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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)
OF AVISTA CORPORATION FOR THE)
AUTHORITY TO INCREASE ITS RATES)
AND CHARGES FOR ELECTRIC AND)
NATURAL GAS SERVICE TO ELECTRIC)
AND NATURAL GAS CUSTOMERS IN THE)
STATE OF IDAHO)
)

CASE NO. AVU-E-23-01
CASE NO. AVU-G-23-01

DIRECT TESTIMONY
OF
ADRIEN M. MCKENZIE, CFA

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

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 Exhibit No. 3, Schedule 1.

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 Idaho Public Utilities
15 Commission (the “Commission” or “IPUC”) my independent evaluation of the fair rate of
16 return on equity (“ROE”) for the jurisdictional electric and natural gas utility operations of
17 Avista Corp. (“Avista” or “the Company”). In addition, I also examine the reasonableness
18 of Avista’s capital structure, considering both the specific risks faced by the Company and
19 other industry guidelines.

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

22 A. To prepare my testimony, I use information from a variety of sources that
23 would normally be relied upon by a person in my capacity. I am familiar with the

1 organization, finances, and operations of Avista from my participation in prior proceedings
2 before the IPUC, the Washington Utilities and Transportation Commission (“WUTC”), and
3 the Oregon Public Utility Commission. In connection with the present filing, I consider and
4 rely upon corporate disclosures, publicly available financial reports and filings, and other
5 published information relating to Avista. I have also visited the Company’s main offices and
6 had discussions with management in order to better familiarize myself with Avista’s utility
7 operations. My evaluation also relies upon information relating to current capital market
8 conditions and specifically to current investor perceptions, requirements, and expectations
9 for electric and natural gas utilities. These sources, coupled with my experience in the fields
10 of finance and utility regulation, have given me a working knowledge of the issues relevant
11 to investors’ required return for Avista, and they form the basis of my analyses and
12 conclusions.

13 **Q. How is your testimony organized?**

14 A. After first summarizing my conclusions and recommendations, my testimony
15 reviews the operations and finances of Avista and industry-specific risks and capital market
16 uncertainties perceived by investors. With this as a background, I present the application of
17 well-accepted quantitative analyses to estimate the current cost of equity for a reference
18 group of comparable-risk utilities (“Utility Group”). These include the discounted cash flow
19 (“DCF”) model, the Capital Asset Pricing Model (“CAPM”), the empirical form of the
20 CAPM (“ECAPM”), an equity risk premium approach based on allowed ROEs for electric
21 utilities, and reference to expected rates of return for electric utilities, which are all methods
22 that are commonly relied on in regulatory proceedings. Based on the cost of equity
23 estimates indicated by my analyses, the Company’s ROE is evaluated considering the

1 specific risks and potential challenges for Avista’s utility operations in Idaho, as well as
2 other factors (*e.g.*, flotation costs) that are properly considered in setting a fair ROE for the
3 Company.

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

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

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

16 A public utility is entitled to such rates as will permit it to earn a return on the
17 value of the property which it employs for the convenience of the public
18 equal to that generally being made at the same time and in the same general
19 part of the country on investments in other business undertakings which are
20 attended by corresponding risks and uncertainties. . . . The return should be
21 reasonable, sufficient to assure confidence in the financial soundness of the
22 utility, and should be adequate, under efficient and economical management,
23 to maintain and support its credit and enable it to raise money necessary for
24 the proper discharge of its public duties.²

¹ *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm’n*, 262 U.S. 679 (1923). (“*Bluefield*”)

² *Id.*

1 The *Hope*³ case expanded on the guidelines as to a reasonable ROE, reemphasizing
2 its findings in *Bluefield* and establishing that the rate-setting process must produce an end-
3 result that allows the utility a reasonable opportunity to cover its capital costs. The Court
4 stated:

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

13 In summary, the Supreme Court’s findings in *Hope* and *Bluefield* established that a just and
14 reasonable ROE must be sufficient to: 1) fairly compensate the utility’s investors, 2) enable
15 the utility to offer a return adequate to attract new capital on reasonable terms, and 3)
16 maintain the utility’s financial integrity. These standards should allow the utility to fulfill its
17 obligation to provide reliable service while meeting the needs of customers through
18 necessary system replacement and expansion, but they can only be met if the utility has a
19 reasonable opportunity to actually earn its allowed ROE.

20 While the *Hope* and *Bluefield* decisions did not establish a particular method to be
21 followed in fixing rates (or in determining the allowed ROE),⁵ these and subsequent cases
22 enshrined the importance of an end result that meets the opportunity cost standard of
23 finance. Under this doctrine, the required return is established by investors in the capital
24 markets based on expected returns available from comparable risk investments. Coupled

³ *Federal Power Comm’n v. Hope Natural Gas Co.* (320 U.S. 391, 1944). (“*Hope*”)

⁴ *Id.*

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

1 with modern financial theory, which has led to the development of formal risk-return models
2 (e.g., DCF and CAPM), practical application of the *Bluefield* and *Hope* standards involves
3 the independent, case-by-case consideration of capital market data in order to evaluate an
4 ROE that will produce a balanced and fair end result for investors and customer

5 **B. Summary of Conclusions**

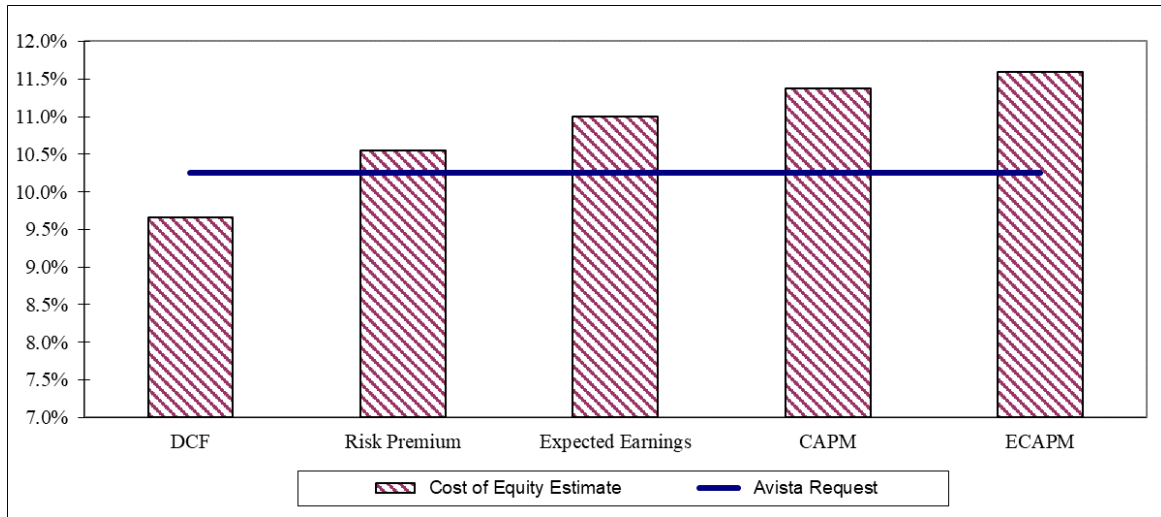
6 **Q. Please summarize the results of your analyses.**

7 A. In order to reflect the risks and prospects associated with Avista's
8 jurisdictional utility operations, my analyses focus on a proxy group of twenty-two utilities
9 with comparable investment risks. Because investors' required return on equity is
10 unobservable and no single method should be viewed in isolation, I apply the DCF, CAPM,
11 ECAPM, and risk premium methods to estimate a fair ROE for Avista, as well as referencing
12 the expected earnings approach. The results of my analyses are presented on Exhibit No. 3,
13 Schedule 3.

14 Figure 1, below, summarizes the cost of equity estimates produced by my alternative
15 analyses and compares them with Avista's 10.25 percent ROE request:

1
2

FIGURE 1
RESULTS OF ANALYSES VS. AVISTA REQUEST



3

Q. What are your findings regarding the 10.25 percent ROE requested by

4

Avista?

5

A. Based on the results of my analyses and the economic requirements necessary

6

to support continuous access to capital under reasonable terms, I determine that 10.25

7

percent is a reasonable estimate of investors' required ROE for Avista. The bases for my

8

conclusion are summarized below:

9

- Based on the results of my analyses and giving less weight to extremes at the high and low ends of the range, I conclude that the cost of equity for the proxy group of utilities is in the **9.9 percent to 11.3 percent** range.

10

11

12

- Based on an accounting of the issuance costs specific to Avista's historical sales of common stock, my testimony supports a flotation cost adjustment of 7 basis points.

13

14

15

- After making a flotation cost adjustment, my recommended ROE range is **9.97 percent to 11.37 percent**.

16

17

- As reflected in the testimony of Mark T. Thies, Avista is requesting a fair ROE of **10.25 percent**, which is below the **10.67 percent** midpoint of my recommended range. Considering capital market expectations, the exposures faced by Avista, and the economic requirements necessary to maintain financial integrity and support additional capital investment even under adverse circumstances, it is my opinion that 10.25 percent represents a reasonable ROE for Avista.

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19

20

21

22

23

1 **Q. What other evidence do you consider in evaluating your ROE**
2 **recommendation in this case?**

3 A. My recommendation is reinforced by the following findings:

- 4 • The reasonableness of a 10.25 percent ROE for Avista is supported by the need
5 to consider the challenges to the Company’s credit standing:
- 6 ○ The pressure of funding significant capital expenditures of approximately
7 \$475 million per year through 2027 heighten the uncertainties associated
8 with Avista, especially given that the Company’s existing rate base is
9 approximately \$4.2 billion.
 - 10 ○ Even with the Power Cost Adjustment Mechanism (“PCA”), Avista’s
11 reliance on hydroelectric generation and increasing dependence on natural
12 gas fueled capacity exposes the Company to relatively greater risks of
13 energy market volatility, such as that experienced recently in the western
14 U.S.
 - 15 ○ Avista’s opportunity to actually earn a fair ROE and mitigate exposure to
16 earnings attrition is an important objective.
 - 17 ○ My conclusion that a 10.25 percent ROE for Avista is a reasonable, even
18 conservative, estimate of investors’ required return is also reinforced by the
19 greater uncertainties associated with Avista’s relatively small size.
- 20 • Investors recognize that constructive regulation is a key ingredient in supporting
21 utility credit standing and financial integrity and providing Avista with the
22 opportunity to earn a return that adequately reflects its risks is an essential
23 ingredient to support the Company’s financial position, which ultimately benefits
24 customers by ensuring reliable service at lower long-run costs.
- 25 • Continued support for Avista’s financial integrity, including the opportunity to
26 actually earn a reasonable ROE, is imperative to ensure that the Company has the
27 capability to maintain and build its credit standing while confronting potential
28 challenges associated with funding infrastructure development necessary to meet
29 the needs of its customers.
- 30 • The implications of regulatory mechanisms approved for Avista are fully
31 considered in the Company’s credit ratings, which are comparable to those of the
32 proxy group used to estimate the cost of equity. Because the utilities in my
33 proxy group operate under a wide variety similar provisions, including revenue
34 decoupling, the effects of regulatory mechanisms approved for Avista in Idaho
35 are already reflected in the results of my analyses.
- 36 • Finally, by proposing a two-year rate plan, the Company is at increased risk of an
37 earnings shortfall if the underlying assumptions are not realized, or the allowed
38 ROE fails to reflect capital market requirements over the duration of the MYRP.

