.gov/monetarypolicy/files/monetary20200323a1.pdf.

As illustrated in Figure 6 below, the Federal Reserve's asset holdings exceed \$8.7 trillion, which is an all-time high, and the resulting effect on capital market conditions has likely never been more pronounced. While the Federal Reserve's aggressive monetary stimulus may help to ensure market liquidity and support the economy, these actions also support financial asset prices, which in turn place artificial downward pressure on bond yields, which provide one commonly cited gauge of capital costs.

⁵⁴ See, e.g., Federal Reserve System, *Federal Reserve takes additional actions to provide up to \$2.3 trillion in loans to support the economy* (Apr. 9, 2020),

https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm. The Federal Reserve discontinued purchases under its Corporate Credit Facilities in December 2020.

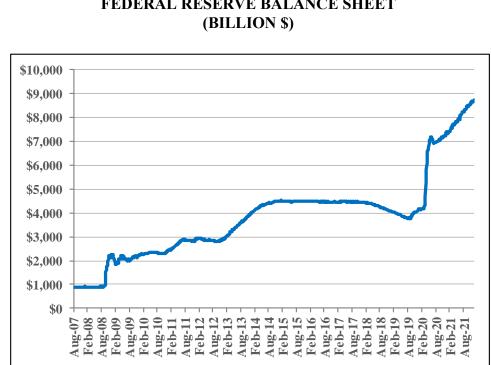


FIGURE 6 FEDERAL RESERVE BALANCE SHEET

https://fred.stlouisfed.org/series/WALCL

1

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3

О. 4 Are bond yields expected to remain at current levels over the next few 5 years?

No. As illustrated in Figure 7 below, economic forecasters anticipate that 6 A. 7 bond yields will increase significantly over the near-term. As indicated below, these 8 forecasts anticipate that interest rates will rise over the period when rates established in this 9 proceeding will be in effect. This evidence suggests that investors continue to anticipate 10 higher interest rates over the near-term.

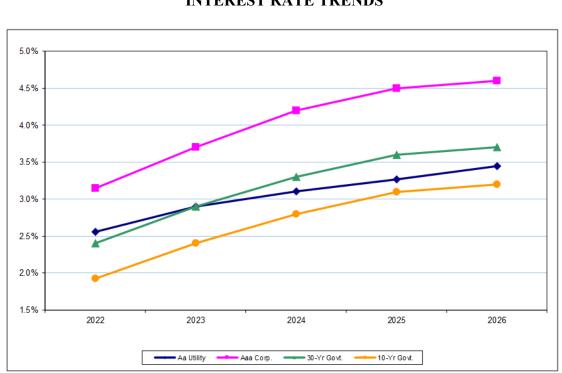


FIGURE 7
INTEREST RATE TRENDS

					(Change (bps)
	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2022-26</u>
(a) 10-Yr. Treasury	1.9%	2.4%	2.8%	3.1%	3.2%	128
(a) 30-Yr. Treasury	2.4%	2.9%	3.3%	3.6%	3.7%	130
(a) Aaa Corporate	3.2%	3.7%	4.2%	4.5%	4.6%	145
(b) Aa Utility	2.6%	2.9%	3.1%	3.3%	3.4%	89

(a) Wolters Kluwer, Blue Chip Financial Forecasts (Dec. 1, 2021)

(b) Average of projections from IHS Markit, Long-Term Macro Forecast - Baseline (Mar. 1, 2021) and Energy Information Administration, Annual Energy Outlook 2021 (Feb. 3, 2021).

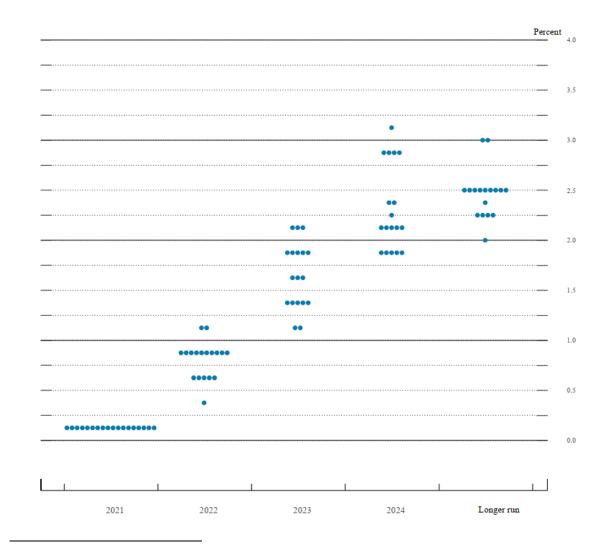
- 1 Are expectations of higher bond yields and exposure to inflation 0. 2 consistent with recent Federal Reserve actions and the views of the Federal Open Market Committee ("FOMC")?⁵⁵ 3 4 Yes. Responding to concerns over accelerating inflation, at its most recent A. 5 policy meeting on December 14-15 the Federal Reserve elected to substantially increase the 6 speed at which it tapers purchases of Treasury and other securities. As Dow Jones reported: 7 Fed officials in early November agreed to reduce their then-\$120-billion-a-8 month in bond purchases by \$15 billion a month, to \$90 billion this month. 9 On Wednesday, officials said they would accelerate that wind down 10 beginning next month, reducing purchases by \$30 billion a month. As a result, they will purchase \$60 billion in Treasury and mortgage securities in 11 January, putting the program on track to end by March.⁵⁶ 12 13 The quicker wind-down to the Fed's asset purchase program is widely viewed as a prelude 14 to higher interest rates, and the FOMC's most recent guidance reflects a more hawkish 15 stance with respect to future increases. 16 Most Federal Reserve officials signaled Wednesday they were prepared to raise their short-term benchmark rate at least three times next year to cool 17 18 high inflation. As expected, officials also approved plans to more quickly 19 scale back its pandemic stimulus efforts in response to hotter inflation, 20 opening the door to rate increases starting next spring. Fed officials voted to hold rates near zero on Wednesday, but the latest projections are a significant 21 22 shift from just three months ago. In September, around half of those officials 23 thought rate increases wouldn't be warranted until 2023. It is the latest sign 24 of how an acceleration and broadening of inflationary pressures, together 25 with signs of an ever-tighter labor market, is reshaping officials' economic 26 outlook and policy planning.⁵⁷ 27 In conjunction with the December 14-15 policy meeting, the FOMC submitted
- 28 updated projections about where short-term interest rates are headed. The results are the dot

