

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. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. Adrien M. McKenzie, 3907 Red River, Austin, Texas, 78751.

4 **Q. In what capacity are you employed?**

5 A. I am President of Financial Concepts and Applications, Inc. (“FINCAP”),  
6 Inc., a firm providing financial, economic, and policy consulting services to business and  
7 government.

8 **Q. Please describe your educational background and professional**  
9 **experience.**

10 A. A description of my background and qualifications, including a resume  
11 containing the details of my experience, is attached as Exh. AMM-2.

12 **A. Overview**

13 **Q. What is the purpose of your testimony in this case?**

14 A. The purpose of my testimony is to present to the Washington Utilities and  
15 Transportation Commission (the “Commission” or “WUTC”) my independent evaluation of  
16 the fair rate 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 reasonableness of Avista’s capital structure, considering both the specific risks faced by the  
19 Company and other industry guidelines.

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

3           A.     To prepare my testimony, I use information from a variety of sources that  
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

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

6 In addition, I corroborate my utility quantitative analyses by applying the DCF  
7 model to a group of low risk non-utility firms. Finally, my testimony addresses the impact  
8 of regulatory mechanisms, including the implications of the Company's proposed multi-year  
9 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?**

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

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

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<sup>1</sup> *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  
2 the proper discharge of its public duties.<sup>2</sup>

3 The *Hope*<sup>3</sup> 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  
11 with returns on investments in other enterprises having corresponding risks.  
12 That return, moreover, should be sufficient to assure confidence in the  
13 financial integrity of the enterprise, so as to maintain credit and attract  
14 capital.<sup>4</sup>

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  
23 followed in fixing rates (or in determining the allowed ROE),<sup>5</sup> these and subsequent cases  
24 enshrined the importance of an end result that meets the opportunity cost standard of

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<sup>2</sup> *Id.*

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

<sup>4</sup> *Id.*

<sup>5</sup> *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 **Q. Please summarize the results of your analyses.**

9 A. In order to reflect the risks and prospects associated with Avista's  
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 A. Based on the results of my analyses and the economic requirements necessary  
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           • The reasonableness of a 10.25 percent ROE for Avista is supported by the need  
2           to consider the challenges to the Company’s credit standing:
- 3                 ○ The pressure of funding significant capital expenditures of approximately  
4                 \$445 million per year through 2026 heighten the uncertainties associated  
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,  
8                 Avista’s reliance on hydroelectric generation and increasing dependence on  
9                 natural gas fueled capacity exposes the Company to relatively greater risks  
10                of power cost volatility, even with the Energy Recovery Mechanism  
11                (“ERM”).
- 12                ○ Avista’s opportunity to actually earn a fair ROE and mitigate exposure to  
13                earnings attrition is an important objective.
- 14                ○ My conclusion that a 10.25 percent ROE for Avista is a reasonable estimate  
15                of investors’ required return is also reinforced by the greater uncertainties  
16                associated with Avista’s relatively small size.
- 17           • Investors recognize that constructive regulation is a key ingredient in supporting  
18           utility credit standing and financial integrity and providing Avista with the  
19           opportunity to earn a return that adequately reflects its risks is an essential  
20           ingredient to support the Company’s financial position, which ultimately benefits  
21           customers by ensuring reliable service at lower long-run costs.
- 22           • Continued support for Avista’s financial integrity, including the opportunity to  
23           actually earn a reasonable ROE, is imperative to ensure that the Company has the  
24           capability to maintain and build its credit standing while confronting potential  
25           challenges associated with funding infrastructure development necessary to meet  
26           the needs of its customers.
- 27           • As my testimony documents, the electric utilities in my proxy group operate  
28           under a wide variety of regulatory mechanisms, including decoupling and  
29           infrastructure cost trackers. Similarly, the vast majority of these proxy firms  
30           operate in regulatory jurisdictions that allow for future test years, formula rates,  
31           and MYRPs. As a result, there is no basis to distinguish Avista from the proxy  
32           group used as the basis of my analyses.
- 33           • Finally, by proposing a two-year rate plan, the Company is at increased risk of an  
34           earnings shortfall if the underlying assumptions are not realized, or the allowed  
35           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.

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

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

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

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

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

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

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

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

8 A. Yes. Investors make investment capital available to Avista only if the  
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?**

17 A. Each of the following considerations indicate that Avista's current ROE is  
18 insufficient:

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

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<sup>6</sup> 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           • As discussed in the testimony of Mr. Everitt, COVID-19 has negatively impacted  
2 workplace efficiency and employee retention and recruitment.
- 3           • As discussed in the testimony of Dr. Forsyth, supply chain disruptions also  
4 increase uncertainty over input prices in the utility sector.
- 5           • My testimony documents (*e.g.*, Figures 7 and 8) that expectations for tightening  
6 monetary policies and higher interest rates support an increase in the Company's  
7 allowed ROE, particularly in light of the two-year horizon of the MYRP.
- 8           • Avista's market capitalization makes it one of the smallest investor-owned  
9 utilities (see Figure 3), which heightens the need to support capital attraction  
10 relative to its much larger counterparts in the industry.
- 11          • In the midst of the foregoing, Avista will be required to refund a substantial  
12 portion of its outstanding long-term debt.
- 13          • As documented in the testimony of Mr. Everitt, pressures on wage and salary  
14 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           • More than its peers, Avista has seen a dramatic increase in its beta value since  
18 2020.
- 19           • The Company's existing credit ratings are sub-par for the industry and an  
20 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 • Avista’s requested capitalization is consistent with the Company’s need to  
2 support its credit standing and financial flexibility as it seeks to raise additional  
3 capital to fund significant system investments, refinance maturing debt  
4 obligations, and meet the requirements of its service territory.
- 5 • Avista’s proposed common equity ratio is consistent with the range of  
6 capitalizations for the proxy utilities and their utility operating subsidiaries, both  
7 for the most recent fiscal year-end available and based on near-term expectations  
8 of The Value Line Investment Survey (“Value Line”).
- 9 • The requested capitalization reflects the importance of an adequate equity layer  
10 to accommodate Avista’s operating risks and recognize the impact of off-balance  
11 sheet commitments such as purchased power agreements, which carry with them  
12 some level of imputed debt.

