Exh. AMM-15T	
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION	
DOCKET NO. UE-220053	
DOCKET NO. UG-220054	
DOCKET NO. UE-210854	
(consolidated)	
REBUTTAL TESTIMONY OF	
ADRIEN M. MCKENZIE, CFA	
REPRESENTING AVISTA CORPORATION	

REBUTTAL TESTIMONY OF ADRIEN M. MCKENZIE, CFA

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1 I. INTRODUCTION 2 0. Please state your name and business address. Adrien M. McKenzie, 3907 Red River, Austin, Texas, 78751. 3 A. Did you previously submit Direct Testimony in this case? 4 Q. 5 Yes, I did. A. What is the purpose of your Rebuttal Testimony? 6 Q. 7 A. My testimony addresses the testimony of David J. Garrett, on behalf of the 8 Washington State Office of Attorney General Public Counsel Unit ("AG"), concerning a fair

Q. Please summarize Mr. Garrett's recommendations. 14

pertaining to Avista's proposed capital structure.

A. AG witness Garrett estimates Avista's cost of equity to be about 7.90% but then recommends an ROE of 8.75% for Avista.² Mr. Garrett further recommends a capital structure for Avista consisting of 54.4% debt and 45.6% equity.³

ROE that Avista Corp. ("Avista" or "the Company") should be authorized to earn on its

investment in providing electric utility service in Washington. Specifically, I rebut Mr.

Garrett's contention that the 9.4% ROE implied by the terms of the Full Multiparty Settlement

Stipulation ("Settlement") is unreasonable. I also address Mr. Garrett's recommendations

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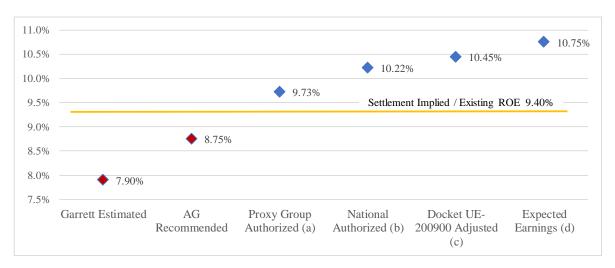
¹ See Exh. JT-1T at footnote 8.

² Garrett Direct at 6.

³ *Id.* at 8.

1		A. Summary of Conclusions
2	Q.	What are the principal conclusions of your rebuttal testimony?
3	A.	My rebuttal testimony confirms that the 9.4% ROE implied by the Settlement
4	understate	s Avista's cost of equity under current capital market conditions and demonstrates
5	that Mr. G	arrett's ROE recommendation of 8.75% falls below a fair and reasonable level for
6	the Compa	any's utility operations. My rebuttal testimony demonstrates that:
7 8 9	•	Mr. Garrett's estimate of the "actual" cost of equity of 7.9% is not credible on its face. This result is extreme and falls far below the lowest ROE awarded by any state regulatory commission in modern history.
10 11	•	The ROE recommendation of AG Witness Garrett falls far below accepted benchmarks.
12 13	•	Mr. Garrett's conclusions and ROE recommendation are inconsistent with current capital market conditions.
14 15 16		 Accelerating inflation and more restrictive monetary policies support the view that the cost of equity is higher now than in 2021 or earlier in 2022.
17 18 19		 Substantially higher current and projected interest rates indicate that investors' forward-looking required return on equity for electric utility stocks has increased.
20	•	The AG's analyses are undermined by methodological flaws, including:
21 22 23 24		 Mr. Garrett's DCF analysis significantly understates the Company's ROE because his growth rate selection is marred by a mistaken belief that expectations of utility investors are limited to growth in GDP.
25 26		 His CAPM analysis is wrongly based on historic and survey data that lead to nonsensical results.
27	Q.	Can you summarize how Mr. Garrett's ROE findings and recommendation
28	stacks up	against comparable benchmarks?
29	A.	Yes. Figure AMM R-1 below compares the 7.90% ROE supported by Mr.
30	Garrett's a	analysis and the AG's 8.75% recommendation to the benchmarks supported in my
31	rebuttal te	stimony.

FIGURE AMM R-1 ROE BENCHMARK COMPARISON



- (a) Average currently authorized ROE for Garrett proxy group from Exhibit AMM-16.
- (b) Average of national ROEs adjusted for current interest rates from Exhibit AMM-17.
- (c) Average of adjusted range from Exhibit AMM-18.

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(d) Average of expected earned returns for Garrett proxy group from Exhibit AMM-19.

As illustrated above, AG's recommended ROE for Avista of 8.75% falls almost 100 basis points below the currently authorized ROEs for a proxy group of utilities that Mr. Garrett agrees are of comparable risk to Avista. This ROE disparity is even more evident when one considers national data on allowed ROEs, once adjusted for much higher current bond yields. As Figure AMM R-1 shows, investors' forward looking ROE expectations for similar risk utilities are 200 basis points higher than Mr. Garrett's recommended ROE of 8.75% for Avista. These benchmarks amply illustrate that Mr. Garrett's 8.75% ROE recommendation is an extreme outlier that violates the economic and regulatory standards underlying a fair ROE, while confirming the reasonableness of the 9.4% ROE implied by the provisions of the Settlement.