1 These findings indicate that the 10.25 percent ROE requested by Avista is reasonable and
2 should be approved.

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

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

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

13 A. Average DCF estimates for a low-risk group of firms in the competitive
14 sector of the economy range from 10.5 percent to 10.7 percent. These results confirm that a
15 10.25 percent ROE is reasonable to maintain Avista's financial integrity, provide a return
16 commensurate with investments of comparable risk, and support the Company's ability to
17 attract capital.

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

20 A. Apart from the results of the quantitative methods summarized above, it is
21 crucial to recognize the importance of supporting the Company's financial position so that

⁶ As discussed in Exhibit No. 3, Schedule 2 at 3-6.

1 Avista remains prepared to respond to unforeseen events that may materialize in the future.
2 Past erosion in Avista’s credit standing highlights the imperative of continuing to build the
3 Company’s financial strength in order to attract the capital needed to maintain reliable
4 service at a reasonable cost for customers.⁷

5 As I discuss in greater detail below, the broader economy is currently experiencing
6 inflationary pressures that haven’t been seen in approximately 40 years. Avista recently
7 posted a third quarter 2022 loss and cut its earnings forecasts for 2022 and 2023, while
8 informing investors that “the pressures of inflation and rising interest rates are too much to
9 offset.”⁸ KeyBanc downgraded Avista shares, noting that “the company will have limited
10 opportunities to improve recovery until 2025, outside of potential revenue increases in Idaho
11 and Oregon,”⁹ while S&P Global Ratings (“S&P”) revised the Company’s outlook to
12 “Negative” due to weakening financial performance stemming from “inflation, rising
13 interest rates, and regulatory lag.”¹⁰ These exposures highlight the imperative of supporting
14 the Company’s financial strength in order to attract the capital needed to maintain reliable
15 service at a reasonable cost for customers.

16 **Q. Does an ROE of 10.25 percent represent a reasonable cost for Avista’s**
17 **customers to pay?**

18 A. Yes. Investors make investment capital available to Avista only if the
19 expected returns justify the risk. Customers will enjoy reliable and efficient service so long

⁷ 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)

⁸ Seeking Alpha, *Avista plunges after posting Q3 loss; KeyBanc cuts to Sell equivalent* (Nov. 1, 2022).

⁹ *Id.*

¹⁰ S&P Global Ratings, *Avista Corp. Outlook Revised to Negative On Weaker Financial Measures; Ratings Affirmed*, Research Update (Nov. 11, 2022).

1 as investors are willing to make the capital investments necessary to maintain and improve
2 Avista's utility system. Providing an adequate return to investors is a necessary cost to
3 ensure that capital is available to Avista now and in the future. If regulatory decisions
4 increase risk or limit returns to levels that are insufficient to justify the risk, investors will
5 look elsewhere to invest capital.

6 **Q. What other factors support the need for a significantly higher ROE than**
7 **is currently approved for the Company?**

8 A. Avista's existing 9.4 percent ROE was approved in September 2021. Since
9 that time, average yields on Baa-rated utility bonds have increased by over 280 basis
10 points.¹¹ In addition to this dramatic and demonstrable upward move in capital costs, each
11 of the following considerations indicate that Avista's current ROE is insufficient:

- 12 • Uncertainty regarding the course of inflation has become magnified, which
13 heightens concerns over future cost pressure for the Company.
- 14 • As discussed in the testimony of Mr. Vermillion, Avista is faced with a highly
15 competitive labor market and pressures on wage and salary expectations continue
16 to increase.
- 17 • As discussed in the testimony of Dr. Forsyth and Mr. Vermillion, in addition to
18 inflationary pressures, supply chain disruptions also increase uncertainty over
19 input prices in the utility sector.
- 20 • My testimony documents (*e.g.*, Table 1) that tightening monetary policies and
21 higher interest rates support an increase in the Company's allowed ROE.
- 22 • Avista's market capitalization makes it one of the smallest investor-owned
23 utilities (see Figure 2), which heightens the need to support capital attraction
24 relative to its much larger counterparts in the industry.
- 25 • In the midst of the foregoing, Avista will be required to refund a substantial
26 portion of its outstanding long-term debt.

¹¹ Moody's Investors Service reported that the average yield on Baa-rated utility bonds was 3.19 percent in September 2021, versus 6.05 percent in November 2022.

1 In addition, my testimony documents that objective measures of investment risk for
2 Avista support a higher ROE relative to others in the industry:

- 3 • Along with its peers, Avista has seen a dramatic increase in its beta value since
4 2020.
- 5 • The Company's existing credit ratings are sub-par for the industry and an
6 insufficient ROE would further undermine Avista's credit standing.

7 Because Avista will have to shoulder these risks over the course of a two-year rate plan,
8 there is little margin for error based on changed circumstances. All of these considerations
9 warrant an increase from the 9.4 percent ROE currently authorized for Avista.

10 **Q. What is your conclusion as to the reasonableness of the Company's**
11 **capital structure?**

12 A. Based on my evaluation, I conclude that a common equity ratio of 50.0
13 percent represents a reasonable basis from which to calculate Avista's overall rate of return.

14 This conclusion is based on the following findings:

- 15 • Avista's requested capitalization is consistent with the Company's need to
16 support its credit standing and financial flexibility as it seeks to raise additional
17 capital to fund significant system investments, refinance maturing debt
18 obligations, and meet the requirements of its service territory.
- 19 • Avista's proposed common equity ratio is consistent with the range of
20 capitalizations for the proxy utilities and their utility operating subsidiaries, both
21 for year-end 2021 and based on near-term expectations of The Value Line
22 Investment Survey ("Value Line").
- 23 • The requested capitalization reflects the importance of an adequate equity layer
24 to accommodate Avista's operating risks and recognize the impact of off-balance
25 sheet commitments such as purchased power agreements, which carry with them
26 some level of imputed debt.

1 **II. RISKS OF AVISTA**

2 **Q. What is the purpose of this section?**

3 A. As a predicate to my capital market analyses, this section examines the
4 investment risks that investors consider in evaluating their required rate of return for Avista.

5 **A. Operating Risks**

6 **Q. How does Avista’s generating resource mix affect investors’ risk**
7 **perceptions?**

8 A. Because approximately 49 percent of Avista’s total energy requirements are
9 provided by hydroelectric facilities,¹² the Company is exposed to a level of uncertainty not
10 faced by most utilities. While hydropower confers advantages in terms of fuel cost savings
11 and diversity, reduced hydroelectric generation due to below-average water conditions
12 forces Avista to rely more heavily on wholesale power markets or more costly thermal
13 generating capacity to meet its resource needs. As S&P has recently observed, one of
14 Avista’s key risks is a “significant dependence on hydroelectric generation, which introduces
15 some fuel replacement risk.”¹³ Another S&P report explained:

16 A reduction in hydro generation typically increases an electric utility’s costs
17 by requiring it to buy replacement power or run more expensive generation to
18 serve customer loads. Low hydro generation can also reduce utilities’
19 opportunity to make off-system sales. At the same time, low hydro years
20 increase regional wholesale power prices, creating potentially a double
21 impact – companies have to buy more power than under normal conditions,
22 paying higher prices.¹⁴

23 Similarly, Moody’s Investors Service (“Moody’s”) concluded that, “Avista’s high
24 dependency on hydro resources (approximately 50% of its production comes from hydro

¹² Avista Corp. SEC Form 10-K for fiscal year ended Dec. 31, 2021 at 8.

¹³ S&P Global Ratings, *Avista Corp.*, RatingsDirect (Aug. 9, 2022).

¹⁴ Standard & Poor’s Corporation, *Pacific Northwest Hydrology And Its Impact On Investor-Owned Utilities’ Credit Quality*, RatingsDirect (Jan. 28, 2008).

1 fueled electric generation resources) is viewed as a supply concentration risk which also
2 lends to the potential for metric volatility, especially since hydro levels, due to weather, is a
3 factor outside of management's control.”¹⁵

4 Investors recognize that volatile energy markets, unpredictable stream flows, and
5 Avista’s reliance on wholesale purchases to meet a significant portion of its resource needs
6 can expose the Company to the risk of reduced cash flows and unrecovered power supply
7 costs. Avista’s reliance on purchased power to meet shortfalls in hydroelectric generation
8 magnifies the importance of strengthening financial flexibility, which is essential to
9 guarantee access to the cash resources and interim financing required to cover inadequate
10 operating cash flows.

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

13 A. The risk posed by climate-related weather events has served to magnify
14 concerns over Avista’s exposure to below-average water conditions. S&P concluded that
15 “water-intensive assets like power plants [are] especially vulnerable in the absence of
16 adaptation,” and concluded that “water stress is also a serious threat” for Avista.¹⁶ In
17 addition, rising temperatures and reduced rainfall have led to increasing exposure to
18 wildfires, particularly for utilities in the western U.S. In this regard, S&P classifies Avista as
19 one of the top 10 utilities with the highest average exposure to wildfires.¹⁷ While noting that

¹⁵ Moody’s Investors Service, *Credit Opinion: Avista Corp.*, Global Credit Research (Mar. 17, 2011).