13 **II. RISKS OF AVISTA**

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,<sup>7</sup> 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:

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

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

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."<sup>9</sup> 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."<sup>10</sup>

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

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

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

<sup>10</sup> S&P Global Ratings, *Avista Corp.*, RatingsDirect (May 29, 2020).

1 “extraordinary circumstances,” which heightens the Company’s exposure to deferred energy  
2 costs and reduced cash flows.<sup>11</sup>

3 **Q. How has global warming impacted investors’ assessment of Avista’s risk**  
4 **exposure?**

5 A. The risk posed by climate-related weather events has served to magnify  
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  
8 adaptation,” and concluded that “water stress is also a serious threat” for Avista.<sup>12</sup> In  
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  
11 one of the top 10 utilities with the highest average exposure to wildfires.<sup>13</sup> While noting that  
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  
16 supplies, which can weaken their financial position and ultimately credit  
17 quality.<sup>14</sup>

18 **Q. Do financial pressures associated with Avista’s planned capital**  
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

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<sup>11</sup> Dockets UE-170485 and UG-170486 (*consolidated*), Order 07 at para. 160.

<sup>12</sup> S&P Global Ratings, *Keeping The Lights On: U.S. Utilities’ Exposure To Physical Climate Risks*, RatingsDirect (Sep. 16, 2021).

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

1 fund new investment in electric generation, transmission and distribution facilities and  
2 increase wildfire resiliency. As discussed in the testimony of Mr. Thies, Avista’s capital  
3 additions are expected to total approximately \$445 million annually through 2026. This  
4 represents a substantial investment given Avista’s current rate base of approximately \$3.8  
5 billion. In addition, Avista must also fund debt maturities of approximately \$250 million in  
6 2022.<sup>15</sup>

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  
13 our indicated financial metric threshold for a possible downgrade.”<sup>16</sup> Similarly, S&P  
14 concluded that “there is minimal cushion between Avista’s financial measures and the  
15 ratings downside trigger . . .”<sup>17</sup>

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

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

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<sup>15</sup> Moody’s Investors Service, *Avista Corp., update to credit analysis*, Credit Opinion (Aug. 10, 2021).

<sup>16</sup> *Id.*

<sup>17</sup> 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  
10 that may require significant capital investments.”<sup>18</sup>

## 11 **B. Regulatory Mechanisms**

12 **Q. 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  
16 COVID-19-related incremental costs and benefits and a balancing account for wildfire costs.  
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 **your 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

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<sup>18</sup> 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  
3 mechanisms, which encompass revenue decoupling and adjustment clauses designed to  
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.<sup>19</sup>

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

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

<sup>20</sup> 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).

1 in eight retail jurisdictions.<sup>21</sup> As documented on Exh. AMM-5, the majority of firms  
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  
7 utilities in my proxy group.<sup>22</sup> As discussed above, the two-year horizon of the  
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 **Q. Would investors consider the potential impact of Avista’s exposure to**  
12 **earnings shortfalls?**

13 A. Yes. The deterioration of actual return below the allowed return that occurs  
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,

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<sup>21</sup> Edison Electric Institute, *Alternative Regulation for Emerging Utility Challenges: 2015 Update* (Nov. 11, 2015).

<sup>22</sup> 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.”).

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

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

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

12 A. Yes. Regulatory lag and attrition have been consistent issues for Avista.  
13 Figure 2 below compares the Company's actual earned ROE attributable to its Washington-  
14 jurisdictional utility operations with its authorized ROE over the 2009-2020 period.<sup>25</sup>

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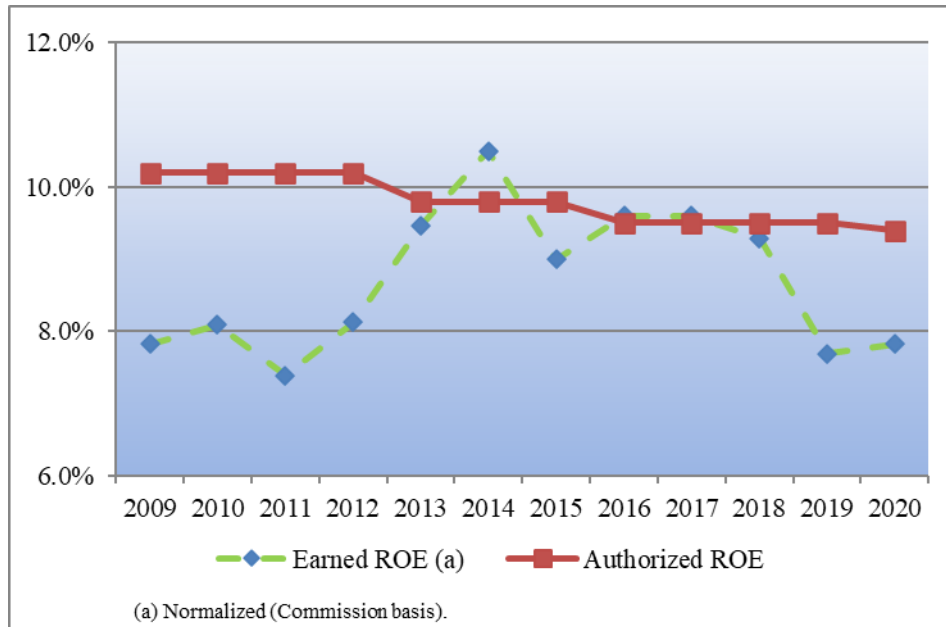
<sup>23</sup> *Verizon Communications, et al v. Federal Communications Commission, et al*, 535 U.S. 467 (2002).