Q.	What do	the capital	market	trends	discussed	in your	rebuttal	testimony
imply with re	spect to th	e ROE reco	mmend	ation p	resented in	your di	rect testii	mony?

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A. As documented in my rebuttal testimony, there has been a fundamental upward shift in long-term capital costs since the time that the analyses presented in my direct testimony were prepared.⁴ A material increase in interest rates, rising inflation, and heightened market volatility indicate that, were I to update the results of my analyses, my ROE recommendation would exceed the 10.25% supported in my direct testimony.⁵

B. Comparison of ROE Recommendation to Accepted Benchmarks

- Q. Do allowed ROEs provide a benchmark to evaluate whether the recommended equity returns in this case are sufficient to meet regulatory standards?
- A. Yes. Allowed ROEs provide a gauge of the reasonableness of the outcome of a particular analysis or decision, but ROE values do not exist in a vacuum. In considering utilities with comparable risks, investors will always prefer to provide capital to the opportunity with the highest expected return. If a utility is unable to offer a return similar to that available from other investment opportunities posing equivalent risks, investors will become unwilling to supply the utility with capital on reasonable terms.

⁴ Average Baa public utility bond yields have increased almost 190 basis points from the 3.26% referenced in my direct testimony to 5.15% in July 2022.

⁵ For example, updating the risk premium analysis presented on page 1 of Exh. AMM-11 using average bond yields for July 2022 produces an implied cost of equity of 10.32%, versus the 9.18% value presented on page 1 of Exh. AMM-11 to my direct testimony.

- Q. How does Mr. Garrett's ROE recommendation compare to ROEs authorized by other state commissions?
- A. Mr. Garrett's 8.75% recommendation is well below this standard. The table below indicates that the average ROE allowed by other state commissions in past five years has been 9.44% for electric utilities:

TABLE AMM R-1 AVERAGE ALLOWED ROE BY STATE COMMISSIONS

<u>Year</u>	Average	Median
2018	9.56%	9.58%
2019	9.65%	9.65%
2020	9.39%	9.48%
2021	9.39%	9.50%
2022	<u>9.34%</u>	9.33%
Average	9.44%	9.49%

Source:

S&P Global Market Intelligence, *Major Rate Case Decisions – January – June 2022*, RRA Regulatory Focus (Jul. 27, 2022).

Note:

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Excludes limited-issue riders. Data for 2022 through June 30.

Similarly, Mr. Garrett's ROE recommendation falls far below the 9.40% ROE most recently approved by the Washington Utilities and Transportation Commission ("Commission") for Avista.⁶ The AG's ROE recommendation is also below the current allowed returns reported to investors for the companies in Mr. Garrett's proxy group. As shown on Exhibit AMM-15, these averaged 9.73%.

Of course, the ROEs approved in other jurisdictions do not constrain the Commission's decision-making in this proceeding. However, it is important to understand that there would

⁶ Dockets UE-200900, UG-200901, Final Order 08 / 05 (Sep. 27, 2021).

1	be a disincentive for investors to provide equity capital if the Commission were to apply a
2.	lower ROE to Avista, compared to entities of comparable risk

Q. Do these historical allowed ROEs provide a direct guide as to a fair ROE for Avista under current capital market conditions?

A. No. The data on which these historical allowed ROEs were based does not reflect investors' current requirements. Substantial evidence highlights a fundamental shift in Federal Reserve monetary policies and investors' expectations over the first half of 2022 and a material increase in the cost of capital. A review of trends in key indicators since 2021 supports a finding that capital market conditions have changed dramatically and recent historical allowed ROEs significantly understate investors' current required returns.

Q. What are some of the key factors that have led to an increase in the cost of capital?

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

The onset of war in Ukraine and a dramatic rise in inflation has led to sharp declines in

global equity markets as investors come to grips with the related exposures. S&P Global
Ratings ("S&P") noted that the conflict "could have profound effects on macroeconomic
prospects and credit conditions around the world," concluding that:

The implications of the Russia-Ukraine conflict could come in the form of energy supply disruptions or price shocks, sustained inflationary pressures, a drag on economic growth or policy missteps by central banks, a migrant crisis in Eastern Europe, additional cyber-attacks between Russia and its perceived adversaries, risk-repricing that drives up borrowing costs or limits funding access, and profit erosion for certain sectors.⁸

As Fed Chair Powell concluded, "The financial and economic implications for the global economy and the U.S. Economy are highly uncertain."

The greater uncertainty faced by equity investors is confirmed by reference to The Chicago Board Options Exchange Volatility Index (commonly known as the "VIX"), which is a key measure of expectations of near-term volatility and market sentiment referenced by the investment community. The VIX has trended sharply higher in 2022 and is currently approximately 46% above the average for 2021. Similarly, the Merrill Lynch Option Volatility Estimate, or "MOVE" index, which is a market-based measure of uncertainty about interest rates and is often referred to as the "investor fear gauge," is also elevated. During June 2022, the MOVE index fluctuated in the range of approximately 97 to 145, which is over 90% higher than it was at the same time in 2021. This ongoing volatility in capital markets is

⁷ S&P Global Ratings, *Russia-Ukraine Military Conflict: Key takeaways From Out Articles*, Comments (Mar. 8, 2022).