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

¹⁷ *Id.*

1 the risks of such events are generally manageable under recovery mechanisms that allow
2 related costs to be recuperated, S&P also observed that:

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

7 **Q. Do financial pressures associated with Avista's planned capital**
8 **expenditures also impact investors' risk assessment?**

9 A. Yes. Avista will require capital investment to meet customer growth, provide
10 for necessary maintenance and replacements of its natural gas utility systems, as well as
11 fund new investment in electric generation, transmission and distribution facilities. Utility
12 capital additions are expected to total approximately \$445 million annually for the annual
13 period ending December 31, 2024.¹⁹ This represents a substantial investment given Avista's
14 current rate base of approximately \$4.2 billion. In addition, as discussed in the testimony of
15 Mr. Thies, the Company remains obligated to repay maturing long-term debt. Continued
16 support for Avista's financial integrity and flexibility will be instrumental in attracting the
17 capital necessary to fund these projects and debt repayments in an effective manner.

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

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

¹⁸ *Id.*

¹⁹ Avista Corp. SEC Form 10-K for fiscal year ended Dec. 31, 2021 at 60.

1 which will accompany declining costs and increased efficiency of energy storage
2 technologies. Accommodating efforts to decarbonize electric generation will also require
3 significant investment to modernize the transmission grid. And while this disruption offers
4 the potential for growth through increased capital investment, it also conveys higher risks,
5 such as the potential for stranded costs. With respect to Avista, is faced with achieving 100
6 percent clean electricity by 2045 and a carbon-neutral electricity supply by the end of 2027.

7 Decarbonization of power generation and electrification of end-loads also has
8 negative implications for long-term demand for natural gas. While natural gas is the
9 cleanest burning fossil fuel, methane that is released into the atmosphere before it is burned
10 contributes to climate change. Methane leaks attributable to natural gas systems have
11 decreased significantly from 1990 and account for only approximately 8.4% of estimated
12 emissions from the natural gas industry.²⁰ Nevertheless, increased focus on reducing carbon
13 emissions suggest that natural gas utilities will be required to address this issue.

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

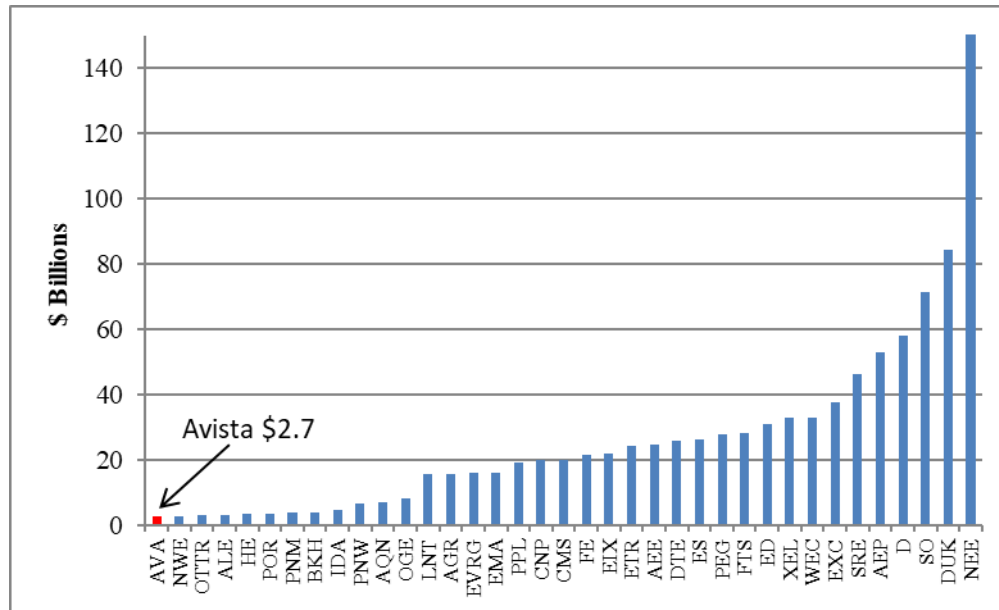
16 A. Yes. A firm’s relative size has important implications for investors in their
17 evaluation of alternative investments, and it is well established that smaller firms are more
18 risky than larger firms. Avista’s market capitalization is compared with the publicly traded
19 electric utilities followed by Value Line in the following figure:²¹

²⁰ American Gas Association, *Understanding Greenhouse Gas Emissions from Natural Gas (EPA Inventory)* (Oct. 4, 2022).

²¹ This comparison includes Algonquin Power and Utilities, Inc. and Emera, Inc. As discussed in Exhibit No. 3, Schedule 2, both companies would be regarded as electric utilities by investors.

1
2

FIGURE 2
COMPARISON OF MARKET CAPITALIZATION



3 As shown above, within this universe of publicly traded utilities, Avista is the smallest firm.

4 The magnitude of the size disparity between Avista and other firms in the utility
5 industry has important practical implications with respect to the risks faced by investors. All
6 else being equal, it is well accepted that smaller firms are more risky than their larger
7 counterparts, due in part to their relative lack of diversification and lower financial
8 resiliency.²² These greater risks imply a higher required rate of return, and there is ample
9 empirical evidence that investors in smaller firms realize higher rates of return than in larger
10 firms.²³ Accepted financial doctrine holds that investors require higher returns from smaller
11 companies, and unless that compensation is provided in the rate of return allowed for a
12 utility, the legal tests embodied in the *Hope* and *Bluefield* cases cannot be met.

²² 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).

²³ 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 **B. Regulatory Mechanisms**

2 **Q. What regulatory mechanisms are applicable to Avista’s electric utility**
3 **operations in Idaho?**

4 A. In addition to mechanisms that account for changes in the cost of power and
5 natural gas, Avista operates under the Fixed Cost Adjustment mechanism (“FCA”), which is
6 designed to sever the link between a utility's revenues and consumers' energy usage. The
7 IPUC has also authorized the establishment of a regulatory asset account to capture and
8 track COVID-19-related incremental costs and benefits and a deferral account for wildfire
9 resiliency costs. In addition, the Company is proposing to implement a deferral account for
10 insurance expense, mainly due to increases in wildfire premiums, and a MYRP in this
11 proceeding.

12 **Q. Did you consider the implications of these regulatory mechanisms in**
13 **your evaluation?**

14 A. Yes. Adjustment mechanisms, cost trackers, and future test years have been
15 increasingly prevalent in the utility industry in recent years, along with alternatives to
16 traditional ratemaking such as formula rates and MYRPs. As summarized on Exhibit No. 3,
17 Schedule 4, the companies in my Utility Group operate under a wide variety of cost
18 adjustment mechanisms, which encompass revenue decoupling and adjustment clauses
19 designed to address rising capital investment outside of a traditional rate case and increasing
20 costs of environmental compliance measures, as well as riders to recover the cost of
21 environmental compliance measures, bad debt expenses, certain taxes and fees, post-
22 retirement employee benefit costs and transmission-related charges. *RRA Regulatory Focus*
23 concluded in its recent review of adjustment clauses that:

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

7 . . . [C]ertain types of adjustment clauses are more prevalent than others. For
8 example, those that address electric and fuel and gas commodity charges are
9 in place in all jurisdictions. Also, about two-thirds of all utilities have riders
10 in place to recover costs related to energy efficiency programs, and roughly
11 half of the utilities utilize some type of decoupling mechanism.²⁴

12 With respect to formula rates and MYRPs, a report prepared for the United States
13 Department of Energy noted that “[MYRPs] are used in many states today to regulate
14 utilities,” and observed that seventeen states currently have approved MYRPs for electric
15 and gas utilities, including California, Florida, Georgia, New York, and Washington.²⁵
16 Meanwhile, formula rates have been used at the Federal Energy Regulatory Commission
17 (“FERC”) as the basis to establish rates for interstate electric transmission service for
18 decades, with the Edison Electric Institute reporting their adoption in eight retail
19 jurisdictions.²⁶ As documented on Exhibit No. 3, Schedule 4, the majority of firms included
20 in the Utility Group operate in states that have approved formula rates or MYRPs for
21 utilities under their jurisdiction.

22 Thus, while investors would consider Avista’s regulatory mechanisms—including its
23 proposed MYRP—to be supportive of the Company’s financial integrity, this does not
24 provide a basis to distinguish the risks of Avista from the utilities in my proxy group. As

²⁴ S&P Global Market Intelligence, *Adjustment Clauses, A State-by-State Overview*, RRA Regulatory Focus (Nov. 12, 2019).

²⁵ 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).

²⁶ Edison Electric Institute, *Alternative Regulation for Emerging Utility Challenges: 2015 Update* (Nov. 11, 2015).

1 discussed above, the two-year horizon of the proposed MYRP carries its own set of risks,
2 given the potential for actual experience to deviate from the underlying assumptions of the
3 plan.

4 **C. Other Factors**

5 **Q. Would investors consider the potential impact of Avista's exposure to**
6 **earnings shortfalls?**

7 A. Yes. The deterioration of actual return below the allowed return that occurs
8 when the relationships between revenues, costs, and rate base used to establish rates (e.g.,
9 using a historical test year without adequate adjustments) do not reflect the actual costs
10 incurred to serve customers can lead to earnings shortfalls. Investors are concerned with
11 what they can expect in the future, not what they might expect in theory if a historical test
12 year were to repeat. To be fair to investors and to benefit customers, a regulated utility must
13 have a reasonable opportunity to actually earn a return that will maintain financial integrity,
14 facilitate capital attraction, and compensate for risk. In other words, it is the end result in
15 the future that determines whether or not the *Hope* and *Bluefield* standards are met.

16 Ratemaking practices that allow the utility an opportunity to actually earn its
17 authorized ROE are consistent with fundamental regulatory principles. The Supreme Court
18 has reaffirmed that the end result test must be applied to the actual returns that investors
19 expect if they put their money at risk to finance utilities.²⁷ That end result would maintain

²⁷ *Verizon Communications, et al v. Federal Communications Commission, et al*, 535 U.S. 467 (2002). While I cannot comment on the legal significance of this case, I found the economic wisdom of looking to the reasonable expectations of actual investors compelling. Economic logic and common sense confirm that a utility cannot attract capital on reasonable terms if investors expect future returns to fall short of those offered by comparable investments.

1 the utility’s financial integrity, ability to attract capital and offer investors fair compensation
2 for the risk they bear.