<sup>24</sup> S&P Global Ratings, *Avista Corp.*, RatingsDirect (May 29, 2020).

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

1  
2

**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,<sup>26</sup> 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.<sup>27</sup>

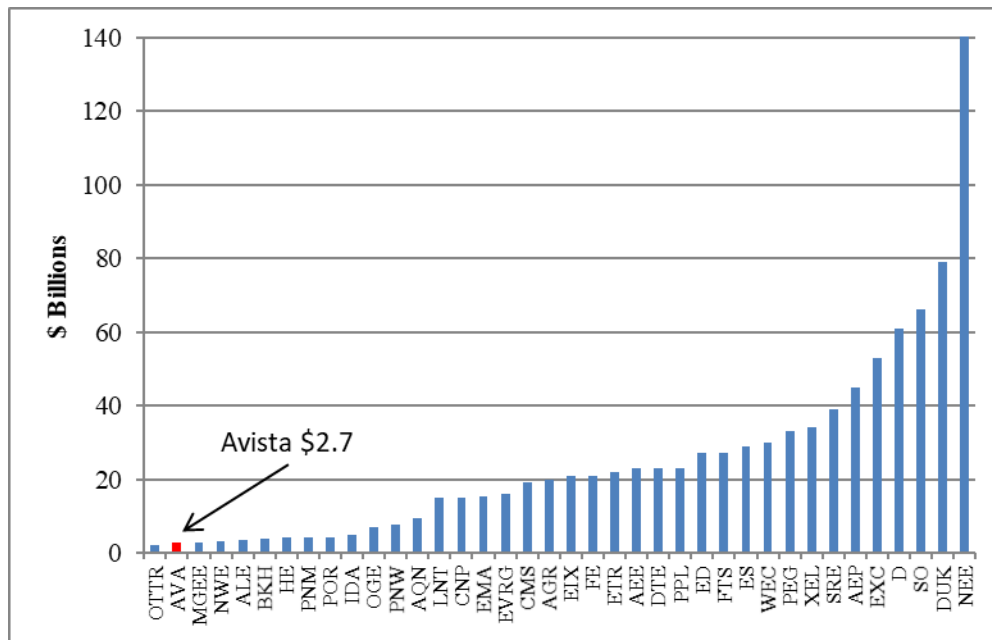
9 The credit rating agencies have also recognized the negative implications of attrition for the  
10 Company. Moody’s noted that, “Because of historical test year requirements, Avista  
11 experiences cash flow lag,”<sup>28</sup> while S&P reported the prospect of “continued regulatory  
12 lag.”<sup>29</sup>

<sup>26</sup> In the three years in which the Company’s actual ROE was equal to or greater than the authorized ROE,  
<sup>27</sup> Value Line Investment Survey, *Avista Corp.* (Apr. 23, 2021) (emphasis original).  
<sup>28</sup> Moody’s Investors Service, *Avista Corp., update to credit analysis*, Credit Opinion (Aug. 10, 2021).  
<sup>29</sup> S&P Global Ratings, *Avista Corp.*, RatingsDirect (Aug. 5, 2021).

1 **Q. Would investors consider Avista’s relative size in their assessment of the**  
 2 **Company’s risks and prospects?**

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

7 **FIGURE 3**  
 8 **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

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<sup>30</sup> 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.

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

8 **D. Support for Avista’s Credit Standing**

9 **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”.

12 **Q. What considerations impact investors’ assessment of the firms in the**  
13 **utility industry?**

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

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<sup>31</sup> 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).

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

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

6 **Q. What are the implications for Avista, given the potential for further**  
7 **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?**

4           A. These terms are generally synonymous and refer to the utility’s ability to  
5           attract and retain the capital that is necessary to provide service at reasonable cost, consistent  
6           with the Supreme Court standards. Avista’s plans call for a continuation of capital  
7           investments to preserve and enhance service reliability for its customers. The Company  
8           must generate adequate cash flow from operations to fund these requirements and for  
9           repayment of maturing debt, together with access to capital from external sources under  
10          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          much like debt investors. Investors understand the important role that a supportive  
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          **Q. What role does regulation play in ensuring that Avista has access to**  
20          **capital under reasonable terms and on a sustainable basis?**

21          A. Regulatory signals are a major driver of investors’ risk assessment for  
22          utilities. Investors recognize that constructive regulation is a key ingredient in supporting  
23          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,"<sup>33</sup> Similarly, S&P observed that, "Regulatory  
3 advantage is the most heavily weighted factor when S&P Global Ratings analyzes a  
4 regulated utility's business risk profile."<sup>34</sup> Value Line summarizes these sentiments:

5 As we often point out, the most important factor in any utility's success,  
6 whether it provides electricity, gas, or water, is the regulatory climate in  
7 which it operates. Harsh regulatory conditions can make it nearly impossible  
8 for the best run utilities to earn a reasonable return on their investment.<sup>35</sup>