⁸ Id

⁹ Federal Reserve, *Transcript of Chair Powell's Press Conference* (Mar. 16, 2021), https://www.federalreserve.gov/monetarypolicy/fomcpresconf20220316.htm.

¹⁰ The average value of the VIX for the 30 days ending Jun. 16, 2022 is 28.60, whereas the average value for all of 2021 is 19.66. https://fred.stlouisfed.org/series/VIXCLS (last visited Jun. 18, 2022).

¹¹ https://www.google.com/finance/quote/MOVE:INDEXNYSEGIS?sa=X&ved=2ahUKEwiWvr7E-uH0AhVcl2oFHQLTAzsQ3ecFegQIBxAc&window=MAX (last visited Aug. 6, 2022).

1	evidence of the greater risks now faced by investors.
2	Q. What impact does rising inflation expectations have on the return investors
3	require from Avista's common equity?
4	A. Implicit in the required rate of return for long-term capital—whether debt of
5	common equity—is compensation for expected inflation. This is highlighted in the textbook
6	Financial Management, Theory and Practice:
7 8 9	The four most fundamental factors affecting the cost of money are (1) production opportunities, (2) time preferences for consumption, (3) risk, and (4) inflation. ¹²
10	In other words, a part of investor's required return is intended to compensate for the erosion of
11	purchasing power due to rising price levels. This inflation premium is added to the real rate
12	of return (pure risk-free rate plus risk premium) to determine the nominal required return. As
13	a result, higher inflation expectations lead to an increase in the cost of equity capital.
14	Q. Is there evidence that inflation has increased dramatically?
15	A. Yes. The U.S. inflation rate as measured by the Consumer Price Index ("CPI"
16	hit a four-decade high of 9.1% in June 2022. As illustrated in Figure AMM R-2, below
17	inflation has now exceeded 5% for thirteen straight months. The so-called "core" price index

which excludes more volatile energy and food costs, rose at an annual rate of 5.9% in June

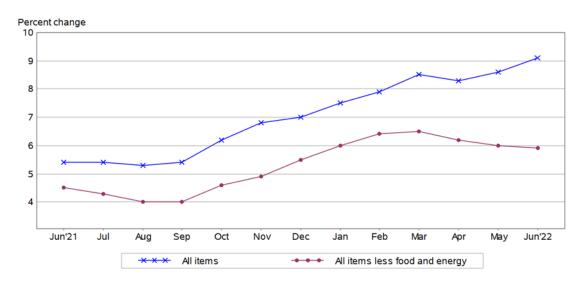
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2022.

¹² Eugene F. Brigham, Louis C. Gapenski, and Michael C. Ehrhardt, *Financial Management, Theory and Practice*, Ninth Edition (1999) at 126.

FIGURE AMM R-2 TREND IN CONSUMER PRICE INDEX



Similarly, inflation as measured by the Personal Consumption Expenditure Price Index ("PCE") rose 6.8% in June 2022, or 4.8% after excluding more volatile food and energy cost.¹³

The Social Security Administration announced that beneficiaries would receive a cost-of-living adjustment of 5.9% for 2022, up from 1.3% a year earlier.¹⁴ Meanwhile, the June 2022 *Survey of Consumer Expectations* conducted by the New York Fed reported a median point prediction for year-ahead inflation of 6.8% and an expected three-year inflation rate of 3.6%.¹⁵ After abandoning the word "transitory" for describing the nature of the current high inflation rate,¹⁶ Fed Chair Jerome Powell recently noted that:

Inflation remains well above our longer-run goal of 2 percent. Over the 12 months ending in May, total PCE prices rose 6.3 percent; excluding the volatile food and energy categories, core PCE prices rose 4.7 percent. In June, the 12-month change in the Consumer Price Index came in above

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¹³ https://www.bea.gov/news/2022/personal-income-and-outlays-june-2022 (last visited Aug. 6, 2022).

¹⁴ Social Security Administration, *Fact Sheet: 2022 Social Security Changes*, https://www.ssa.gov/news/press/factsheets/colafacts2022.pdf.

¹⁵ Federal Reserve Bank of New York, https://www.newyorkfed.org/microeconomics/sce#/inflexp-2 (last visited Aug. 6, 2022).

¹⁶ https://www.reuters.com/article/usa-fed-instant/feds-powell-floats-dropping-transitory-label-for-inflation-idUSKBN2IF1S0.

1	expectations at 9.1 percent, and the change in the core CPI was 5.9 percent.
2	Notwithstanding the recent slowdown in overall economic activity,
3	aggregate demand appears to remain strong, supply constraints have been
4	larger and longer lasting than anticipated, and price pressures are evident
5	across a broad range of goods and services. Although prices for some
6	commodities have turned down recently, the earlier surge in prices of crude
7	oil and other commodities that resulted from Russia's war on Ukraine has
8	boosted prices for gasoline and food, creating additional upward pressure on
9	inflation. ¹⁷
10	As Value Line concluded, "Inflation clearly is worrisome." 18
11	Q. Does the threat of rising inflation pose a challenge for utilities, such as
12	Avista?
13	A. Yes. S&P recently noted that "the threat of inflation comes at a time when
14	credit metrics are already under pressure relative to downside ratings thresholds."19 S&P
15	affirmed its negative outlook for investor-owned utilities, noting that "risk will continue to
16	pressure the credit quality of the industry in 2022." ²⁰ As S&P elaborated:
17	Recently, several new credit risks have emerged, including inflation, higher
18	interest rates, and rising commodity prices. Persistent pressure from any of
19	these risks would likely lead to a further weakening of the industry's credit
20	quality in 2022. ²¹
21	The risks posed by inflation are particularly acute for Avista, given that its rates will

be fixed over the 2023-2024 rate plan period. The evidence presented in my rebuttal testimony is consistent with the findings of Company witness Grant D. Forsyth, who concluded from his review of stage-of-production inflation rates based on the Producer Price Index that Avista