⁵⁵ The FOMC is a committee composed of twelve members that serves as the monetary policymaking body of the Federal Reserve System.

 ⁵⁶ Nick Timiraos, Fed Officials Project Three Rate Rises Next Year and Accelerate Wind Down of Stimulus, Dow Jones Newswires (Dec. 16, 2021).
 ⁵⁷ Id.

plot—a visual representation of where members think rates will go over the short, medium, and longer run. As shown in the figure below, the most recent dot plot indicates that all of the FOMC participants expect its benchmark interest rate to be dramatically higher than current levels by 2024, ⁵⁸ with the majority anticipating a midpoint of the federal funds target range of 2.5 percent, versus 0.125 percent currently.⁵⁹

6 7 FIGURE 8 FEDERAL RESERVE DOT PLOT



 ⁵⁸ Summary of Economic Projections (Dec. 15, 2021).
 <u>https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20211215.pdf</u>.
 ⁵⁹ Id.

- 1
- 2

Q. Would it be reasonable to disregard the implications of current capital market conditions in establishing a fair ROE for Avista?

- 3 They reflect the reality of the situation in which Avista and other A. No. 4 businesses must attract and retain capital. The standards underlying a fair rate of return 5 require that the Company's authorized ROE reflect a return competitive with other 6 investments of comparable risk and preserve its ability to maintain access to capital on 7 reasonable terms. These standards can only be met by considering the requirements of 8 investors in today's capital markets. As S&P concluded, challenges posed by the 9 coronavirus crisis "have the potential to significantly impact the financial performance of 10 the investor-owned utilities, increasing the overall level of investor risk, and will have to be addressed by state regulators."60 11
- 12 If the upward shift in investors' risk perceptions and required rates of return for long-13 term capital is not incorporated in the allowed ROE, the results will fail to meet the 14 comparable earnings standard that is fundamental in determining the cost of capital. From a 15 more practical perspective, failing to provide investors with the opportunity to earn a rate of return commensurate with Avista's risks will weaken its financial integrity, while hampering 16 17 the Company's ability to attract necessary capital.
- 18

Q. Does a two-year rate plan heighten the Company's exposure to 19 anticipated increases in the cost of long-term capital?

20

A. Yes. Given that there will be no opportunity for the Company to alter rates in

21 response to higher trends in capital costs during the pendency of the MYRP, Avista will be

⁶⁰ S&P Global Market Intelligence, *State Regulatory Evaluations*, RRA Regulatory Focus (Mar. 25, 2020).

1 exposed to the potential that the ROE established in this proceeding will fall below 2 investors' required return over the period when rates are in effect. Accordingly, this supports consideration of forecasts for higher inflation and interest rates in evaluating a just and 3 4 reasonable ROE in this case.

5 Q. In its order in Avista's last rate proceeding, the Commission expressed concern regarding your "heavy reliance on projections" in estimating the cost of 6 equity.⁶¹ How do you respond? 7

8 First, and most fundamentally, the cost of equity is, perforce, a forward-A. 9 looking concept that is predicated on investors' expectations for the future, not on what has 10 occurred in the past. As a result, historical data has limited relevance in evaluating a fair 11 ROE. Second, evidence regarding the expected course of capital costs over the term of 12 Avista's proposed MYRP is highly relevant, given that the ROE established in this 13 proceeding will remain fixed.

- 14
- 15

F. Capital Structure

Q. Is an evaluation of the capital structure maintained by a utility relevant in assessing its return on equity? 16

17 A. Yes. Other things equal, a higher debt ratio and lower common equity ratio, 18 translates into increased financial risk for all investors. A greater amount of debt means 19 more investors have a senior claim on available cash flow, thereby reducing the certainty 20 that each will receive their contractual payments. This increases the risks to which lenders 21 are exposed, and they require correspondingly higher rates of interest. From common shareholders' standpoint, a higher debt ratio means that there are proportionately more 22

⁶¹ Docket UE-200900, et al., Final Order 08/05 (Sep. 27, 2021) at P 104.

- investors ahead of them, thereby increasing the uncertainty as to the amount of cash flow
 that will remain.
- 3 Q. What common equity ratio is implicit in Avista's requested capital 4 structure?
- A. Avista's capital structure is presented in the testimony of Mr. Thies. As
 summarized in his testimony, the proposed capital structure used to compute Avista's overall
 rate of return consists of 48.5 percent equity / 51.5 percent long-term debt in this filing.
- 8

Q. What is the average capitalization maintained by the Utility Group?

9 A. As shown on page 1 of Exh. AMM-6, for the 16 firms in the Utility Group, 10 common equity ratios at December 31, 2020 range between 28.6 percent and 60.9 percent 11 and average 44.8 percent.