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  
18 inconsistent."<sup>36</sup> With respect to the Company specifically, Moody's noted that "improved  
19 regulatory and financial outcomes [for Avista] remain subject to the bill's implementation by

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

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

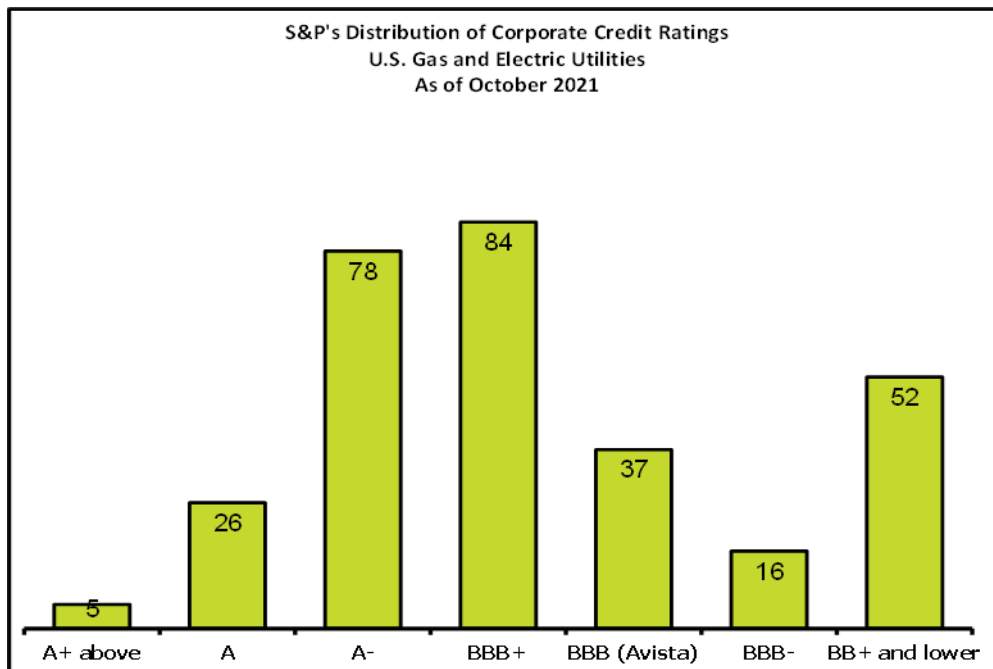
<sup>35</sup> Value Line Investment Survey, *Water Utility Industry* (Jan. 13, 2017) at p. 1780.

<sup>36</sup> 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).

1 the WUTC,”<sup>37</sup> and concluded that “[u]ncertainty over the implementation of new, potentially  
 2 positive legislative provisions” was a key credit challenge for the Company.<sup>38</sup>

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

8 **FIGURE 4**  
 9 **S&P CORPORATE CREDIT RATINGS – UTILITIES**



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.<sup>39</sup> Continued regulatory support will be instrumental in

<sup>37</sup> *Id.*

<sup>38</sup> Moody’s Investors Service, *Avista Corp., update to credit analysis*, Credit Opinion (Aug. 10, 2021).

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

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

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

10 **E. Outlook for Capital Costs**

11 **Q. Please summarize current economic and capital market conditions.**

12 A. U.S. real GDP contracted 3.5 percent during 2020, including a decline of 31.2  
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.

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<sup>39</sup> 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.<sup>40</sup> 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.<sup>41</sup> After abandoning the word “transitory” for  
13 describing the nature of the current high inflation rate,<sup>42</sup> 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.”<sup>43</sup>

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<sup>40</sup> 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), <https://www.newyorkfed.org/newsevents/news/research/2021/20211213>.

<sup>41</sup> Social Security Administration, *Fact Sheet: 2022 Social Security Changes*, <https://www.ssa.gov/news/press/factsheets/colafacts2022.pdf>.

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

<sup>43</sup> Federal Reserve, *Transcript of Chair Powell’s Press Conference* (Dec. 15, 2021), <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20211215.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  
18 requirements in the face of the severe disruptions to commerce and the world economy.  
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 A. Yes. Concerns over weakening credit quality prompted S&P to revise its  
 7 outlook for the regulated utility industry from “stable” to “negative.”<sup>44</sup> As S&P explained:

8 Even before the current downturn and COVID-19, a confluence of factors,  
 9 including the adverse impacts of tax reform, historically high capital  
 10 spending, and associated increased debt, resulted in little cushion in ratings  
 11 for unexpected operating challenges.<sup>45</sup>

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  
 16 the year that percentage had doubled, to about 36%.”<sup>46</sup> S&P further observed that “[o]ne of  
 17 the enduring effects of COVID-19 was regulatory lag,”<sup>47</sup> and noted that “2021 could become  
 18 the second consecutive year that downgrades outpace upgrades” in the utility sector.<sup>48</sup>

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

<sup>45</sup> 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).

<sup>46</sup> S&P Global Ratings, *North American Regulated Utilities’ Negative Outlook Could See Modest Improvement*, RatingsDirect (Jan. 20, 2021).

<sup>47</sup> 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).

<sup>48</sup> 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  
3 under pressure relative to downside ratings thresholds.”<sup>49</sup> As Value Line concluded,  
4 “Inflation clearly is worrisome.”<sup>50</sup>

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  
12 companies was 0.66<sup>51</sup> and the beta for Avista was 0.60.<sup>52</sup>

13           The significant shift in pre- and post-pandemic beta values for the Gas Group and  
14 Avista is further exemplified in Figure 5 below. As can be seen, the Electric Group’s and  
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.