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¹⁷ Federal Reserve, *Transcript of Chair Powell's Press Conference* (Jul. 7, 2022), https://www.federalreserve.gov/monetarypolicy/fomcpresconf20220727.htm.

¹⁸ The Value Line Investment Survey, *Selection and Opinion* (Dec. 3, 2021).

¹⁹ S&P Global Ratings, Will Rising Inflation Threaten North American Investor-Owned Regulated Utilities' Credit Quality? (Jul. 20, 2021).

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

²¹ Id.

- "should expect a much higher, and more persistent, level of inflation affecting the Company's
 O&M costs throughout the Rate Plan."²²
 - Q. Have increased risks and higher inflation resulted in higher capital costs?
 - A. Yes. While the cost of equity is unobservable, the yields on long-term bonds provide a widely referenced benchmark for the direction of capital costs, including required returns on common stocks. The table below compares the average yields on Treasury securities and Baa-rated public utility bonds during 2021 with those required in July 2022.

TABLE AMM R-2 BOND YIELD TRENDS

	July		Change
Series	2022	2021	(bps)
10-Year Treasury Bonds	2.90%	1.44%	146
30-Year Treasury Bonds	3.10%	2.05%	105
Baa Utility Bonds	5.15%	3.35%	180

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

As shown above, trends in bond yields since 2021 document a substantial increase in the returns on long-term capital demanded by investors. With respect to utility bond yields—which are the most relevant indicator in gauging the implications for the Company's common equity investors—average yields are now approximately 180 basis points above 2021 levels.

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²² Exh. GDF-3T at 9.

Q. Are bond yields expected to remain elevated over Avista's 2023-2024 rate plan period?

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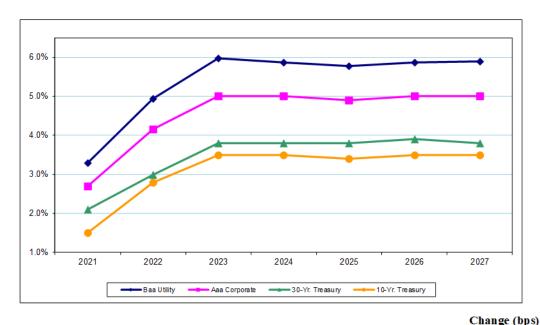
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A. Yes. As illustrated in Figure AMM R-3 below, the most recent long-term projections from Blue Chip document that bond yields are expected to increase significantly and remain elevated when compared to recent historical levels.





						(Change (bps)
<u>2021</u>	2022	2023	2024	2025	2026	2027	<u>2021-27</u>
1.5%	2.8%	3.5%	3.5%	3.4%	3.5%	3.5%	200
2.1%	3.0%	3.8%	3.8%	3.8%	3.9%	3.8%	170
2.7%	4.2%	5.0%	5.0%	4.9%	5.0%	5.0%	230
3.3%	4.9%	6.0%	5.9%	5.8%	5.9%	5.9%	260
	1.5% 2.1% 2.7%	1.5% 2.8% 2.1% 3.0% 2.7% 4.2%	1.5% 2.8% 3.5% 2.1% 3.0% 3.8% 2.7% 4.2% 5.0%	1.5% 2.8% 3.5% 3.5% 2.1% 3.0% 3.8% 3.8% 2.7% 4.2% 5.0% 5.0%	1.5% 2.8% 3.5% 3.5% 3.4% 2.1% 3.0% 3.8% 3.8% 3.8% 2.7% 4.2% 5.0% 5.0% 4.9%	1.5% 2.8% 3.5% 3.5% 3.4% 3.5% 2.1% 3.0% 3.8% 3.8% 3.8% 3.9% 2.7% 4.2% 5.0% 5.0% 4.9% 5.0%	2021 2022 2023 2024 2025 2026 2027 1.5% 2.8% 3.5% 3.5% 3.4% 3.5% 3.5% 2.1% 3.0% 3.8% 3.8% 3.8% 3.9% 3.8% 2.7% 4.2% 5.0% 5.0% 4.9% 5.0% 5.0%

⁽a) Wolters Kluwer, Blue Chip Financial Forecasts (Jun. 1, 2022).

As indicated above, Blue Chip's projections anticipate that interest rates will continue to rise and remain higher over the period when rates established in this proceeding will be in effect. This evidence suggests that long-term capital costs—including the cost of equity— have increased substantially and will continue to increase over the 2023-2024 rate plan period, Rebuttal Testimony of Adrien M. McKenzie Avista Corporation

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⁽b) Based on projected yields on Baa corporate bonds (Wolters Kluwer, Blue Chip Financial Forecasts (Jun. 1, 2022)), adjusted for six-month average yield spreads at Jun. 2022 (Moody's Investors Service).