12 Q. What capitalization is representative for the proxy group of utilities13 going forward?

A. As shown on page 1 of Exh. AMM-6, Value Line expects an average common equity ratio for the proxy group of utilities of 45.5 percent for its three-to-five year forecast horizon, with the individual common equity ratios ranging from 32.5 percent to 57.5 percent. The WUTC has previously observed that "[i]t is appropriate ... to afford more weight to forward considerations than to historic conditions as we determine the appropriate equity ratio to be embedded in prospective rates."⁶²

⁶² Order No. 06, Docket Nos. UG-040640 and UE-040641 (consolidated) (Feb. 18, 2005) at P. 32.

1

2

0. How does Avista's proposed equity ratio compare with those of the operating companies held by the proxy group parent companies?

3 A. The individual operating company capital structures are presented on pages 4 2-3 of Exh. AMM-6. As shown there, the operating company equity ratios range from 38.3 5 percent to 73.4 percent. The average of these results points to an equity ratio of 52.1 6 percent.

7

Q. What implication do the uncertainties inherent in the utility industry have for the capital structures maintained by utilities?

8

9 As discussed earlier, utilities are facing the need to finance significant capital A. 10 investment plans, uncertainties over accommodating operating and financial market 11 uncertainties, and ongoing regulatory risks. Coupled with the potential for turmoil in capital 12 markets, these considerations warrant a stronger balance sheet to deal with an increasingly 13 uncertain environment. A more conservative financial profile, in the form of a higher 14 common equity ratio, is consistent with increasing uncertainties and the need to maintain the 15 continuous access to capital under reasonable terms that is required to fund operations and necessary system investment, including times of adverse capital market conditions. This is 16 17 consistent with the views of the investment community, as reflected in the comments of the 18 ratings agencies discussed earlier in my testimony.

- 19

0. Do ongoing economic and capital market uncertainties also influence the 20 appropriate capital structure for Avista?

21 A. Yes. Financial flexibility plays a crucial role in ensuring the wherewithal to 22 meet funding needs, and utilities with higher financial leverage may be foreclosed or have

limited access to additional borrowing, especially during times of stress. As Moody's observed:

Utilities are among the largest debt issuers in the corporate universe and typically require consistent access to capital markets to assure adequate sources of funding and to maintain financial flexibility. During times of distress and when capital markets are exceedingly volatile and tight, liquidity becomes critically important because access to capital markets may be difficult.⁶³

- 9 As a result, the Company's capital structure must maintain adequate equity to preserve the 10 flexibility necessary to maintain continuous access to capital even during times of 11 unfavorable market conditions.
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Q. What other factors do investors consider in their assessment of a company's capital structure?

14 A. Depending on their specific attributes, contractual agreements or other 15 obligations that require the utility to make specified payments may be treated as debt in 16 evaluating Avista's financial risk. Power purchase agreements, leases, and pension 17 obligations typically require the utility to make specified minimum contractual payments 18 akin to those associated with traditional debt financing and investors consider a portion of 19 these commitments as debt in evaluating total financial risks. Because investors consider 20 the debt impact of such fixed obligations in assessing a utility's financial position, they 21 imply greater risk and reduced financial flexibility. These commitments have been 22 repeatedly cited by major bond rating agencies in connection with assessments of utility

⁶³ Moody's Investors Service, *FAQ on credit implications of the coronavirus outbreak*, Sector Comment (Mar. 26, 2020).

financial risks.⁶⁴ In order to offset the debt equivalent associated with off-balance sheet 1 2 obligations, the utility must rebalance its capital structure by increasing its common equity in order to restore its effective capitalization ratios to previous levels. Unless the utility 3 4 takes action to offset this additional financial risk by maintaining a higher equity ratio, the 5 resulting leverage will weaken its creditworthiness and imply greater risk.

6

Q. What does this evidence indicate with respect to Avista's capital 7 structure?

8 A. Based on my evaluation, I conclude that Avista's requested capital structure 9 represents a reasonable mix of capital sources from which to calculate the Company's 10 overall rate of return. While industry averages provide one benchmark for comparison, each 11 firm must select its capitalization based on the risks and prospects it faces, as well its 12 specific needs to access the capital markets. A public utility with an obligation to serve must 13 maintain ready access to capital under reasonable terms so that it can meet the service 14 requirements of its customers. Financial flexibility plays a crucial role in ensuring the 15 wherewithal to meet the needs of customers, and utilities with higher leverage may be 16 foreclosed from additional borrowing under reasonable terms, especially during times of 17 stress.

18 Avista's capital structure is consistent with the range of equity ratios maintained by 19 the parent firms in the Utility Group and their operating subsidiaries, and reflects the 20 challenges posed by its resource mix, the burden of significant capital spending requirements, and the Company's ongoing efforts to strengthen its credit standing and 21

⁶⁴ See, e.g., Standard & Poor's Corporation, Utilities: Key Credit Factors For The Regulated Utilities Industry, RatingsDirect (Nov. 19, 2013).

support access to capital on reasonable terms. The reasonableness of a 48.5 percent
 common equity / 51.5 percent long-term debt capital structure for Avista is reinforced by the
 importance of supporting continued investment in system improvements even during times
 of adverse capital market conditions.

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III. <u>CAPITAL MARKET ESTIMATES</u>

A. Quantitative Analyses

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What is the purpose of this section?

A. This section presents capital market estimates of the cost of equity. The details of my quantitative analyses are contained in Exh. AMM-3, with the results being summarized below.

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Do you rely on a single method to estimate the cost of equity for Avista?