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

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

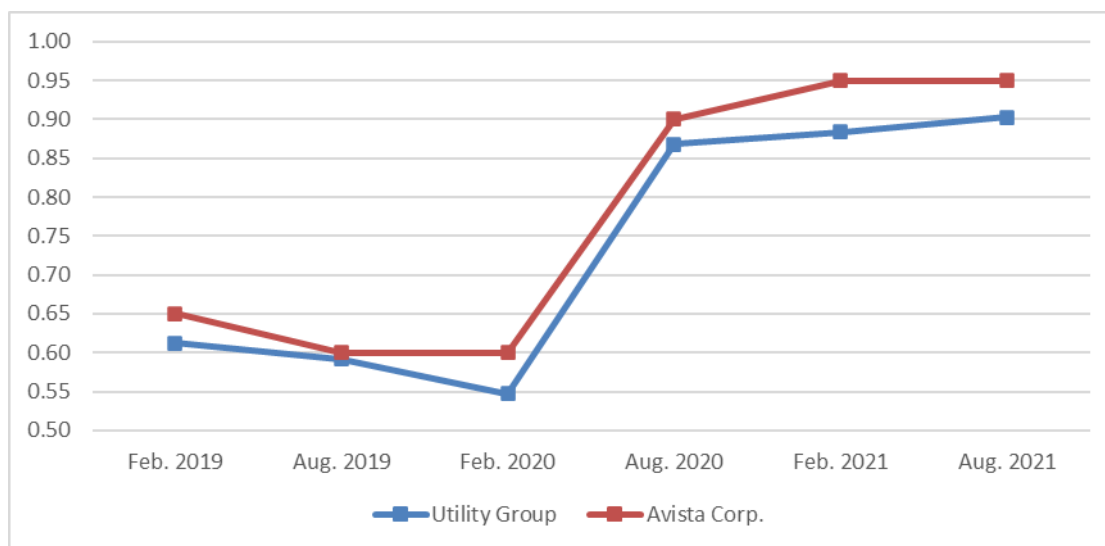
<sup>51</sup> The Value Line Investment Survey, *Summary & Index* (Jan. 24, 2020).

<sup>52</sup> The Value Line Investment Survey, *Avista Corp.* (Jan. 24, 2020).



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

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

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<sup>53</sup> Federal Reserve, *Press Release* (Mar. 23, 2020),  
<https://www.federalreserve.gov/monetarypolicy/files/monetary20200323a1.pdf>.

1 initiatives designed to support credit markets and ensure liquidity, including credit facilities  
2 to support households, businesses, and state and local governments, as well as the purchase  
3 of corporate bonds on the secondary market.<sup>54</sup>

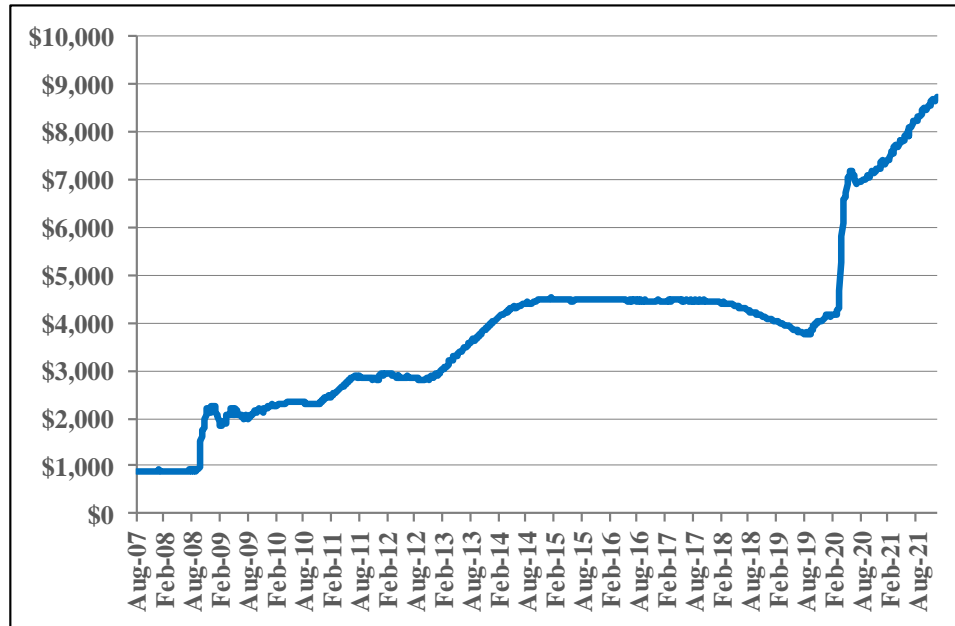
4 As illustrated in Figure 6 below, the Federal Reserve's asset holdings exceed \$8.7  
5 trillion, which is an all-time high, and the resulting effect on capital market conditions has  
6 likely never been more pronounced. While the Federal Reserve's aggressive monetary  
7 stimulus may help to ensure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

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<sup>54</sup> 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.