1	during which Avista's rates will remain fixed.
2	Q. Are expectations of higher bond yields and exposure to inflation consistent
3	with recent Federal Reserve actions?
4	A. Yes. The Federal Open Market Committee ("FOMC") ²³ has responded to
5	concerns over accelerating inflation by raising the benchmark range for the federal funds rate
6	by 0.25% in March 2022, 0.50% in May 2022, 0.75% in June, and a further 0.75% at its policy
7	meeting on July 26-27, 2022. Chair Powell noted that:
8 9 10 11 12 13	From the standpoint of our Congressional mandate to promote maximum employment and price stability, the current picture is plain to see: The labor market is extremely tight, and inflation is much too high. Against this backdrop, today the FOMC raised its policy interest rate by 3/4 percentage point and anticipates that ongoing increases in the target range for the federal funds rate will be appropriate. ²⁴
14	The Federal Reserve also began a significant draw-down of its balance sheet holdings
15	beginning in June 2022,25 and Fed Chair Powell surmised that this process could be the
16	equivalent of another one quarter percent rate hike over the course of a year. ²⁶

In conjunction with the June 14-15, 2022 policy meeting, the FOMC submitted updated projections about where short-term interest rates are headed. The results are the dot plot—a visual representation of where members think interest rates will trend over the short, medium, and longer run. As shown in Figure AMM R-4 below, the most recent dot plot indicates that all of the FOMC participants expect its benchmark interest rate to be dramatically higher than

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²³ The FOMC is a committee composed of twelve members that serves as the monetary policymaking body of the Federal Reserve System.

²⁴ https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20220727.pdf.

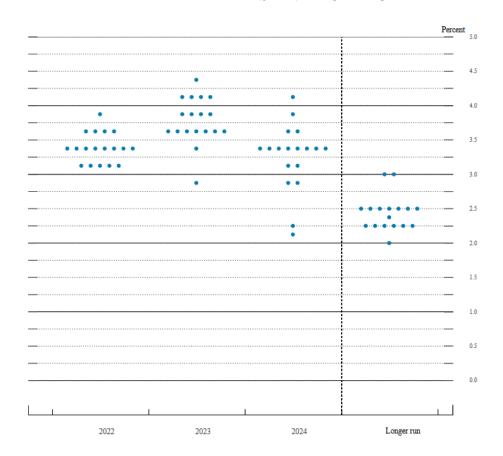
²⁵ Federal Reserve, *Plans for Reducing the Size of the Federal Reserve's Balance Sheet*, Press Release (May 4, 2022), https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm

²⁶ Federal Reserve, *Transcript of Chair Powell's Press Conference* (May 4, 2022), https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20220504.pdf.

- 1 current levels by the end of 2022,²⁷ with the median of the federal funds target range rising to
- 2 3.375%, versus 2.375% currently.

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FIGURE AMM R-4 FEDERAL RESERVE DOT PLOT



- Q. After adjusting for current financial market conditions, what does a comparison with recent allowed ROEs indicate with respect to the 9.4% ROE implied by the Settlement?
- A. It demonstrates that the 9.4% ROE implied by the provision of the Settlement is reasonable and likely understates Avista's cost of equity in today's capital markets. This is

²⁷ Summary of Economic Projections (Jun. 15, 2022). https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20220316.pdf.

shown on Exhibit AMM-16. There I subtract the average Baa utility bond yield corresponding to the average allowed ROE for electric utilities reported by RRA for Q-1 2022, 2021, and 2020 to compute the implied risk premium. As discussed in my direct testimony, 28 the equity risk premium expands as interest rates decline and contracts as interest rates rise. Accordingly, I adjusted each of the historical risk premiums to reflect the fact that interest rates are now higher than those corresponding to the average allowed ROEs. As shown on Exhibit AMM-16, adjusting historical average allowed ROEs to reflect current capital market conditions results in an implied cost of equity in the 9.79% to 10.45% range. Thus, a consistent comparison with allowed ROEs shows that the 9.4% implied by the Settlement is understated. This provides further confirmation that the 8.75% ROE recommended by Mr. Garrett is insufficient and unreasonable.

Q. Do the most recent ROE findings of the Commission for Avista also demonstrate that Mr. Garrett's 8.75% recommendation is far too low?

A. Yes. In an order issued on September 27, 2021, the Commission determined that "a reasonable range of returns exists between 9.0 and 9.8 percent as demonstrated by the evidence in this case." Explicit consideration of bond yield increases since the pendency of Avista's last rate proceeding further highlights the inadequacy of the 8.75% ROE recommended by Mr. Garrett. In Exhibit AMM-17, I compute the implied equity risk premium associated with the most recent ROE range approved by the Commission for Avista, as measured against the yields on Baa-rated public utility bonds. As shown there, after accounting for the inverse relationship between equity risk premiums and interest rates, adjusting the range

²⁸ Exh. AMM-1T at 53-55.