12 No. In my opinion, no single method or model should be relied upon to A. 13 determine a utility's cost of equity because no single approach can be regarded as wholly 14 reliable. Therefore, I used the DCF, CAPM, and risk premium methods to estimate the cost 15 of common equity. In addition, I also evaluate a fair ROE using an earnings approach based 16 on investors' current expectations in the capital markets. In my opinion, comparing 17 estimates produced by one method with those produced by other approaches ensures that the 18 estimates of the cost of equity pass fundamental tests of reasonableness and economic logic. 19 My consideration of multiple methods and approaches is consistent with the conclusions of 20 the WUTC:

We value each of the methodologies used to calculate the cost of equity and do not find it appropriate to select a single method as being the most accurate or instructive. Financial circumstances are constantly shifting and changing,

and we welcome a robust and diverse record of evidence based on a variety of analytics and cost of capital methodologies.⁶⁵

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- Q. More recently, the WUTC elected to assign greater weight to the DCF model and concluded that CAPM results should be given little weight.⁶⁶ Do you agree with these findings?
- A. No. It is widely recognized that no single method can be regarded as failsafe; with all approaches having advantages and shortcomings. As the Federal Energy Regulatory Commission ("FERC") has noted, "The determination of rate of return on equity starts from the premise that there is no single approach or methodology for determining the correct rate of return."⁶⁷ FERC also recognized the potential for any application of the DCF model to produce unreliable results.⁶⁸ Similarly, a publication of the Society of Utility and Regulatory Financial Analysts concluded that:

13 Each model requires the exercise of judgment as to the reasonableness of the 14 underlying assumptions of the methodology and on the reasonableness of the proxies used to validate the theory. Each model has its own way of 15 examining investor behavior, its own premises, and its own set of 16 17 simplifications of reality. Each method proceeds from different fundamental 18 premises, most of which cannot be validated empirically. Investors clearly do not subscribe to any singular method, nor does the stock price reflect the 19 application of any one single method by investors.⁶⁹ 20

⁶⁵ PacifiCorp D/B/A Pacific Power & Light Company, Docket UE-100749, Final Order at P 91 (Mar. 25, 2011).

⁶⁶ Docket UE-200900, et al., Final Order 08/05 (Sep. 27, 2021) at PP 100, 103.

⁶⁷ Northwest Pipeline Co., Opinion No. 396-C, 81 FERC ¶ 61,036 at 4 (1997).

⁶⁸ Opinion No. 531, 147 FERC ¶ 61,234 at P 41 (2014).

⁶⁹ David C. Parcell, *The Cost of Capital – A Practitioner's Guide*, Society of Utility and Regulatory Financial Analysts (2010) at 84.

- 1 As this treatise succinctly observed, "no single model is so inherently precise that it can be
- 2 relied on solely to the exclusion of other theoretically sound models."⁷⁰ Similarly, New

3 *Regulatory Finance* concluded that:

4 There is no single model that conclusively determines or estimates the 5 expected return for an individual firm. Each methodology possesses its own way of examining investor behavior, its own premises, and its own set of 6 7 simplifications of reality. Each method proceeds from different fundamental premises that cannot be validated empirically. Investors do not necessarily 8 9 subscribe to any one method, nor does the stock price reflect the application 10 of any one single method by the price-setting investor. There is no monopoly as to which method is used by investors. In the absence of any hard evidence 11 as to which method outdoes the other, all relevant evidence should be used 12 13 and weighted equally, in order to minimize judgmental error, measurement error, and conceptual infirmities.⁷¹ 14

- 15 Thus, while the DCF model is a recognized approach to estimating the ROE, it is not
- 16 without shortcomings and does not otherwise eliminate the need to ensure that the "end
- 17 result" is fair. The Indiana Utility Regulatory Commission has recognized this principle:

18 There are three principal reasons for our unwillingness to place a great deal of weight on the results of any DCF analysis. One is. . . the failure of the 19 20 DCF model to conform to reality. The second is the undeniable fact that 21 rarely if ever do two expert witnesses agree on the terms of a DCF equation 22 for the same utility - for example, as we shall see in more detail below, 23 projections of future dividend cash flow and anticipated price appreciation of the stock can vary widely. And, the third reason is that the unadjusted DCF 24 25 result is almost always well below what any informed financial analysis 26 would regard as defensible, and therefore require an upward adjustment 27 based largely on the expert witness's judgment. In these circumstances, we 28 find it difficult to regard the results of a DCF computation as any more than suggestive.72 29

- 30 As this discussion indicates, consideration of the results of alternative approaches
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1 reduces the potential for error associated with any single quantitative method. Just as

⁷⁰ Id.

⁷¹ Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 429.

⁷² Ind. Michigan Power Co., Cause No. 38728, 116 PUR4th, 1, 17-18 (IURC 8/24/1990).

1 investors inform their decisions through the use of a variety of methodologies, my 2 evaluation of a fair ROE for the Company considers the results of multiple financial models. 3 0. Why is the CAPM approach an appropriate component of evaluating the 4 cost of equity for Avista? 5 The CAPM approach generally is considered to be the most widely A. 6 referenced method for estimating the cost of equity among academicians and professional 7 practitioners, with the pioneering researchers of this method receiving the Nobel Prize in 8 1990. Because this is the dominant model for estimating the cost of equity outside the 9 regulatory sphere, the CAPM provides important insight into investors' required rate of 10 return for utility stocks, including Avista. As FERC explained in support of its decision to 11 weight the CAPM equally in its evaluation of the ROEs for electric utilities: 12 Academic literature similarly indicates that investors rely on the CAPM. Moreover, the CAPM is directly relevant to the Commission's task in this 13 14 context of assessing what rate of return on equity investors require to invest in a utility. John Graham and Campbell Harvey have explained that "the 15 CAPM is by far the most popular method of estimating the cost of equity 16 17 capital."73 18 0. What specific proxy group of utilities do you rely on for your analysis? 19 In estimating the cost of equity, the DCF model is typically applied to A. 20 publicly traded firms engaged in similar business activities or with comparable investment 21 risks. As described in detail in Exh. AMM-3, I apply the DCF model to a utility proxy group composed of 16 companies, which I refer to as the "Utility Group."⁷⁴ 22

⁷³ Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569, 169 FERC ¶ 61,129 at P 236 (2019).