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**FIGURE 6  
FEDERAL RESERVE BALANCE SHEET  
(BILLION \$)**



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

4  
5  
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10

**Q. Are bond yields expected to remain at current levels over the next few years?**

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

1  
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**FIGURE 7  
INTEREST RATE TRENDS**



	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<b>Change (bps)</b> <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           **Q. Are expectations of higher bond yields and exposure to inflation**  
 2 **consistent with recent Federal Reserve actions and the views of the Federal Open**  
 3 **Market Committee (“FOMC”)?**<sup>55</sup>

4           A. Yes. Responding to concerns over accelerating inflation, at its most recent  
 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  
 11 result, they will purchase \$60 billion in Treasury and mortgage securities in  
 12 January, putting the program on track to end by March.<sup>56</sup>

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  
 17 raise their short-term benchmark rate at least three times next year to cool  
 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  
 21 hold rates near zero on Wednesday, but the latest projections are a significant  
 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.<sup>57</sup>

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

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

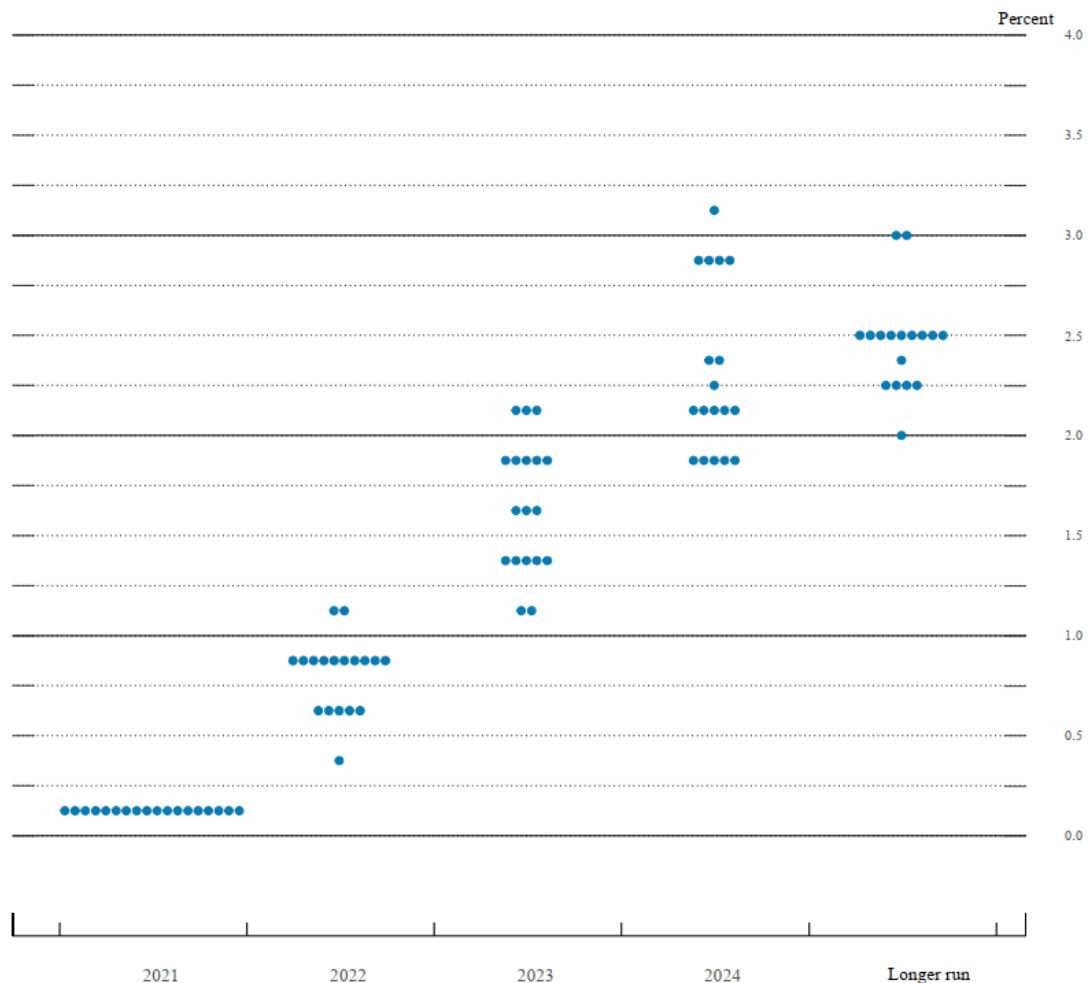
<sup>56</sup> Nick Timiraos, *Fed Officials Project Three Rate Rises Next Year and Accelerate Wind Down of Stimulus*, Dow Jones Newswires (Dec. 16, 2021).

<sup>57</sup> *Id.*

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

6  
 7

**FIGURE 8  
 FEDERAL RESERVE DOT PLOT**



<sup>58</sup> *Summary of Economic Projections* (Dec. 15, 2021).  
<https://www.federalreserve.gov/monetarypolicy/files/fomcprojt20211215.pdf>.  
<sup>59</sup> *Id.*

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

3           A.     No. They reflect the reality of the situation in which Avista and other  
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  
11 addressed by state regulators."<sup>60</sup>

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  
16 return commensurate with Avista's risks will weaken its financial integrity, while hampering  
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

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<sup>60</sup> 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  
3 consideration of forecasts for higher inflation and interest rates in evaluating a just and  
4 reasonable ROE in this case.

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

8 A. First, and most fundamentally, the cost of equity is, perforce, a forward-  
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 **F. Capital Structure**

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

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  
22 shareholders' standpoint, a higher debt ratio means that there are proportionately more

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



1 investors ahead of them, thereby increasing the uncertainty as to the amount of cash flow  
2 that will remain.