3 Recently, unforeseen inflation and rising interest rates have imperiled Avista’s ability
4 to earn their required return, causing S&P to downgrade Avista from “stable” to “negative.”
5 S&P noted that “we expect [Avista’s] financial measures will consistently weaken to below
6 our downgrade threshold ... through at least 2023.”²⁸ Earlier this year S&P also clarified
7 that “we expect that credit metrics will remain weak during 2022-2023 due to expected
8 refunds to customers arising from tax credits, inflationary pressure, and regulatory lag due to
9 higher-than-expected purchased fuel costs.”²⁹

10 **Q. What other consideration is relevant to investors’ risk assessment?**

11 A. Recent years have brought unusually large and damaging wildfires to the
12 Pacific Northwest. While Avista does not face the same degree of exposure attributed to
13 California utilities due to that state’s inverse condemnation laws, Avista’s common equity
14 investors nevertheless recognize the potential liabilities associated with wildfire events.³⁰
15 As S&P recently noted, “environmental factors are a moderately negative consideration in
16 our credit rating analysis of Avista Corp,” and further noted “the company’s elevated
17 physical risks due to its service territory’s exposure to higher-than-average wildfire risk.”³¹

²⁸ S&P Global Ratings, *Avista Corp. Outlook Revised To Negative On Weaker Financial Measures; Ratings Affirmed*, RatingsDirect (Nov. 11, 2022).

²⁹ S&P Global Ratings, *Avista Corp.*, RatingsDirect (Aug. 9, 2022).

³⁰ For example, in August 2019 the Company was served with a complaint filed by the State of Washington Department of Natural Resources, seeking recovery of fire suppression costs and related expenses incurred in connection with a wildfire that occurred in Ferry County, Washington in August 2018.

³¹ S&P Global Ratings, *Avista Corp.*, RatingsDirect (Aug. 9, 2022).

1 S&P explained that “Avista experienced heightened wildfire activity in September 2020 and
2 we believe this risk is ongoing.”³²

3 In addition, energy markets have seen a dramatic rise in volatility since the onset of
4 military conflict in Ukraine. As with major weather events, market conditions that lead to
5 significant spikes in energy prices can place extraordinary pressure on liquidity as utilities
6 seek to fund higher procurement costs and maintain service to customers. With respect to
7 Avista specifically, the Pacific Northwest has recently faced a dramatic increase in gas costs.
8 As the Energy Information Administration reported:

9 On December 21, 2022, daily natural gas spot prices at three major trading
10 hubs in the western United States—Pacific Gas & Electric (PG&E) Citygate,
11 Sumas on the Canada-Washington border, and Malin, Oregon—settled higher
12 than \$50.00 per million British thermal units (MMBtu), the highest level of
13 any other market and an average of \$48.12/MMBtu above Henry Hub, the
14 national benchmark natural gas price.³³

15 Continued support for the Company’s financial strength is instrumental to ensure that Avista
16 can maintain access to the capital necessary to respond effectively under times of turmoil in
17 the energy and capital markets.

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

19 **Q. Throughout your testimony you refer repeatedly to the concepts of**
20 **“financial strength,” “financial integrity,” and “financial flexibility.” Would you**
21 **briefly describe what you mean by these terms?**

22 A. These terms are generally synonymous and refer to the utility’s ability to
23 attract and retain the capital that is necessary to provide service at reasonable cost, consistent
24 with the Supreme Court standards. Avista’s plans call for a continuation of capital

³² *Id.*

³³ Energy Information Administration, *Natural Gas Weekly Update* (Dec. 2, 2022),
<https://www.eia.gov/naturalgas/weekly/#itn-tabs-1> (last visited Jan. 5, 2023).

1 investments to preserve and enhance service reliability for its customers. The Company
2 must generate adequate cash flow from operations to fund these requirements and for
3 repayment of maturing debt, together with access to capital from external sources under
4 reasonable terms, on a sustainable basis.

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

13 **Q. What credit ratings have been assigned to Avista?**

14 A. S&P has assigned Avista a corporate credit rating of “BBB”, while Moody’s
15 has set Avista’s Issuer Rating at “Baa2”.

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

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

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. Exposure to rising interest rates, inflation, capital expenditure requirements,
9 and the need to refinance maturing long-term debt reinforce the importance of buttressing
10 Avista’s credit standing, which is under pressure. Moody’s has noted that, “The company’s
11 financial buffer will be limited over the next several years” and that a key measure of cash
12 flow sufficiency is expected to weaken “below our indicated financial metric threshold for a
13 possible downgrade.”³⁴ Similarly, S&P concluded that “there is minimal cushion between
14 Avista’s financial measures and the ratings downside trigger.”³⁵ As noted earlier, S&P
15 formally notified investors of the potential for a downgrade in the Company’s credit ratings
16 in November 2022 by revising their outlook from “Stable” to “Negative” due to weakening
17 financial measures.

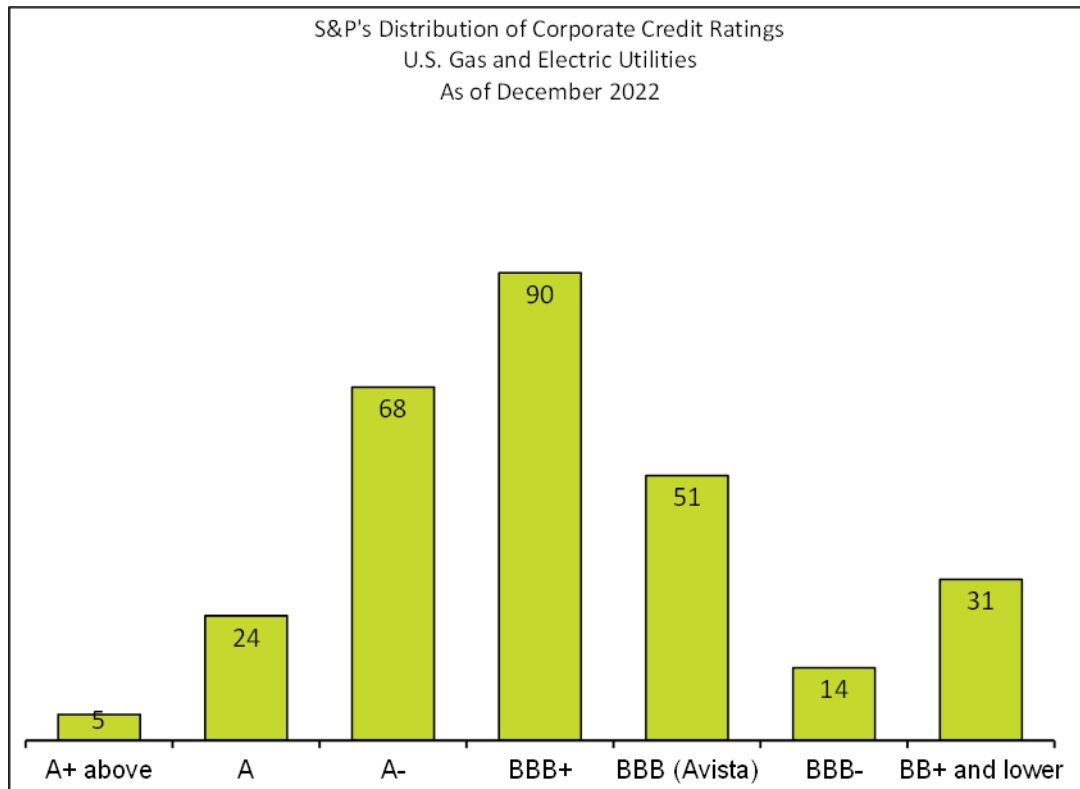
18 Further strengthening Avista’s financial integrity is imperative to ensure the ongoing
19 capability to maintain investment grade ratings. As noted in Mr. Thies’ testimony, credit
20 ratings for other utilities are predominantly in the A- or BBB+ categories, with his
21 Illustration No. 5 being excerpted as Figure 3, below:

³⁴ Moody’s Investors Service, *Avista Corp., update to credit analysis*, Credit Opinion (Aug. 10, 2021).

³⁵ S&P Global Ratings, *Avista Corp.*, RatingsDirect (Aug. 5, 2021).

1
2

FIGURE 3
S&P CORPORATE CREDIT RATINGS – UTILITIES



3 S&P recently reported that of the 250 regulated utilities covered in its survey, only 48 had a
4 weaker credit profile than Avista.³⁶ Continued regulatory support will be instrumental in
5 achieving Avista’s objective of a BBB+ rating from S&P, which is consistent with the
6 average credit standing in the electric utility industry.

7 Considering the potential for financial market instability, competition with other
8 investment alternatives, and investors’ sensitivity to risk exposures in the utility industry,
9 greater credit strength is a key ingredient in maintaining access to capital at reasonable cost.

³⁶ S&P Global Ratings, *Issuer Ranking: North American Electric, Gas, And Water Regulated Utilities, Strongest To Weakest*, RatingsDirect (Aug. 15, 2022).

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

3 A. Regulatory signals are a major driver of investors’ risk assessment for
4 utilities. Investors recognize that constructive regulation is a key ingredient in supporting
5 utility credit ratings and financial integrity. Security analysts study commission orders and
6 regulatory policy statements to advise investors about where to put their money. Moody’s
7 noted that, “An overarching consideration for regulated utilities is the regulatory
8 environment in which they operate,” and concluded that “the regulatory environment and
9 how the utility adapts to that environment are the most important credit considerations.”³⁷
10 Similarly, S&P observed that, “Regulatory advantage is the most heavily weighted factor
11 when S&P Global Ratings analyzes a regulated utility’s business risk profile.”³⁸ Value Line
12 summarizes these sentiments:

13 As we often point out, the most important factor in any utility’s success,
14 whether it provides electricity, gas, or water, is the regulatory climate in
15 which it operates. Harsh regulatory conditions can make it nearly impossible
16 for the best run utilities to earn a reasonable return on their investment.³⁹

17 In addition, the ROE set by regulators impacts investor confidence in not only the
18 jurisdictional utility, but also in the ultimate parent company that is the entity that actually
19 issues common stock.

20 **Q. Do customers benefit by enhancing the utility’s financial flexibility?**

21 A. Yes. Providing an ROE that is sufficient to maintain Avista’s ability to attract
22 capital under reasonable terms, even in times of financial and market stress, is not only

³⁷ Moody’s Investors Service, *Regulated Electric and Gas Utilities*, Rating Methodology (Jun. 23, 2017).