⁷⁴ The size and breadth of my proxy group addresses the WUTC's concern that, "In general, the smaller the proxy group, the greater possibility for bias to be introduced due to subjective factors." *PacifiCorp D/B/A Pacific Power & light Company*, Docket UE-100749, Final Order at P 78 (Mar. 25, 2011).

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 Q.
 How do the overall risks of your Utility Group compare with Avista?

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 A.
 Table 1 compares the Utility Group with Avista across five key indicators of

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 investment risks

3 investment risk:

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TABLE 1 COMPARISON OF RISK INDICATORS

			Value Line				
			Safety	Financial			
	S&P	Moody's	Rank	Strength	Beta		
Utility Group	BBB+	Baa2	2	А	0.91		
Avista Corp.	BBB	Baa2	2	B++	0.95		

Do these comparisons indicate that investors would view the firms in

6

7 your proxy groups as risk-comparable to the Company?

A. Yes. Considered together, a comparison of these objective measures, which consider of a broad spectrum of risks, including financial and business position, and exposure to firm-specific factors, indicates that investors would likely conclude that the overall investment risks for Avista are comparable to those of the firms in the Utility Group.

12

Q. What cost of equity is implied by your DCF results for the Utility Group?

A. My application of the DCF model, which is discussed in greater detail in Exh. AMM-3, considers three alternative measures of expected earnings growth, as well as the sustainable growth rate based on the relationship between expected retained earnings and earned rates of return ("br+sv"). As shown on Exh. AMM-7 and summarized below in

Table 2, after eliminating illogical values,⁷⁵ application of the constant growth DCF model
results in the following cost of equity estimates:

TABLE 2DCF RESULTS – UTILITY GROUP

Growth Rate	Average
Value Line	9.0%
IBES	9.0%
Zacks	8.7%
br + sv	8.9%

5 Q. How do you apply the CAPM to estimate the cost of equity?

6 A. Like the DCF model, the CAPM is an *ex-ante*, or forward-looking model 7 based on expectations of the future. As a result, in order to produce a meaningful estimate 8 of investors' required rate of return, the CAPM is best applied using estimates that reflect the 9 expectations of actual investors in the market, not with backward-looking, historical data. 10 Accordingly, I apply the CAPM to the Utility Group based on a forward-looking estimate 11 for investors' required rate of return from common stocks. Because this forward-looking 12 application of the CAPM looks directly at investors' expectations in the capital markets, it 13 provides a more meaningful guide to the expected rate of return required to implement the CAPM. 14

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Q. What cost of equity is indicated by the CAPM approach?

A. As shown on page 1 of Exh. AMM-9, my forward-looking application of the CAPM model indicates an average ROE of 12.1 percent for the Utility Group, and 12.6 percent after adjusting for the impact of firm size. As shown on page 2 of Direct Exhibit

⁷⁵ I provide a detailed explanation of my DCF analysis, including the evaluation of individual estimates, in Exh. AMM-3.

AMM-9, incorporating a forecasted Treasury bond yield implies an average cost of equity
 estimate of 12.4 percent for the Utility Group, and 12.8 percent after adjusting for the impact
 of relative size.

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Q.

How do you implement the risk premium method?

A. I base my estimates of equity risk premiums for electric utilities on surveys of previously authorized rates of return on common equity, which are frequently referenced as the basis for estimating equity risk premiums. My application of the risk premium method also considers the inverse relationship between equity risk premiums and interest rates, which suggests that when interest rate levels are relatively high, equity risk premiums narrow, and when interest rates are relatively low, equity risk premiums widen.

11

What cost of equity estimates is indicated by the ECAPM?

12 Empirical tests of the CAPM have shown that low-beta securities earn returns A. 13 somewhat higher than the CAPM would predict, and high-beta securities earn less than 14 predicted. The ECAPM incorporates a refinement to address this observed relationship 15 documented in the financial research. My application of the ECAPM is based on the same 16 forward-looking market rate of return, risk-free rates, and beta values discussed above in 17 connection with the CAPM. As shown on page 1 of Exh. AMM-10, applying the forward-18 looking ECAPM approach to the firms in the Utility Group results in an average ROE 19 estimate of 12.6 percent, or 12.9 percent after incorporating the size adjustment 20 corresponding to the market capitalization of the individual utilities. As shown on page 2 of 21 Exh. AMM-10, incorporating a forecasted Treasury bond yield for 2023-2024 implies an 22 average cost of equity for the Utility Group of 12.7 percent, and 13.1 percent once adjusted 23 for the impact of firm size.

1

Q. What cost of equity is indicated by the risk premium approach?

A. As shown on page 1 of Exh. AMM-10, adding an adjusted risk premium of
5.90 percent to the six-month average yield on long-term Baa utility bonds at October 2021
of 3.31 percent results in an implied cost of equity of 9.18 percent.⁷⁶

5 Recognizing that widely referenced forecasting services expect interest rates to rise 6 over the near-term, I also apply the risk premium based on forecasted utility bond yields. As 7 shown on page 2 of Exh. AMM-10, incorporating a forecasted yield for 2023-2024 and 8 adjusting for changes in interest rates since the 1974-2020 study period implies a cost of 9 equity of approximately 9.24 percent.