3 **Q. What common equity ratio is implicit in Avista's requested capital**  
4 **structure?**

5 A. Avista's capital structure is presented in the testimony of Mr. Thies. As  
6 summarized in his testimony, the proposed capital structure used to compute Avista's overall  
7 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 utilities**  
13 **going forward?**

14 A. As shown on page 1 of Exh. AMM-6, Value Line expects an average  
15 common equity ratio for the proxy group of utilities of 45.5 percent for its three-to-five year  
16 forecast horizon, with the individual common equity ratios ranging from 32.5 percent to  
17 57.5 percent. The WUTC has previously observed that "[i]t is appropriate ... to afford more  
18 weight to forward considerations than to historic conditions as we determine the appropriate  
19 equity ratio to be embedded in prospective rates."<sup>62</sup>

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

1           **Q.    How does Avista’s proposed equity ratio compare with those of the**  
2 **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**  
8 **have for the capital structures maintained by utilities?**

9           A.    As discussed earlier, utilities are facing the need to finance significant capital  
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  
16 necessary system investment, including times of adverse capital market conditions. This is  
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           **Q.    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

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

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

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.

12 **Q. What other factors do investors consider in their assessment of a**  
13 **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

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

1 financial risks.<sup>64</sup> In order to offset the debt equivalent associated with off-balance sheet  
2 obligations, the utility must rebalance its capital structure by increasing its common equity  
3 in order to restore its effective capitalization ratios to previous levels. Unless the utility  
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  
21 requirements, and the Company's ongoing efforts to strengthen its credit standing and

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

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

### 5 **III. CAPITAL MARKET ESTIMATES**

#### 6 **Q. What is the purpose of this section?**

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

#### 10 **A. Quantitative Analyses**

#### 11 **Q. Do you rely on a single method to estimate the cost of equity for Avista?**

12 A. No. In my opinion, no single method or model should be relied upon to  
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:

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

1 and we welcome a robust and diverse record of evidence based on a variety  
2 of analytics and cost of capital methodologies.<sup>65</sup>

3 **Q. More recently, the WUTC elected to assign greater weight to the DCF**  
4 **model and concluded that CAPM results should be given little weight.<sup>66</sup> Do you agree**  
5 **with these findings?**

6 A. No. It is widely recognized that no single method can be regarded as fail-  
7 safe; with all approaches having advantages and shortcomings. As the Federal Energy  
8 Regulatory Commission (“FERC”) has noted, “The determination of rate of return on equity  
9 starts from the premise that there is no single approach or methodology for determining the  
10 correct rate of return.”<sup>67</sup> FERC also recognized the potential for any application of the DCF  
11 model to produce unreliable results.<sup>68</sup> Similarly, a publication of the Society of Utility and  
12 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  
15 proxies used to validate the theory. Each model has its own way of  
16 examining investor behavior, its own premises, and its own set of  
17 simplifications of reality. Each method proceeds from different fundamental  
18 premises, most of which cannot be validated empirically. Investors clearly do  
19 not subscribe to any singular method, nor does the stock price reflect the  
20 application of any one single method by investors.<sup>69</sup>

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

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

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

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

<sup>69</sup> 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.”<sup>70</sup> 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  
 6 way of examining investor behavior, its own premises, and its own set of  
 7 simplifications of reality. Each method proceeds from different fundamental  
 8 premises that cannot be validated empirically. Investors do not necessarily  
 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  
 11 as to which method is used by investors. In the absence of any hard evidence  
 12 as to which method outdoes the other, all relevant evidence should be used  
 13 and weighted equally, in order to minimize judgmental error, measurement  
 14 error, and conceptual infirmities.<sup>71</sup>

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  
 19 of weight on the results of any DCF analysis. One is. . . the failure of the  
 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  
 24 the stock can vary widely. And, the third reason is that the unadjusted DCF  
 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  
 29 suggestive.<sup>72</sup>

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

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<sup>70</sup> *Id.*

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

<sup>72</sup> *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 **Q. Why is the CAPM approach an appropriate component of evaluating the**  
4 **cost of equity for Avista?**

5 A. The CAPM approach generally is considered to be the most widely  
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.  
13 Moreover, the CAPM is directly relevant to the Commission's task in this  
14 context of assessing what rate of return on equity investors require to invest  
15 in a utility. John Graham and Campbell Harvey have explained that "the  
16 CAPM is by far the most popular method of estimating the cost of equity  
17 capital."<sup>73</sup>

18 **Q. What specific proxy group of utilities do you rely on for your analysis?**

19 A. In estimating the cost of equity, the DCF model is typically applied to  
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  
22 composed of 16 companies, which I refer to as the "Utility Group."<sup>74</sup>

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

<sup>74</sup> 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).



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

2 A. Table 1 compares the Utility Group with Avista across five key indicators of  
3 investment risk:

4 **TABLE 1**  
5 **COMPARISON OF RISK INDICATORS**

	<u>Value Line</u>				
	<u>S&amp;P</u>	<u>Moody's</u>	<u>Safety Financial</u>		
<u>Rank</u>			<u>Strength</u>	<u>Beta</u>	
Utility Group	BBB+	Baa2	2	A	0.91
Avista Corp.	BBB	Baa2	2	B++	0.95

6 **Q. Do these comparisons indicate that investors would view the firms in**  
7 **your proxy groups as risk-comparable to the Company?**

8 A. Yes. Considered together, a comparison of these objective measures, which  
9 consider of a broad spectrum of risks, including financial and business position, and  
10 exposure to firm-specific factors, indicates that investors would likely conclude that the  
11 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?**

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

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

3 **TABLE 2**  
 4 **DCF RESULTS – UTILITY GROUP**

<u>Growth Rate</u>	<u>Average</u>
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  
 14 CAPM.