²⁹ Dockets UE-200900, UG-200901, Final Order 08 / 05 (Sep. 27, 2021) at P 102.

determined in Avista's last rate proceeding results in an implied ROE under current capital market conditions in the range of 10.05% to 10.85%. This provides additional confirmation that the 9.4% ROE implied by the provisions of the Settlement is understated.

Q. What other benchmark indicates that Mr. Garrett's recommended ROE is too low?

A. Expected earned rates of return for other utilities provide another useful benchmark of reasonableness. The expected earnings approach is predicated on the comparable earnings test, which developed as a direct result of the Supreme Court decisions in *Bluefield*³⁰ and *Hope*.³¹ This test recognizes that investors compare the allowed ROE with returns available from other alternatives of comparable risk.

Importantly, the expected earnings approach explicitly recognizes that regulators do not set the returns that investors earn in the capital markets. Regulators can only establish the allowed return on the value of a utility's investment, as reflected on its accounting records. As a result, the expected earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk will earn on invested capital. This opportunity cost test does not require theoretical models to indirectly infer investors' perceptions from stock prices or other market data. As long as the proxy companies are similar in risk, their expected earned returns on invested capital provide a direct benchmark for investors' opportunity costs that is independent of fluctuating stock prices, MTB ratios, debates over growth rates, or the limitations inherent in any theoretical model of investor behavior.

³⁰ Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n, 262 U.S. 679 (1923), ("Bluefield").

³¹ Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944), ("Hope").

Q.	Has the	expected	earnings	approach	been	recognized	as	a	valid	ROE
benchmark?										

A. Yes. This method predominated before the DCF model became fashionable with academic experts, and it has long been referenced and relied on in regulatory proceedings.³² For example, in approving an ROE for electric utility operations, the North Carolina Utilities Commission recently concluded that:

In prior cases, the Commission has given significant weight to the results of the Expected Earnings methodology, which stands separate and apart from the market-based methodologies (e.g., the DCF or CAPM) also used by ROE experts. The Commission chooses to do so again in this case.³³

Similarly, the Ohio Public Utility Commission is required by statute to consider prospective earned rates of return in evaluating the impact of electric security plans.³⁴

As S&P observed, "[h]istorically, there have been two approaches in calculating ROE in regulatory proceedings, a comparable earnings approach and a market analysis. In a comparable earnings approach, similar investments with similar risks are analyzed to determine an appropriate ROE." A textbook prepared for the Society of Utility and Regulatory Financial Analysts points out that the comparable earnings method is firmly anchored in the regulatory tradition of the *Bluefield* and *Hope* cases, as well as sound regulatory economics.³⁵ Similarly, *New Regulatory Finance* concludes that, "because the investment base for

³² See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs, *Utility Regulatory Policy in the U.S. and Canada*, 1995-1996 (Dec. 1996). The Virginia State Corporation Commission is required by statute to consider the earned returns on book value, which establish lower and upper boundaries for the allowed ROE. Virginia Code § 56-585.1.A.2.a.

³³ North Carolina Utilities Commission, Docket No. E-7, SUB 1187, et al., Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Customer Notice (Mar. 31, 2021) at 94.

³⁴ Ohio R.C. 4928.143(E).

³⁵ *Id*.

ratemaking purposes is expressed in book value terms, a rate of return on book value, as is the case with Comparable Earnings, is highly meaningful."³⁶

Q. What ROEs are implied by the expected earnings approach for the proxy group of utilities referenced by AG Witness Garrett?

A. As shown on Exhibit AMM-18, reference to the expected earnings approach implies an annual average cost of equity of 10.7% for the utilities in Mr. Garrett's proxy group. This book return estimate is an "apples to apples" comparison to Mr. Garrett's 8.75% ROE recommendation.

Q. Mr. Garrett claims that his cost of equity estimate incorporates current market conditions.³⁷ Do you agree?

A. No. Mr. Garrett's claim to have captured current market conditions—including the impact of accelerating inflation—rests solely on his observation that he "incorporated recent Treasury bond yields" when applying the CAPM.³⁸ But as I document later in my rebuttal testimony, Mr. Garrett's application of the CAPM is otherwise irreparably flawed. The simple fact that he relied on recent Treasury bond yields for the risk-free rate in the CAPM does nothing to remediate these defects. In addition, Mr. Garrett fails to apply the risk premium approach, as I do in my direct testimony,³⁹ which expressly considers prevailing bond yields for utilities. Mr. Garrett's ROE findings and his ultimate recommendation fall far below the benchmark established by average historical authorized ROEs for electric utilities. This

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³⁶ Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 395.

³⁷ Garrett Direct at 55-56.

³⁸ Id. at 55

³⁹ Exh. AMM-3 at 26-31. Updating the risk premium analysis presented on page 1 of Exh. AMM-11 using average bond yields for July 2022 produces an implied cost of equity of 10.32%.

shortfall is even more glaring when recent increases in utility bond yields are considered, which demonstrates the disconnect between Mr. Garrett's ROE recommendation and the requirements of investors in current capital markets.

Q. What is your conclusion regarding the 8.75% ROE recommendation of Mr.

Garrett?

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A. The 8.75% recommendation of Mr. Garrett is unreasonably low and should be rejected. This conclusion is reinforced by the significant increase in long-term capital costs that has occurred in recent months, and when considering projections for even higher—and sustained—interest rates over the 2023-2024 period covered by Avista's rate plan.