10

Q. Please summarize the results of the expected earnings approach.

11 Reference to rates of return available from alternative investments of A. 12 comparable risk provide an important benchmark in assessing the return necessary to assure 13 confidence in the financial integrity of a firm and its ability to attract capital. The simple, 14 but powerful concept underlying the expected earnings approach is that investors compare 15 each investment alternative with the next best opportunity. If the utility is unable to offer a 16 return similar to that available from other opportunities of comparable risk, investors will 17 become unwilling to supply the capital on reasonable terms. For existing investors, denying 18 the utility an opportunity to earn what is available from other similar risk alternatives 19 prevents them from earning their opportunity cost of capital. This expected earnings 20 approach is consistent with the economic underpinnings for a fair rate of return established 21 by the U.S. Supreme Court. Moreover, it avoids the complexities and limitations of capital

⁷⁶ Moody's yield averages are based on seasoned bonds with a remaining maturity of at least 20 years.

1	market methods and instead focuses on the returns earned on book equity, which are readily
2	available to investors.

As shown on Exh. AMM-11, Value Line's projections for the Utility Group suggest
an average ROE of approximately 11.0 percent.

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B. <u>Flotation Costs</u>

Q. What other considerations are relevant in setting the return on equity for a utility?

8 A. The common equity used to finance the investment in utility assets is 9 provided from either the sale of stock in the capital markets or from retained earnings not 10 paid out as dividends. When equity is raised through the sale of common stock, there are 11 costs associated with "floating" the new equity securities. These flotation costs include 12 services such as legal, accounting, and printing, as well as the fees and discounts paid to 13 compensate brokers for selling the stock to the public. Also, some argue that the "market 14 pressure" from the additional supply of common stock and other market factors may further 15 reduce the net amount of funds a utility receives when it issues common equity.

Q. Is there an established mechanism for a utility to recognize equity issuance costs?

A. No. While debt flotation costs are recorded on the books of the utility, amortized over the life of the issue, and thus increase the effective cost of debt capital, there is no similar accounting treatment to ensure that equity flotation costs are recorded and ultimately recognized. No rate of return is authorized on flotation costs necessarily incurred to obtain a portion of the equity capital used to finance plant. In other words, equity flotation costs are not included in a utility's rate base because neither that portion of the gross proceeds

from the sale of common stock used to pay flotation costs is available to invest in plant and equipment, nor are flotation costs capitalized as an intangible asset. Unless some provision is made to recognize these issuance costs, a utility's revenue requirements will not fully reflect all of the costs incurred for the use of investors' funds. Because there is no accounting convention to accumulate the flotation costs associated with equity issues, they must be accounted for indirectly, with an upward adjustment to the cost of equity being the most appropriate mechanism.

8

Q. Is there academic evidence that supports a flotation cost adjustment?

9 A. Yes, the financial literature and evidence in this case supports an adjustment 10 to include consideration of flotation costs. An adjustment for flotation costs associated with 11 past equity issues is appropriate, even when the utility is not contemplating any new sales of 12 common stock. The need for a flotation cost adjustment to compensate for past equity issues 13 has been recognized in the financial literature. In a Public Utilities Fortnightly article, for 14 example, Brigham, Aberwald, and Gapenski demonstrated that even if no further stock 15 issues are contemplated, a flotation cost adjustment in all future years is required to keep 16 shareholders whole, and that the flotation cost adjustment must consider total equity, including retained earnings.⁷⁷ Similarly, New Regulatory Finance contains the following 17 18 discussion:

Another controversy is whether the flotation cost allowance should still be applied when the utility is not contemplating an imminent common stock issue. Some argue that flotation costs are real and should be recognized in calculating the fair rate of return on equity, but only at the time when the expenses are incurred. In other words, the flotation cost allowance should not continue indefinitely, but should be made in the year in which the sale of

⁷⁷ E. F. Brigham, D. A. Aberwald, and L. C. Gapenski, *Common Equity Flotation Costs and Rate Making*, Pub. Util. Fortnightly (May 2, 1985).

securities occurs, with no need for continuing compensation in future years. This argument implies that the company has already been compensated for these costs and/or the initial contributed capital was obtained freely, devoid 4 of any flotation costs, which is an unlikely assumption, and certainly not applicable to most utilities. ... The flotation cost adjustment cannot be strictly forward-looking unless all past flotation costs associated with past issues 6 have been recovered.⁷⁸

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Q. Can you illustrate why investors will not have the opportunity to earn

9 their required ROE unless a flotation cost adjustment is included?

10 A. Yes. Assume a utility sells \$10 worth of common stock at the beginning of 11 year 1. If the utility incurs flotation costs of \$0.48 (5 percent of the net proceeds), then only 12 \$9.52 is available to invest in rate base. Assume that common shareholders' required rate of 13 return is 10.5 percent, the expected dividend in year 1 is \$0.50 (i.e., a dividend yield of 5 14 percent), and that growth is expected to be 5.5 percent annually. As developed in Table 3 15 below, if the allowed rate of return on common equity is only equal to the utility's 10.5 percent "bare bones" cost of equity, common stockholders will not earn their required rate of 16 17 return on their \$10 investment, since growth will really only be 5.25 percent, instead of 5.5 18 percent:

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TABLE 3 NO FLOTATION COST ADJUSTMENT

	Co	mmon	Re	tained	Total	Market	M/B	Allowed			Payout
Year	S	tock	Ea	rnings	Equity	Price	Ratio	ROE	EPS	DPS	Ratio
1	\$	9.52	\$	-	\$ 9.52	\$10.00	1.050	10.50%	\$ 1.00	\$ 0.50	50.0%
2	\$	9.52	\$	0.50	\$10.02	\$10.53	1.050	10.50%	\$ 1.05	\$ 0.53	50.0%
3	\$	9.52	\$	0.53	\$10.55	\$11.08	1.050	10.50%	\$ 1.11	\$ 0.55	50.0%
Growth					5.25%	5.25%			5.25%	5.25%	1

⁷⁸ Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 335.