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

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

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

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

4 **Q. How do you implement the risk premium method?**

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

11 **Q. What cost of equity estimates is indicated by the ECAPM?**

12 A. Empirical tests of the CAPM have shown that low-beta securities earn returns  
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?**

2           A.     As shown on page 1 of Exh. AMM-10, adding an adjusted risk premium of  
3     5.90 percent to the six-month average yield on long-term Baa utility bonds at October 2021  
4     of 3.31 percent results in an implied cost of equity of 9.18 percent.<sup>76</sup>

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          A.     Reference to rates of return available from alternative investments of  
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

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<sup>76</sup> 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.

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

5 **B. Flotation Costs**

6 **Q. What other considerations are relevant in setting the return on equity for**  
7 **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.

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

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

1 from the sale of common stock used to pay flotation costs is available to invest in plant and  
2 equipment, nor are flotation costs capitalized as an intangible asset. Unless some provision is  
3 made to recognize these issuance costs, a utility's revenue requirements will not fully reflect  
4 all of the costs incurred for the use of investors' funds. Because there is no accounting  
5 convention to accumulate the flotation costs associated with equity issues, they must be  
6 accounted for indirectly, with an upward adjustment to the cost of equity being the most  
7 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,  
17 including retained earnings.<sup>77</sup> Similarly, *New Regulatory Finance* contains the following  
18 discussion:

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

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

1 securities occurs, with no need for continuing compensation in future years.  
 2 This argument implies that the company has already been compensated for  
 3 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  
 5 applicable to most utilities. ... The flotation cost adjustment cannot be strictly  
 6 forward-looking unless all past flotation costs associated with past issues  
 7 have been recovered.<sup>78</sup>

8 **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  
 16 percent "bare bones" cost of equity, common stockholders will not earn their required rate of  
 17 return on their \$10 investment, since growth will really only be 5.25 percent, instead of 5.5  
 18 percent:

19 **TABLE 3**  
 20 **NO FLOTATION COST ADJUSTMENT**

<b>Year</b>	<b>Common Stock</b>	<b>Retained Earnings</b>	<b>Total Equity</b>	<b>Market Price</b>	<b>M/B Ratio</b>	<b>Allowed ROE</b>	<b>EPS</b>	<b>DPS</b>	<b>Payout Ratio</b>
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	<u>\$10.55</u>	<u>\$11.08</u>	1.050	10.50%	<u>\$ 1.11</u>	<u>\$ 0.55</u>	50.0%
<b>Growth</b>			<b>5.25%</b>	<b>5.25%</b>			<b>5.25%</b>	<b>5.25%</b>	

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





1           **Q.    Have other regulators recognized flotation costs in evaluating a fair**  
 2 **ROE?**

3           A.    Yes.    In Case No. INT-G-16-02 the staff of the Idaho Public Utilities  
 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  
 9 textbooks.<sup>79</sup>

10           More recently, the Wyoming Office of Consumer Advocate, an independent division  
 11 of the Wyoming Public Service Commission, recommended a 10 basis point flotation cost  
 12 adjustment for a gas utility.<sup>80</sup> Similarly, the South Dakota Public Utilities Commission has  
 13 recognized the impact of issuance costs, concluding that, “recovery of reasonable flotation  
 14 costs is appropriate.”<sup>81</sup> Another example of a regulator that approves common stock  
 15 issuance costs is the Mississippi Public Service Commission, which routinely includes a  
 16 flotation cost adjustment in its Rate Stabilization Adjustment Rider formula.<sup>82</sup> The Public  
 17 Utilities Regulatory Authority of Connecticut,<sup>83</sup> the Minnesota Public Utilities  
 18 Commission,<sup>84</sup> and the Virginia State Corporation Commission<sup>85</sup> have also recognized that

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

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

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

<sup>82</sup> *See, e.g.*, Entergy Mississippi Formula Rate Plan FRP-7,

[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiLs4Sy67nsAhVKHqwKHddgAJwQFjABegQIBRAC&url=https%3A%2F%2Fcdn.energy-mississippi.com%2Fuserfiles%2Fcontent%2Fprice%2Ftariffs%2Feml\\_frp.pdf&usg=AOvVaw1vyc6J\\_1IccZshzpfCtD0v](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiLs4Sy67nsAhVKHqwKHddgAJwQFjABegQIBRAC&url=https%3A%2F%2Fcdn.energy-mississippi.com%2Fuserfiles%2Fcontent%2Fprice%2Ftariffs%2Feml_frp.pdf&usg=AOvVaw1vyc6J_1IccZshzpfCtD0v) (last visited Oct. 16, 2020).

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

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

<sup>85</sup> 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 **Q. Has the WUTC previously considered flotation costs in establishing a**  
4 **fair ROE for Avista?**

5 A. Yes. In Docket No. UE-991606 the WUTC concluded that a flotation cost  
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  
10 stock. Flotation costs incurred in connection with a sale of common stock are  
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.<sup>86</sup>

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."<sup>87</sup>

19 **Q. How have you addressed the Commission's concern?**

20 A. Rather than developing a generic flotation cost adjustment based on industry-  
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

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

<sup>87</sup> 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 A. As indicated earlier, I also present a DCF analysis for a low risk group of  
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**  
 10 **COMPARISON OF RISK INDICATORS**

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

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.  
 13 These objective indicators suggest that investors would likely conclude that the overall  
 14 investment risks for the Utility Group and Avista are greater than those of the firms in the  
 15 Non-Utility Group.

16 **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  
 18 companies using analysts’ earnings per share (“EPS”) growth projections, as described  
 19 earlier for the Utility Group. As summarized below in Table 6, after eliminating illogical

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

3 **TABLE 6**  
 4 **DCF RESULTS – NON-UTILITY GROUP**

<u>Growth Rate</u>	<u>Average</u>
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.