II. RESPONSE TO AG WITNESS GARRETT'S ANALYSES

Q. How does Mr. Garrett arrive at his 8.75% recommended ROE for Avista?

A. That is not entirely clear. In his testimony, Mr. Garrett provides DCF and CAPM analyses that support a cost of equity estimate of 7.9%. He also refers to this value as the "market-based cost of equity" for the Company. However, this is not his final recommendation. Without any additional analysis, he concludes: "I recommend the Commission award Avista an authorized ROE of 8.75 percent," noting that "8.75 percent is still clearly 15 above Avista's market-based cost of equity estimate." Mr. Garrett appears to pick an 8.75% ROE with no objective support for that number, but merely as a subjective appeal to the principle of "gradualism". He explains:

Although an authorized ROE of 8.75 percent clearly exceeds any reasonable estimate of Avista's market-based cost of equity, I believe it

⁴⁰ Garrett Direct at 56.

⁴¹ *Id*. at 9.

⁴² *Id.* at 3.

⁴³ *Id*. at 7.

is reasonable under the circumstances because it reflects a gradual, yet
meaningful move towards fairness and equity by reducing the excess
wealth transfer from customers to shareholders that otherwise occurs
when the authorized ROE grossly exceeds actual market-based equity
costs. ⁴⁴

Q. Does Mr. Garrett present schedules, tables or supporting calculations of any kind to document his conclusion that 8.75% is a reasonable ROE for Avista?

A. No. Mr. Garrett's only support is a general reference to the concept of "gradualism," which has customarily been referenced in rate design where a movement to cost-based rates may engender rate shock. Mr. Garrett provides no logical path to connect the analysis that he presents in support of the "market-based" cost of equity of 7.9% and his 8.75% proposal. Moreover, considering that Mr. Garrett's 8.75% ROE recommendation falls well below recent authorized ROEs for electric utilities his adjustment for "gradualism" does little to provide a reasonable ROE recommendation, or to address the Company's ongoing need to maintain its financial integrity and attract capital.

Q. What are your comments concerning Mr. Garrett's 7.9% estimate of the "market-based" cost of equity?

A. This result is not credible and should be dismissed out of hand. An authorized ROE of 7.9% for the Company would be extreme, unprecedented, and punitive. This recommendation is approximately 150 basis points below the average allowed ROE for other electric utilities in the first half 2022. Such an outcome would threaten the financial integrity of the Company and its ability to attract capital under reasonable terms, conditions that would violate the *Hope* and *Bluefield* regulatory standards.

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⁴⁴ *Id*. at 56.

Furthermore, Mr. Garrett's insinuation that he has determined the "actual" market cost
of equity, whereas regulatory commissions across the country have failed in their
responsibilities, is patently false. Unlike the cost of debt, which is specified and contractually
enforceable, there is no stated or precisely known cost of equity. It is predicated on investor
expectations that are unobservable and impossible to know with certainty. For this reason,
regulatory proceedings, including this one, typically include testimony from multiple witnesses
and an extensive evidentiary record on the subject of a fair and reasonable ROE. What Mr.
Garrett has determined is nothing more than <u>his opinion</u> of the "actual" market cost of equity.
For him to argue otherwise is presumptuous at best, and misleading and seriously mistaken at
worst.
Mr. Garrett recognizes the fact that there is no observable cost of common equity. In
his responsive testimony, Mr. Garrett acknowledges:
Determining the cost of debt is relatively straightforward. Interest payments on bonds are contractual, embedded costs that are generally calculated by dividing total interest payments by the book value of outstanding debt. Determining the cost of equity, on the other hand, is more complex. Unlike the known contractual, and embedded cost of debt, there is no explicit "cost" of equity. Instead, the cost of equity must be estimated through various
financial models. ⁴⁵
financial models. ⁴⁵ These statements highlight the hubris of Mr. Garrett's claim to have pinpointed the "actual"

⁴⁵ *Id.* at 4.

Q.	Mr. Garrett	reaches	several	questionable	conclusions	based	on his	belie
that his estima	ate represents	s the "act	tual" cos	st of equity. A	re these conc	lusions	s reaso	nable?

A. No. The conclusions that Mr. Garrett reaches based on his mistaken claim to have estimated the "actual" market cost of equity are extreme and must be ignored. For instance, Mr. Garrett repeats the theme throughout his testimony that regulatory commissions consistently fail to properly set allowed returns; that is, for many years they have determined allowed returns that exceed the actual cost of equity. Given the guiding legal and statutory obligations, and the independence and professionalism shown by regulators, Mr. Garrett's suggestion is misguided. Again, Mr. Garrett has fallen into the trap of believing that his opinion of equity costs represents the "actual" cost, despite substantial and conclusive evidence to the contrary.

Mr. Garrett even presents a chart purporting to show the gap between allowed returns and the market cost of equity.⁴⁷ Mr. Garrett argues that such differences have resulted in an "excess wealth transfer from ratepayers to shareholders."⁴⁸ His conclusions are, once again, unfounded. First, the "Market Cost of Equity" that he displays on the chart is nothing more than the best guess of a professor at New York University. This methodology simply adds a risk-free rate to an implied equity risk premium to estimate the market required return. That this method is unreliable and distorted can easily be seen with a current calculation. On Professor Damodaran's website, he indicates a current implied market risk premium of 5.26%.⁴⁹ Combining this with Mr. Garrett's 30-day average yield on 30-year Treasury bonds

⁴⁶ *Id.* at 12-17.