1 The reason that investors never really earn 10.5 percent on their investment in the 2 above example is that the \$0.48 in flotation costs initially incurred to raise the common 3 stock is not treated like debt issuance costs (*i.e.*, amortized into interest expense and 4 therefore increasing the embedded cost of debt), nor is it included as an asset in rate base.

5 Including a flotation cost adjustment allows investors to be fully compensated for the 6 impact of these costs. One commonly referenced method for calculating the flotation cost 7 adjustment is to multiply the dividend yield by a flotation cost percentage. Thus, with a 5 8 percent dividend yield and a 5 percent flotation cost percentage, the flotation cost 9 adjustment in the above example would be approximately 25 basis points. As shown in 10 Table 4 below, by allowing a rate of return on common equity of 10.75 percent (an 10.5 11 percent cost of equity plus a 25 basis point flotation cost adjustment), investors earn their 12 10.5 percent required rate of return, since actual growth is now equal to 5.5 percent:

13 14

TABLE 4 INCLUDING FLOTATION COST ADJUSTMENT

		Co	mmon	Re	tained	Total	Market	M/B	Allowed			Payout
_	Year	S	tock	Ea	rnings	Equity	Price	Ratio	ROE	EPS	DPS	Ratio
_	1	\$	9.52	\$	-	\$ 9.52	\$10.00	1.050	10.75%	\$ 1.02	\$ 0.50	48.8%
	2	\$	9.52	\$	0.52	\$10.05	\$10.55	1.050	10.75%	\$ 1.08	\$ 0.53	48.8%
	3	\$	9.52	\$	0.55	\$10.60	\$11.13	1.050	10.75%	\$ 1.14	\$ 0.56	48.8%
	Growth					5.50%	5.50%			5.50%	5.50%	

The only way for investors to be fully compensated for issuance costs is to include an ongoing adjustment to account for past flotation costs when setting the return on common equity. This is the case regardless of whether or not the utility is expected to issue additional shares of common stock in the future.

1 **Q**. Have other regulators recognized flotation costs in evaluating a fair 2 **ROE**? 3 In Case No. INT-G-16-02 the staff of the Idaho Public Utilities A. Yes. 4 Commission supported the use of the same flotation cost methodology that I recommend 5 above, concluding: 6 [I]s the standard equation for flotation cost adjustments and is referred to as 7 the "conventional" approach. Its use in regulatory proceedings is 8 widespread, and the formula is outlined in several corporate finance textbooks.79 9 10 More recently, the Wyoming Office of Consumer Advocate, an independent division of the Wyoming Public Service Commission, recommended a 10 basis point flotation cost 11 adjustment for a gas utility.⁸⁰ Similarly, the South Dakota Public Utilities Commission has 12 13 recognized the impact of issuance costs, concluding that, "recovery of reasonable flotation costs is appropriate."⁸¹ Another example of a regulator that approves common stock 14 15 issuance costs is the Mississippi Public Service Commission, which routinely includes a flotation cost adjustment in its Rate Stabilization Adjustment Rider formula.⁸² The Public 16 Utilities Regulatory Authority of Connecticut,⁸³ the Minnesota Public Utilities 17 Commission,⁸⁴ and the Virginia State Corporation Commission⁸⁵ have also recognized that 18

⁸¹ Northern States Power Co, EL11-019, Final Decision and Order at P 22 (2012).

⁸² See, e.g., Entergy Mississippi Formula Rate Plan FRP-7, <u>https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiLs4Sy67nsAhVKH</u> <u>qwKHddgA1wQFjABegQIBRAC&url=https%3A%2F%2Fcdn.entergy-</u> <u>mississippi.com%2Fuserfiles%2Fcontent%2Fprice%2Ftariffs%2Feml_frp.pdf&usg=AOvVaw1vyc6J_1IccZsh</u> <u>zpfCtD0v</u> (last visited Oct. 16, 2020).

⁷⁹ Case No. INT-G-16-02, *Direct Testimony of Mark Rogers* (Dec. 16, 2016) at 18.

⁸⁰ Docket No. 30011-97-GR-17, *Pre-Filed Direct Testimony of Anthony J. Ornelas* (May 1, 2018) at 52-53.

⁸³ See, e.g., Docket No. 14-05-06, Decision (Dec. 17, 2014) at 133-134.

⁸⁴ See, e.g., Docket No. E001/GR-10-276, Findings of Fact, Conclusions, and Order at 9.

⁸⁵ Roanoke Gas Company, Case No. PUR-2018-00013, Final Order, (Jan. 24, 2020) at 6.