³⁸ S&P Global Ratings, *Assessing U.S. Investors-Owned Utility Regulatory Environments*, RatingsExpress (Aug. 10, 2016).

³⁹ Value Line Investment Survey, *Water Utility Industry* (Jan. 13, 2017) at p. 1780.

1 consistent with the economic requirements embodied in the U.S. Supreme Court's *Hope* and
2 *Bluefield* decisions, it is also in customers' best interests. Customers enjoy the benefits that
3 come from ensuring that the utility has the financial wherewithal to take whatever actions
4 are required to ensure safe and reliable service.

5 **E. Capital Structure**

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

8 A. Yes. Other things equal, a higher debt ratio and lower common equity ratio,
9 translates into increased financial risk for all investors. A greater amount of debt means
10 more investors have a senior claim on available cash flow, thereby reducing the certainty
11 that each will receive their contractual payments. This increases the risks to which lenders
12 are exposed, and they require correspondingly higher rates of interest. From common
13 shareholders' standpoint, a higher debt ratio means that there are proportionately more
14 investors ahead of them, thereby increasing the uncertainty as to the amount of cash flow
15 that will remain.

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

18 A. Avista's capital structure is presented in the testimony of Mr. Thies. As
19 summarized in his testimony, the proposed capital structure used to compute Avista's overall
20 rate of return consists of 50 percent equity / 50 percent long-term debt in this filing.

1 **Q. How does this compare to the average equity ratios maintained by the**
2 **utilities in the Utility Group?**

3 A. As shown on page 1 of Exhibit No. 3, Schedule 5, for the 22 firms in the
4 Utility Group, common equity ratios at December 31, 2021 range between 31.0 percent and
5 59.8 percent and average 44.6 percent.

6 **Q. How do these historic capitalization ratios compare with investors’**
7 **forward-looking expectations?**

8 A. As shown on page 1 of Exhibit No. 3, Schedule 4, Value Line expects an
9 average common equity ratio for the proxy group of utilities of 44.7 percent for its three-to-
10 five year forecast horizon, with the individual common equity ratios ranging from 32.0
11 percent to 59.5 percent.

12 **Q. What other industry benchmarks are relevant in evaluating Avista’s**
13 **capital structure?**

14 A. Because this proceeding focuses on the ROE for Avista’s regulated utility
15 operations, the capital structures of the proxy companies’ regulated utility operating
16 companies provide a consistent basis of comparison. Pages 2 through 3 of Exhibit No. 3,
17 Schedule 4 display capital structure data for the most recent fiscal year-end for the group of
18 electric utility operating companies owned by the firms in the Utility Group used to estimate
19 the cost of equity. As shown there, the operating company equity ratios range from 39.7
20 percent to 60.5 percent. The average of these results points to an equity ratio of 51.2
21 percent.

1 **Q. Do ongoing economic and capital market uncertainties also influence the**
2 **appropriate capital structure for Avista?**

3 A. Yes. Financial flexibility plays a crucial role in ensuring the wherewithal to
4 meet funding needs, and utilities with higher financial leverage may be foreclosed or have
5 limited access to additional borrowing, especially during times of stress. As Moody’s
6 observed:

7 Utilities are among the largest debt issuers in the corporate universe and
8 typically require consistent access to capital markets to assure adequate
9 sources of funding and to maintain financial flexibility. During times of
10 distress and when capital markets are exceedingly volatile and tight, liquidity
11 becomes critically important because access to capital markets may be
12 difficult.⁴⁰

13 More recently, S&P concluded that “[c]onsistent access to the capital markets could
14 become more challenging” for electric utilities,⁴¹ noting that, “[r]ising interest rates,
15 decreasing equity prices, and inflation could obstruct access [to] the capital markets,
16 potentially pressuring credit quality.”⁴² As a result, the Company’s capital structure must
17 maintain adequate equity to preserve the flexibility necessary to maintain continuous access
18 to capital even during times of unfavorable energy or financial market conditions.

19 **Q. What other factors do investors consider in their assessment of a**
20 **company’s capital structure?**

21 A. Utilities, including Avista, are facing significant capital investment plans.
22 Coupled with the potential for turmoil in capital markets, this warrants a stronger balance
23 sheet to deal with an uncertain environment. As S&P recently noted:

⁴⁰ Moody’s Investors Service, *FAQ on credit implications of the coronavirus outbreak*, Sector Comment (Mar. 26, 2020).

⁴¹ S&P Global Ratings, *Industry Top Trends Update, Regulated Utilities, Credit quality has weakened and credit risks are rising*, North American Corporate Credit Mid-Year Outlook 2022 (Jul 14, 2022).

⁴² *Id.*

1 Under our base case, we expect that by 2024 the industry's capital spending
2 will exceed \$180 billion. Because of the industry's continued robust capital
3 spending, we expect that industry will continue to generate negative
4 discretionary cash flow. This requires that the industry has consistent access
5 to the capital markets to finance capital spending and dividends
6 requirements.⁴³

7 A conservative financial profile, in the form of a reasonable common equity ratio, is
8 consistent with the need to accommodate these uncertainties and maintain the continuous
9 access to capital under reasonable terms that is required to fund operations and necessary
10 system investment, even during times of adverse capital market conditions.

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

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

23 Avista's capital structure is consistent with the range of equity ratios maintained by
24 the parent firms in the Utility Group and their operating subsidiaries, and reflects the

⁴³ S&P Global Ratings, *For The First Time Ever, The Median Investor-Owned Utility Ratings Falls To The 'BBB' Category*, RatingsDirect (Jan. 20, 2022).

1 challenges posed by its resource mix, the burden of significant capital spending
2 requirements, and the Company's ongoing efforts to strengthen its credit standing and
3 support access to capital on reasonable terms. The reasonableness of a 50 percent common
4 equity / 50 percent long-term debt capital structure for Avista is reinforced by the importance
5 of supporting continued investment in system improvements and the Company's debt
6 repayment obligations, even during times of adverse capital market conditions.

7 **III. CAPITAL MARKET ESTIMATES**

8 **Q. What is the purpose of this section?**

9 A. First, I examine specific conditions impacting today's capital markets and
10 discuss the current outlook for capital costs, including expectations for interest rates. Next,
11 this section presents capital market estimates of the cost of equity. The details of my
12 quantitative analyses are contained in Exhibit No. 3, Schedule 2, with the results being
13 summarized below.

14 **A. Outlook for Capital Costs**

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

16 A. U.S. real GDP contracted 3.4% during 2020, but with the easing of
17 lockdowns accompanying the COVID-19 vaccine rollout, the economic outlook improved
18 significantly in 2021, with GDP growing at a pace of 5.7%. Regional increases in COVID-
19 19 cases, expiration of government assistance payments, and declines in wholesale trade led
20 GDP to fall at an annual rate of -1.6% and -0.6% in the first two quarters of 2022.⁴⁴ More
21 recently, exports and higher consumer spending led real GDP to growth by 2.9% during the

⁴⁴ https://www.bea.gov/sites/default/files/2022-11/gdp3q22_2nd.pdf (last visited Dec. 4, 2022).

1 third quarter of 2022.⁴⁵ Meanwhile, indicators of employment remained stable, with the
2 national unemployment rate rising slightly in October 2022 to 3.7%.⁴⁶

3 The underlying risk and price pressures associated with the COVID-19 pandemic
4 were overshadowed by Russia’s full-scale invasion of Ukraine on February 24, 2022. The
5 dramatic increase in geopolitical risks has also been accompanied by heightened economic
6 uncertainties as inflationary pressures due to COVID-19 supply chain disruptions were
7 further stoked by sharp increases in commodity prices stemming from a wide-ranging
8 sanctions regime targeting the Russian economy. The twin threats posed by inflation and
9 military conflict in Ukraine have led to extreme volatility in the capital markets as investors
10 have been forced to dramatically revise their risk perceptions and return requirements in the
11 face of the severe disruptions to commerce and the world economy.

12 The onset of war in Ukraine, which prompted substantial disruption in the energy
13 economy and a dramatic rise in inflation, has led to sharp declines in global equity markets
14 as investors come to grips with the related exposures. S&P warned that the conflict “could
15 have profound effects on macroeconomic prospects and credit conditions around the
16 world,”⁴⁷ and more recently concluded that:

17 The balance of risks is firmly on the downside—with rapid monetary
18 tightening potentially pushing major economies into recession; growing
19 geopolitical tensions exacerbating Europe's energy crisis; lingering high
20 prices pressuring costs and eroding households' purchasing power; and China
21 grappling with structural factors that are undermining its economic growth.⁴⁸

22 As Federal Reserve Chair Powell concluded, “The financial and economic implications for

⁴⁵ *Id.*

⁴⁶ <https://www.bls.gov/news.release/pdf/empsit.pdf> (last visited Nov. 15, 2022).

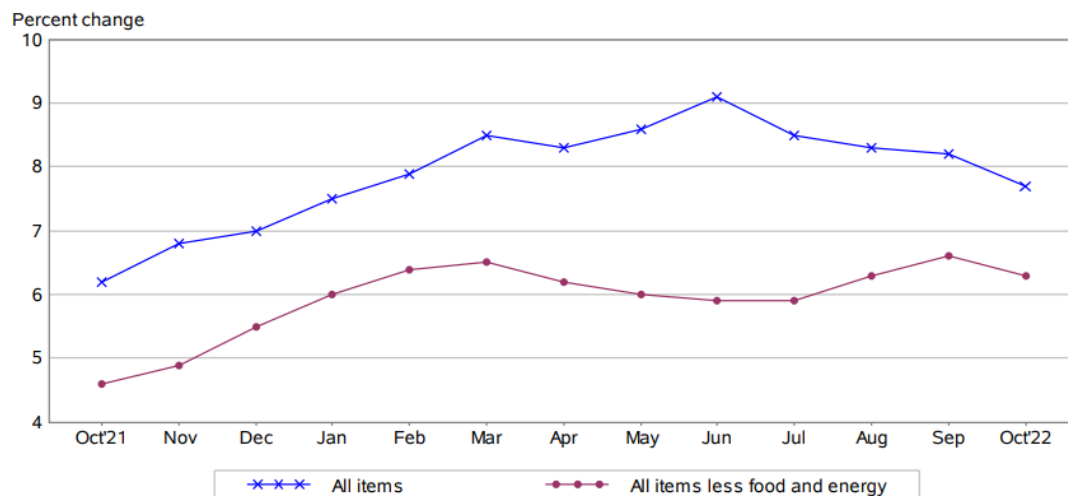
⁴⁷ S&P Global Ratings, *Russia-Ukraine Military Conflict: Key takeaways From Our Articles*, Comments (Mar. 8, 2022).

⁴⁸ S&P Global Ratings, *Global Credit Conditions Q4 2022: Darkening Horizons*, Comments (Sept. 29, 2022).

1 the global economy and the U.S. Economy are highly uncertain.”⁴⁹

2 Stimulative monetary and fiscal policies, coupled with economic ramifications
3 stemming from the conflict in Ukraine, have led to increasing concern that inflation may
4 remain significantly above the 2% longer-run benchmark cited by the Federal Reserve. In
5 June 2022, the Consumer Price Index (“CPI”) peaked at its highest level since November
6 1981. Since then, the CPI has moderated somewhat to 7.7% in October 2022.⁵⁰ The so-
7 called “core” price index, which excludes more volatile energy and food costs, rose at an
8 annual rate of 6.3% in October 2022. As illustrated in Figure 4, below, inflation has now
9 exceeded 7% for ten straight months.

10 **FIGURE 4**
11 **TREND IN CONSUMER PRICE INDEX**



12 Similarly, inflation based on the Personal Consumption Expenditures Index (“PCE”)
13 rose 6.0% in October 2022, or 5.0% after excluding more volatile food and energy cost.⁵¹

⁴⁹ Federal Reserve, *Transcript of Chair Powell’s Press Conference* (Mar. 16, 2021),

<https://www.federalreserve.gov/monetarypolicy/fomcpresconf20220316.htm>.

⁵⁰ <https://www.bls.gov/news.release/pdf/cpi.pdf> (last visited Dec. 4, 2022).

⁵¹ <https://www.bea.gov/news/2022/personal-income-and-outlays-october-2022> (last visited Dec. 4, 2022).

1 As Federal Reserve Chair Jerome Powell recently noted:

2 Inflation is running well above 2 percent, and high inflation has continued to
3 spread through the economy. While the lower inflation reading for July are
4 welcome, a single month's improvement falls far short of what the
5 Committee will need to see before we are confident that inflation is moving
6 down."⁵²

7 **Q. What impact does rising inflation expectations have on the return that**
8 **equity investors require from Avista?**

9 A. Implicit in the required rate of return for long-term capital—whether debt or
10 common equity—is compensation for expected inflation. This is highlighted in the
11 textbook, *Financial Management, Theory and Practice*:

12 The four most fundamental factors affecting the cost of money are (1)
13 production opportunities, (2) time preferences for consumption, (3) risk, and
14 (4) inflation.⁵³

15 In other words, a part of investor's required return is intended to compensate for the erosion
16 of purchasing power due to rising price levels. This inflation premium is added to the real
17 rate of return (pure risk-free rate plus risk premium) to determine the nominal required
18 return. As a result, higher inflation expectations lead to an increase in the cost of equity
19 capital.

20 **Q. How have these developments impacted common equity markets?**

21 A. These events have led to extreme volatility in the capital markets as investors
22 have been forced to dramatically revise their risk perceptions and return requirements in the
23 face of the severe disruptions to commerce and the world economy.

⁵² Chair Jerome H. Powell, *Monetary Policy and Price Stability*, Speech (Aug. 26, 2022).

<https://www.federalreserve.gov/newsevents/speech/powell20220826a.htm> (last visited Aug. 31, 2022).

⁵³ Eugene F. Brigham, Louis C. Gapenski, and Michael C. Ehrhardt, *Financial Management, Theory and Practice*, Ninth Edition (1999) at 126.

1 The greater uncertainty faced by equity investors is confirmed by reference to the
2 Chicago Board Options Exchange Volatility Index (commonly known as the “VIX”),⁵⁴
3 which has trended sharply higher in 2022.⁵⁵ Similarly, the Merrill Lynch Option Volatility
4 Estimate, or “MOVE” index, which is a market-based measure of uncertainty about interest
5 rates and is often referred to as the “investor fear gauge,” is also elevated.⁵⁶ This ongoing
6 volatility in capital markets is evidence of the greater risks now faced by investors.

7 **Q. Have utilities and their investors also faced heightened levels of**
8 **uncertainty?**

9 A. Yes. Concerns over weakening credit quality prompted S&P to revise its
10 outlook for the regulated utility industry from “stable” to “negative.”⁵⁷ As S&P explained:

11 Even before the current downturn and COVID-19, a confluence of factors,
12 including the adverse impacts of tax reform, historically high capital
13 spending, and associated increased debt, resulted in little cushion in ratings
14 for unexpected operating challenges.⁵⁸

15 Meanwhile, rising inflation expectations also pose a challenge for utilities, with S&P
16 recently noting that “the threat of inflation comes at a time when credit metrics are already
17 under pressure relative to downside ratings thresholds.”⁵⁹ S&P subsequently affirmed its
18 negative outlook for investor-owned utilities, noting that “risk will continue to pressure the

⁵⁴ The VIX is one of the most widely recognized measures of expectations of near-term volatility and market sentiment referenced by the investment community.

⁵⁵ The VIX averaged 19.66 during 2021, versus 26.26 through October 31, 2022, or an increase of over 30%. <https://fred.stlouisfed.org/series/VIXCLS> (last visited Nov. 17, 2022).

⁵⁶ At December 31, 2021 the MOVE index closed at 77.10, versus 144.60 at October 28, 2022. <https://www.google.com/finance/quote/MOVE:INDEXNYSEGIS?sa=X&ved=2ahUKewiWvr7E-uH0AhVcl2oFHQLTAzsQ3ecFegQIBxAc&window=MAX> (last visited Nov. 17, 2022).

⁵⁷ S&P Global Ratings, *COVID-19: The Outlook For North American Regulated Utilities Turns Negative*, RatingsDirect (April 2, 2020).

⁵⁸ 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).

⁵⁹ S&P Global Ratings, *Will Rising Inflation Threaten North American Investor-Owned Regulated Utilities' Credit Quality?* (Jul. 20, 2021).

1 credit quality of the industry in 2022.”⁶⁰ As S&P elaborated:

2 Recently, several new credit risks have emerged, including inflation, higher
3 interest rates, and rising commodity prices. Persistent pressure from any of
4 these risks would likely lead to a further weakening of the industry’s credit
5 quality in 2022.⁶¹

6 In affirming its negative outlook on the industry, S&P more recently cited weak
7 financial measures, rising prices and capital spending, and increased environmental risks as
8 key challenges.⁶² S&P also noted that consistent access to capital markets could become
9 more challenging and utilities’ management of regulatory risk could weaken if the U.S.
10 economy moves into a recession. Similarly, on November 10, 2022, Moody’s revised its
11 outlook for the regulated utilities sector to “negative” from “stable,” citing “increasingly
12 challenging business and financial conditions stemming from higher natural gas prices,
13 inflation and rising interest rates.”⁶³

14 **Q. Do changes in utility company beta values demonstrate an increase in**
15 **industry risk?**

16 A. Yes. As explained earlier, beta is used by the investment community as an
17 important guide to investors’ risk perceptions. As shown in Table 2 below, the average beta
18 for the Utility Group is 0.90.⁶⁴ Prior to the pandemic, the average beta for the same group of
19 companies was 0.56.⁶⁵

20 The significant upward shift in beta values for the Utility Group and Avista is further

⁶⁰ S&P Global Ratings, *For The First Time Ever, The Median Investor-Owned Utility Ratings Falls To The ‘BBB’ Category*, RatingsDirect (Jan. 20, 2022).

⁶¹ *Id.*

⁶² S&P Global Ratings, *Industry Top Trends Update, Regulated Utilities, Credit quality has weakened and credit risks are rising*, North American Corporate Credit Mid-Year Outlook 2022 (Jul. 14, 2022).

⁶³ Moody’s Investors Service, *Regulated Electric and Gas Utilities--US, 2023 outlook negative due to higher natural gas prices, inflation and rising interest rates*, Outlook (Nov. 10, 2022).

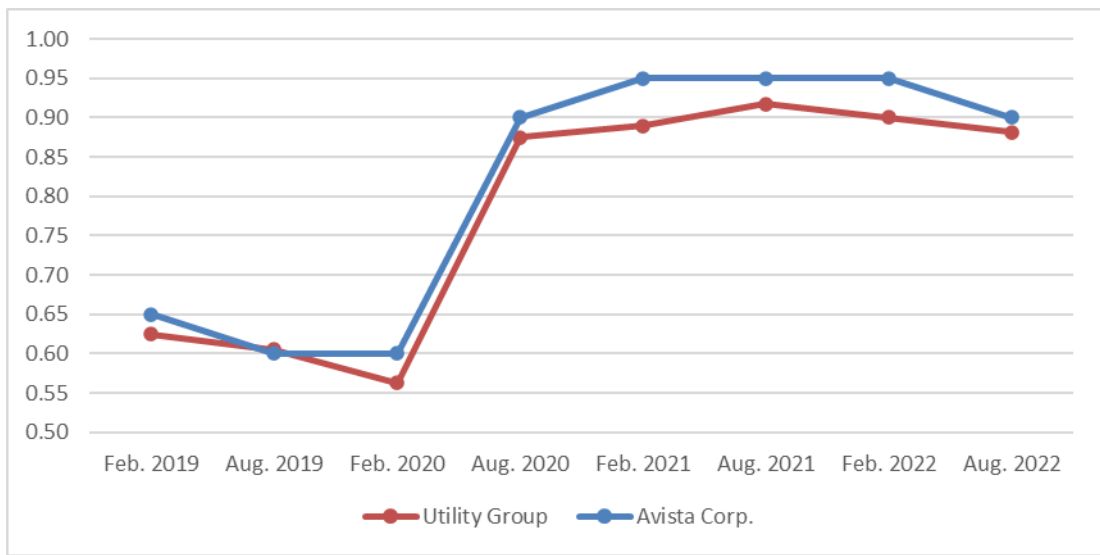
⁶⁴ As indicated on Exhibit No. 3, Schedule 7, this is based on data as of November 11, 2022.

⁶⁵ The Value Line Investment Survey, *Summary & Index* (Feb. 14, 2020).