1 flotation costs are a legitimate expense worthy of consideration in setting a fair and 2 reasonable ROE. 3 Has the WUTC previously considered flotation costs in establishing a 0. 4 fair ROE for Avista? 5 Yes. In Docket No. UE-991606 the WUTC concluded that a flotation cost A. 6 adjustment of 25 basis points should be included in the allowed return on equity: 7 The Commission also agrees with both Dr. Avera and Dr. Lurito that a 25 8 basis point markup for flotation costs should be made. This amount 9 compensates the Company for costs incurred from past issues of common stock. Flotation costs incurred in connection with a sale of common stock are 10 11 not included in a utility's rate base because the portion of gross proceeds that 12 is used to pay these costs is not available to invest in plant and equipment.⁸⁶ 13 Q. What was the WUTC's position regarding flotation costs in Avista's last 14 rate proceeding? 15 A. While the WUTC concluded that flotation costs "may be legitimate 16 adjustments made during the underwriting process," the Commission rejected my proposed 17 10 basis point adjustment, concluding that "the Company had failed to demonstrate the level 18 of flotation costs it had actually incurred during the test year."⁸⁷ 19 0. How have you addressed the Commission's concern? 20 Rather than developing a generic flotation cost adjustment based on industry-A. 21 wide data, my analysis is predicated on actual issuance costs incurred by Avista. 22 Specifically, Exh. AMM-13 documents the flotation costs associated with the Company's 23 sales of common stock, including those under its Dividend Reinvestment Plan. As shown

⁸⁶ *Third Supplemental Order*, WUTC Docket No. UE-991606, et al., p. 95 (September 2000).

⁸⁷ Docket UE-200900, et al., Final Order 08/05 (Sep. 27, 2021) at P 96.

1 there, this results in an issuance expense factor of 1.454 percent. Applying this expense 2 percentage to the 3.7 percent average dividend yield for the Utility Group produces a 3 flotation cost adjustment on the order of 5 basis points. I thus recommend the Commission 4 increase the cost of equity by 5 basis points in arriving at a fair ROE for Avista.

- 5 **Q**. In accounting for the impact of flotation costs, would it be relevant to 6 consider only expenses incurred during the test year, as the WUTC's finding in Docket 7 UE-200900 might suggest?

8 A. No. There is no economic rationale that would support considering only 9 equity flotation costs incurred during a single historical test year. As discussed earlier, 10 flotation costs reflect a difference between the amount paid by equity investors and the 11 capital received by the utility. This difference represents a permanent shortfall between the 12 capital committed by investors and the funds invested in rate base. Therefore, the flotation 13 cost adjustment is required to reflect this perpetual, ongoing difference irrespective of 14 whether the utility issues new common stock in any given test year.

- 15

C. Non-Utility DCF Model

16 Q. What other proxy group do you consider in evaluating a fair ROE for 17 Avista?

18 As indicated earlier, I also present a DCF analysis for a low risk group of A. 19 non-utility firms, with which Avista must compete for investors' capital. Under the 20 regulatory standards established by *Hope* and *Bluefield*, the salient criterion in establishing a 21 meaningful benchmark to evaluate a fair ROE is relative risk, not the particular business 22 activity or degree of regulation. With regulation taking the place of competitive market 23 forces, required returns for utilities should be in line with those of non-utility firms of

1	comparable risk operating under the constraints of free competition. Consistent with this						
2	accepted regulatory standard, I also apply the DCF model to a reference group of low-risk						
3	companies in the non-utility sectors of the economy. I refer to this group as the "Non-Utility						
4	Group." I explain this approach in more detail in Exh. AMM-3 at 34-37.						
5	Q. How do the overall risks of this Non-Utility Group compare with the						
6	Utility Group and Avista?						
7	A. Table 5 compares the Non-Utility Group with the Utility Group and Avista						
8	across the five key risk measures discussed earlier:						
9	TABLE 5						

			Value Line		
			Safety	Financial	
	S&P	Moody's	Rank	Strength	Beta
Non-Utility Group	А	A2	1	A++	0.80
Utility Group	BBB+	Baa2	2	А	0.91
Avista Corp.	BBB	Baa2	2	B++	0.95

COMPARISON OF RISK INDICATORS

11 As shown above, the average credit ratings, Safety Rank, and Financial Strength Rating for 12 the Non-Utility Group suggest less risk than for Avista and the proxy group of utilities. These objective indicators suggest that investors would likely conclude that the overall 13 14 investment risks for the Utility Group and Avista are greater than those of the firms in the 15 Non-Utility Group.

16

10

Q. What are the results of your DCF analysis for the Non-Utility Group?

17 A. As shown on Exh. AMM-14, I apply the DCF model to the non-utility companies using analysts' earnings per share ("EPS") growth projections, as described 18 19 earlier for the Utility Group. As summarized below in Table 6, after eliminating illogical Direct Testimony of Adrien M. McKenzie Avista Corporation Docket Nos. UE-22-____ & UG-22-____

values, application of the constant growth DCF model resulted in the following cost of
equity estimates:

3 4

TABLE 6DCF RESULTS – NON-UTILITY GROUP

Growth Rate	Average
Value Line	10.2%
IBES	10.2%
Zacks	10.8%

5 As discussed in Exh. AMM-3, reference to the Non-Utility Group is consistent with 6 established regulatory principles. Required returns for utilities should be in line with those 7 of non-utility firms of comparable risk operating under the constraints of free competition. 8 Because the actual cost of equity is unobservable, and DCF results inherently incorporate a 9 degree of error, cost of equity estimates for the Non-Utility Group provide an important 10 benchmark in evaluating a fair and reasonable ROE for Avista. The DCF results for the 11 Non-Utility Group support a finding that the 10.25 percent requested ROE for Avista's 12 utility operations is reasonable.

13

Q. Does this conclude your pre-filed direct testimony?

14 A. Yes.