1 exemplified in Figure 5 below. As illustrated there, the Utility Group’s average beta value
2 increased significantly with the beginning of the pandemic in March 2020, continued to
3 increase during 2021, and has remained elevated in 2022. This dramatic increase in a
4 primary gauge of investors’ risk perceptions is further proof of the rise in the risk of utility
5 common stocks.

6
7

**FIGURE 5
UTILITY GROUP AND AVISTA BETA VALUES**



8 **Q. Have increased risks and higher inflation resulted in higher capital**
9 **costs?**

10 A. Yes. While the cost of equity is unobservable, the yields on long-term bonds
11 provide a widely referenced benchmark for the direction of capital costs, including required
12 returns on common stocks. Table 1 below compares the average yields on Treasury
13 securities and Baa-rated public utility bonds during 2021 with those required in November

1
2

TABLE 1
BOND YIELD TRENDS

Series	November	2021	Change
	2022		(bps)
10-Year Treasury Bonds	3.89%	1.44%	245
30-Year Treasury Bonds	4.00%	2.05%	195
Baa Utility Bonds	6.05%	3.35%	270

Source: <https://fred.stlouisfed.org/series/GS30>; Moody's Credit Trends.

3 As shown above, trends in bond yields since 2021 document a substantial increase in
4 the returns on long-term capital demanded by investors. With respect to utility bond
5 yields—which are the most relevant indicator in gauging the implications for the Company’s
6 common equity investors—average yields are 270 basis points above 2021 levels.

7 **Q. Are these upward moves in bond yields and exposure to inflation**
8 **consistent with recent Federal Reserve actions?**

9 A. Yes. As of its policy meeting in November 2022, the Federal Open Market
10 Committee (“FOMC”) has responded to concerns over accelerating inflation by raising the
11 benchmark range for the federal funds rate by a total of 3.75% in 2022.⁶⁶ Chair Powell
12 noted that:

13 Today, the FOMC raised our policy interest rate by 75 basis points, and we
14 continue to anticipate that ongoing increases will be appropriate. We are
15 moving our policy stance purposefully to a level that will be sufficiently
16 restrictive to return inflation to 2 percent. In addition, we are continuing the
17 process of significantly reducing the size of our balance sheet. Restoring
18 price stability will likely require maintaining a restrictive stance of policy for
19 some time.⁶⁷

⁶⁶ The FOMC is a committee composed of twelve members that serves as the monetary policymaking body of the Federal Reserve System.

⁶⁷ <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20221102.pdf>

1 In addition to these increases, Federal Reserve Chair Powell has surmised that the
2 significant draw-down of its balance sheet holdings that began in June 2022 could be the
3 equivalent of another one quarter percent rate hike over the course of a year.⁶⁸

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

6 A. No. They reflect the reality of the situation in which Avista must attract and
7 retain capital. The standards underlying a fair rate of return require an authorized ROE for
8 the Company that is competitive with other investments of comparable risk and sufficient to
9 preserve its ability to maintain access to capital on reasonable terms. These standards can
10 only be met by considering the requirements of investors over the time period when the rates
11 established in this proceeding will be in effect. If the upward shift in investors' risk
12 perceptions and required rates of return for long-term capital is not incorporated in the
13 allowed ROE, the results will fail to meet the comparable earnings standard that is
14 fundamental in determining the cost of capital. From a more practical perspective, failing to
15 provide investors with the opportunity to earn a rate of return commensurate with Avista's
16 risks will weaken its financial integrity, while hampering the Company's ability to attract
17 necessary capital.

18 **Q. In summary, how have the risks confronting Avista's common**
19 **shareholders changed since the Company's last rate proceeding?**

20 A. Investors are confronting unprecedented economic uncertainty and
21 dramatically higher volatility. Future prospects for the economy are highly uncertain as

⁶⁸ Federal Reserve, *Transcript of Chair Powell's Press Conference* (May 4, 2022),
<https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20220504.pdf>.

1 inflation ramped up to a 40 year high in 2022, GDP contracted over the first two quarters
2 this year, and many investors are pointing to a likely recession in 2023.⁶⁹ Not surprisingly,
3 these exposures have prompted a profound reevaluation of utility stocks. Avista’s common
4 stockholders have lost over 27 percent of their capital investment since March 2020.⁷⁰ This
5 is indicative of a substantial upward revision to their underlying discount rate or cost of
6 capital. Consistent with this view, beta values for utilities—which are a widely cited
7 barometer for equity risk—have increased dramatically. Considered along with Avista’s
8 relative size and operating and financial risks, these factors support the conclusion that the
9 return required by the Company’s shareholders has increased.

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, ECAPM, and risk premium methods to
15 estimate the cost of common equity. In addition, I also evaluate a fair ROE using an
16 earnings approach based on investors’ current expectations in the capital markets. In my
17 opinion, comparing estimates produced by one method with those produced by other
18 approaches ensures that the estimates of the cost of equity pass fundamental tests of

⁶⁹ For example, Fannie Mae is projecting 2022 real GDP to be flat and to decline 0.5 percent in 2023. In their September press release, they note that “in light of expected continuing tightening of monetary policy and global economic weakness, we expect a further slowing in housing activity and sluggish consumer spending and business investment growth. We continue to expect a moderate recession to occur in 2023 along with a weakening of the labor market.” <https://www.fanniemae.com/research-and-insights/forecast/housing-and-interest-rates-continue-suggest-recession-likely-2023>.

⁷⁰ Avista’s common stock closed at \$52.59 per share on March 6, 2020, versus \$38.22 over the 30 trading days ended November 15, 2022.

1 reasonableness and economic logic. As the Commission has noted with respect to the DCF,
2 comparable earnings, risk premium, and CAPM approaches:

3 While each of these methods can be useful in estimating a utility's ROE, as
4 with other analytical tools used in ratemaking, these methods only
5 imperfectly predict the Company's future requirements and performance.⁷¹

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

7 A. In estimating the cost of equity, the DCF model is typically applied to
8 publicly traded firms engaged in similar business activities or with comparable investment
9 risks. As described in detail in Exhibit No. 3, Schedule 2, I apply the DCF model to a utility
10 proxy group composed of 22 companies, which I refer to as the "Utility Group."

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

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

14 **TABLE 2**
15 **COMPARISON OF RISK INDICATORS**

	<u>Value Line</u>				
	<u>S&P</u>	<u>Moody's</u>	<u>Safety</u>		<u>Beta</u>
<u>Rank</u>			<u>Strength</u>		
Utility Group	BBB+	Baa2	2	A	0.90
Avista	BBB	Baa2	2	B++	0.90

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

18 A. Yes. Considered together, a comparison of these objective measures, which
19 consider of a broad spectrum of risks, including financial and business position, and

⁷¹ Case No. INT-G-1 6-02, Order No. 33757 (Apr. 28, 2017) at 8.

1 exposure to firm-specific factors, indicates that investors would likely conclude that the
2 overall investment risks for Avista are comparable to those of the firms in the Utility Group.

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

4 A. My application of the DCF model, which is discussed in greater detail in
5 Exhibit No. 3, Schedule 2, considers three alternative measures of expected growth in
6 earnings per share (“EPS”), as well as the sustainable growth rate based on the relationship
7 between expected retained earnings and earned rates of return (“br+sv”). As shown on
8 Exhibit No. 3, Schedule 6 and summarized below in Table 3, after eliminating illogical
9 values,⁷² application of the constant growth DCF model results in the following cost of
10 equity estimates:

11 **TABLE 3**
12 **DCF RESULTS – UTILITY GROUP**

<u>Growth Rate</u>	<u>Average</u>	<u>Midpoint</u>
Value Line	9.4%	9.6%
IBES	10.4%	11.4%
Zacks	9.7%	10.2%
br + sv	9.1%	9.4%

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

14 A. Like the DCF model, the CAPM is an *ex-ante*, or forward-looking model
15 based on expectations of the future. As a result, in order to produce a meaningful estimate
16 of investors’ required rate of return, the CAPM is best applied using estimates that reflect the
17 expectations of actual investors in the market, not with backward-looking, historical data.
18 Accordingly, I apply the CAPM to the Utility Group based on a forward-looking estimate

⁷² I provide a detailed explanation of my DCF analysis, including the evaluation of individual estimates, in Exhibit No. 3, Schedule 2.

1 for investors' required rate of return from common stocks. Because this forward-looking
2 application of the CAPM looks directly at investors' expectations in the capital markets, it
3 provides a more meaningful guide to the expected rate of return required to implement the
4 CAPM.

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

6 A. As shown on page 1 of Exhibit No. 3, Schedule 8, my forward-looking
7 application of the CAPM model indicates an average ROE of 11.4 percent for the Utility
8 Group after adjusting for the impact of firm size.

9 **Q. What cost of equity estimate is indicated by the ECAPM?**

10 A. Empirical tests of the CAPM have shown that low-beta securities earn returns
11 somewhat higher than the CAPM would predict, and high-beta securities earn less than
12 predicted. The ECAPM incorporates a refinement to address this observed relationship
13 documented in the financial research. My application of the ECAPM is based on the same
14 forward-looking market rate of return, risk-free rates, and beta values discussed above in
15 connection with the CAPM. As shown on Exhibit No. 3, Schedule 8, applying the forward-
16 looking ECAPM approach to the firms in the Utility Group results in an average cost of
17 equity estimate of 11.6 percent after incorporating the size adjustment corresponding to the
18 market capitalization of the individual utilities.

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

20 A. I base my estimates of equity risk premiums for electric utilities on surveys of
21 previously authorized rates of return on common equity, which are frequently referenced as
22 the basis for estimating equity risk premiums. My application of the risk premium method
23 also considers the inverse relationship between equity risk premiums and interest rates,

1 which suggests that when interest rate levels are relatively high, equity risk premiums
2 narrow, and when interest rates are relatively low, equity risk premiums widen.

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

4 A. As shown on page 1 of Exhibit No. 3, Schedule 10, adding an adjusted risk
5 premium of 5.00 percent to the six-month average yield on long-term Baa utility bonds at
6 November 2022 of 5.55 percent results in an implied cost of equity of approximately 10.55
7 percent.⁷³

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

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

⁷³ Moody's yield averages are based on seasoned bonds with a remaining maturity of at least 20 years.

1 As shown on Exhibit No. 3, Schedule 11, Value Line's projections for the Utility
2 Group suggest an average ROE of approximately 11.0 percent.

3 **B. Flotation Costs**

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

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

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

16 A. No. While debt flotation costs are recorded on the books of the utility,
17 amortized over the life of the issue, and thus increase the effective cost of debt capital, there
18 is no similar accounting treatment to ensure that equity flotation costs are recorded and
19 ultimately recognized. No rate of return is authorized on flotation costs necessarily incurred
20 to obtain a portion of the equity capital used to finance plant. In other words, equity
21 flotation costs are not included in a utility's rate base because neither that portion of the
22 gross proceeds from the sale of common stock used to pay flotation costs is available to
23 invest in plant and equipment, nor are flotation costs capitalized as an intangible asset.

1 Unless some provision is made to recognize these issuance costs, a utility's revenue
2 requirements will not fully reflect all of the costs incurred for the use of investors' funds.
3 Because there is no accounting convention to accumulate the flotation costs associated with
4 equity issues, they must be accounted for indirectly, with an upward adjustment to the cost
5 of equity being the most appropriate mechanism.

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

7 A. The financial literature and evidence in this case provides a sound theoretical
8 and practical basis to include consideration of flotation costs for Avista. An adjustment for
9 flotation costs associated with past sales of common stock is appropriate, even when the
10 utility is not contemplating any new sales of common stock. The need for a flotation cost
11 adjustment to compensate for past common stock offerings has been recognized in the
12 financial literature. In a *Public Utilities Fortnightly* article, for example, Brigham,
13 Aberwald, and Gapenski demonstrated that even if no further stock issues are contemplated,
14 a flotation cost adjustment in all future years is required to keep shareholders whole, and
15 that the flotation cost adjustment must consider total equity, including retained earnings.⁷⁴

16 Similarly, *New Regulatory Finance* contains the following discussion:

17 Another controversy is whether the flotation cost allowance should still be
18 applied when the utility is not contemplating an imminent common stock
19 issue. Some argue that flotation costs are real and should be recognized in
20 calculating the fair rate of return on equity, but only at the time when the
21 expenses are incurred. In other words, the flotation cost allowance should
22 not continue indefinitely, but should be made in the year in which the sale of
23 securities occurs, with no need for continuing compensation in future years.
24 This argument implies that the company has already been compensated for
25 these costs and/or the initial contributed capital was obtained freely, devoid
26 of any flotation costs, which is an unlikely assumption, and certainly not

⁷⁴ E. F. Brigham, D. A. Aberwald, and L. C. Gapenski, *Common Equity Flotation Costs and Rate Making*, Pub. Util. Fortnightly (May 2, 1985).

1 applicable to most utilities. ... The flotation cost adjustment cannot be strictly
 2 forward-looking unless all past flotation costs associated with past issues
 3 have been recovered.⁷⁵

4 **Q. Can you illustrate why investors will not have the opportunity to earn**
 5 **their required ROE unless a flotation cost adjustment is included?**

6 A. Yes. Assume a utility sells \$10 worth of common stock at the beginning of
 7 year 1. If the utility incurs flotation costs of \$0.48 (5% of the net proceeds), then only \$9.52
 8 is available to invest in rate base. Assume that common shareholders' required rate of return
 9 is 10.5%, the expected dividend in year 1 is \$0.50 (*i.e.*, a dividend yield of 5%), and that
 10 growth is expected to be 5.5% annually. As developed in Table 4 below, if the allowed rate
 11 of return on common equity is only equal to the utility's 10.5% "bare bones" cost of equity,
 12 common stockholders will not earn their required rate of return on their \$10 investment,
 13 since growth will only be 5.25%, instead of 5.5%:

14 **TABLE 4**
 15 **NO FLOTATION COST ADJUSTMENT**

<u>Year</u>	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total Equity</u>	<u>Market Price</u>	<u>M/B Ratio</u>	<u>Allowed ROE</u>	<u>EPS</u>	<u>DPS</u>	<u>Payout Ratio</u>
1	\$ 9.52	\$ -	\$ 9.52	\$10.00	1.050	10.50%	\$ 1.00	\$ 0.50	50.0%
2	\$ 9.52	\$ 0.50	\$ 10.02	\$10.52	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%
Growth			5.25%	5.25%			5.25%	5.25%	

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

⁷⁵ Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 335.

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

9 **TABLE 5**
 10 **INCLUDING FLOTATION COST ADJUSTMENT**

<u>Year</u>	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total Equity</u>	<u>Market Price</u>	<u>M/B Ratio</u>	<u>Allowed ROE</u>	<u>EPS</u>	<u>DPS</u>	<u>Payout Ratio</u>
1	\$ 9.52	\$ -	\$ 9.52	\$10.00	1.050	10.75%	\$ 1.02	\$ 0.50	48.9%
2	\$ 9.52	\$ 0.52	\$ 10.04	\$10.55	1.050	10.75%	\$ 1.08	\$ 0.53	48.9%
3	\$ 9.52	\$ 0.55	\$ 10.60	\$11.13	1.050	10.75%	\$ 1.14	\$ 0.56	48.9%
Growth			5.50%	5.50%			5.50%	5.50%	

11 The only way for investors to be fully compensated for issuance costs is to include
 12 an ongoing adjustment to account for past flotation costs when setting the return on common
 13 equity. This is the case regardless of whether the utility is expected to issue additional
 14 shares of common stock in the future.

15 **Q. What is the magnitude of the adjustment to the “bare bones” cost of**
 16 **equity to account for issuance costs?**

17 A. The most common method used to account for flotation costs in regulatory
 18 proceedings is to apply an average flotation-cost percentage to a utility’s dividend yield.
 19 Rather than developing a generic flotation cost adjustment based on industry-wide data, my
 20 analysis is predicated on actual issuance costs incurred by Avista. Specifically, Exhibit

1 No. 3, Schedule 12 documents the flotation costs associated with the Company's sales of
2 common stock, including those under its Dividend Reinvestment Plan. As shown there, this
3 results in an issuance expense factor of 1.467 percent. Applying this expense percentage to
4 Avista's 4.6 percent average dividend yield produces a flotation cost adjustment on the order
5 of 7 basis points, which I recommend the Commission add to the cost of equity in arriving at
6 a fair ROE for Avista.

7 **Q. Has the IPUC Staff previously considered flotation costs in estimating a**
8 **fair ROE?**

9 A. Yes. For example, in Case No. IPC-E-08-10, IPUC Staff witness Terri
10 Carlock noted that she had adjusted her DCF analysis to incorporate an allowance for
11 flotation costs.⁷⁶ Similarly, in Case No. NT-G-16-02 the IPUC Staff supported the use of
12 the same flotation cost methodology that I recommend above, concluding:

13 [I]s the standard equation for flotation cost adjustments and is referred to as
14 the "conventional" approach. Its use in regulatory proceedings is widespread,
15 and the formula is outlined in several corporate finance textbooks.⁷⁷

16 **Q. Are equity flotation costs particularly relevant to Avista?**

17 A. Yes. In order to finance a substantial capital expenditures program and
18 maintain the Company's credit standing, Avista will continue to rely on additional sales of
19 common stock to raise new capital. As shown on Exhibit No. 3, Schedule 7, Value Line
20 anticipates that Avista's common shares outstanding will increase by over 3 percent by 2026.

⁷⁶ Case No. IPC-E-08-10, *Direct Testimony of Terui Carlock* at 12-13 (Oct. 24, 2008).

⁷⁷ Case No. INT-G-16-02, *Direct Testimony of Mark Rogers* at 18 (Dec. 16, 2016).

1 **C. Non-Utility DCF Model**

2 **Q. What other proxy group do you consider in evaluating a fair ROE for**
3 **Avista?**

4 A. As indicated earlier, I also present a DCF analysis for a low risk group of
5 non-utility firms, with which Avista must compete for investors' capital. Under the
6 regulatory standards established by *Hope* and *Bluefield*, the salient criterion in establishing a
7 meaningful benchmark to evaluate a fair ROE is relative risk, not the particular business
8 activity or degree of regulation. With regulation taking the place of competitive market
9 forces, required returns for utilities should be in line with those of non-utility firms of
10 comparable risk operating under the constraints of free competition. Consistent with this
11 accepted regulatory standard, I also apply the DCF model to a reference group of low-risk
12 companies in the non-utility sectors of the economy. I refer to this group as the "Non-Utility
13 Group." I explain this approach in more detail in Exhibit No. 3, Schedule 2 at 29-32.

14 **Q. How do the overall risks of this Non-Utility Group compare with the**
15 **Utility Group and Avista?**

16 A. Table 6 compares the Non-Utility Group with the Utility Group and Avista
17 across the five key risk measures discussed earlier:

18 **TABLE 6**
19 **COMPARISON OF RISK INDICATORS**

	<u>Value Line</u>				
			<u>Safety Financial</u>		
	<u>S&P</u>	<u>Moody's</u>	<u>Rank</u>	<u>Strength</u>	<u>Beta</u>
Non-Utility Group	A-	A3	1	A+	0.79
Utility Group	BBB+	Baa2	2	A	0.90
Avista	BBB	Baa2	2	B++	0.90

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

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

5 A. As shown on Exhibit No. 3, Schedule 13, I apply the DCF model to the non-
6 utility companies using analysts' EPS growth projections, as described earlier for the Utility
7 Group. As summarized below in Table 7, after eliminating illogical values, application of
8 the constant growth DCF model resulted in the following cost of equity estimates:

9 **TABLE 7**
10 **DCF RESULTS – NON-UTILITY GROUP**

<u>Growth Rate</u>	<u>Average</u>	<u>Midpoint</u>
Value Line	10.7%	11.1%
IBES	10.5%	11.4%
Zacks	10.5%	10.7%

11 As discussed in Exhibit No. 3, Schedule 2, reference to the Non-Utility Group is
12 consistent with established regulatory principles. Required returns for utilities should be in
13 line with those of non-utility firms of comparable risk operating under the constraints of free
14 competition. Because the actual cost of equity is unobservable, and DCF results inherently
15 incorporate a degree of error, cost of equity estimates for the Non-Utility Group provide an
16 important benchmark in evaluating a fair and reasonable ROE for Avista. The DCF results
17 for the Non-Utility Group support a finding that the 10.25 percent requested ROE for
18 Avista's utility operations is reasonable.

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

20 A. Yes.