⁴⁷ *Id.* at Figure 3.

⁴⁸ *Id.* at 15.

⁴⁹ http://people.stern.nyu.edu/adamodar/.

(the risk-free rate) of 3.21% implies a required market return of 8.47% (5.26% plus 3.21%). This return on the "market" is below any ROE authorized for an electric utility in recent history, despite the fact that regulated utilities are widely considered to be less risky than the market as a whole. This result defies risk/return theory and points to the dubiousness of the data relied on by Mr. Garrett. This source certainly provides no basis to call into question

the decisions of every state regulatory commission over the past 30 years.

Q. Mr. Garrett dismisses firm-specific risk factors in the ROE estimation process, stating that, "Market risk is the only type of risk that is rewarded by the market and is thus the primary type of risk the Commission should consider when determining the allowed return." Do you agree?

A. Absolutely not. Mr. Garrett discussed two primary types of risk that affect equity investors: firm-specific risk and market risk.⁵³ He defines firm-specific risk as those factors that affect individual companies, rather than the entire market. He lists financial risks (due to differences in debt and equity levels) and business risks (all other operating and managerial factors that may result in investors realizing more or less than their expected return in that particular company) as examples of firm-specific risk. He describes market risk as those factors that affect all firms in the market to some extent, such as interest rate risk, inflation risk, the risk of major socio-economic events. I do not disagree with Mr. Garrett's risk definitions.

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⁵⁰ Exh. DJG-12.

⁵¹ Reliance on data from Damodaran has been previously rejected by FERC. In Docket No. EL14-86, the Presiding Judge concluded that a study including data from Damodaran "presented a flawed application . . . using a methodology the Commission has already rejected." *Initial Decision*, 154 FERC ¶ 63,024 at P 730 (2016).

⁵² Garrett Direct at 25.

⁵³ *Id.* at 21-27.

Mr. Garrett goes on to say that investors can eliminate firm-specific risk through
diversification, and for this reason, it is not part of their investment decision. Since market
risk cannot be eliminated through diversification, it is the only type of risk that bears on the
investment decision. Based on these assumptions, Mr. Garrett maintains that market risk is
the primary type of risk the Commission should consider in setting the allowed return.

The problem with Mr. Garrett's risk discussion is that he is mixing apples (portfolio theory) and oranges (the regulatory process). The goal of the regulatory process is not to build a diversified portfolio, it is to estimate the ROE of a specific firm. To set a firm-specific ROE, firm-specific risks must be considered. The landmark *Bluefield* case cited by Mr. Garrett as setting forth the standards by which public utilities are allowed to earn a return on capital investments states it clearly:

> By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.⁵⁴

Consider a utility with a service area that is highly concentrated and geographically isolated. This utility faces the potential for uncertain and extreme weather, including exposure to avalanches. It has one hydro-based generating facility and relies on a single transmission path. It lacks a broad suite of regulatory recovery mechanisms and due to its reduced economies of scale, it faces greater exposure to cash flow pressures associated with unforeseen events, including the loss of key customers or changes in regulations. Under Mr. Garrett's approach, these firm-specific risks would not be considered in the ROE estimation process. In reality, the described risks conform closely to those faced by Alaska Electric Light and Power Co. ("AEL&P") and its firm-specific risks are explicitly considered by the Regulatory

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⁵⁴ *Id*. at 12.

Commission of Alaska ("RCA") in setting its allowed equity return. In fact, the RCA typically considers the implications of firm-specific risks in setting its ROE.⁵⁵ Mr. Garrett's risk philosophies are misapplied in this case and should be rejected.

Q. Would you consider the issues you have just discussed to constitute fatal flaws in Mr. Garrett's approach?

A. Yes. These fundamental misconceptions underlying Mr. Garrett's ROE evaluation render it virtually meaningless. His final ROE recommendation of 8.75% is not supported by analysis or documentation; his base ROE determination of 7.9% is extreme, unprecedented, and so far out of the mainstream that it would cause serious harm to the financial integrity and ability of the Company to attract capital under reasonable terms; and, his position that firm-specific risks do not matter in the regulatory process is irrational. Taken together, these flaws undermine any ability to rely on Mr. Garrett's findings and recommendations.

A. <u>Discounted Cash Flow Model</u>

Q. Are there technical flaws in Mr. Garrett's DCF analysis?

A. Yes. As discussed previously, there is no direct connection between his DCF analysis and his ultimate ROE recommendation of 8.75% in this case. In fact, his cost of equity summary indicates a DCF cost of equity of only 7.5%.⁵⁶ While this disconnect between model results and his recommendation is the biggest flaw in his DCF approach, I have identified other technical faults in his application of the DCF model.

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⁵⁵ In AEL&P's last litigated case concerning ROE, the RCA approved an ROE of 12.875%. U-10-29, Order No. 15 (Sep. 2, 2011) at p. 37.

⁵⁶ Garrett Direct, Figure 12, at 56.

Q. W	hat faults	do you	find with	his gr	owth term?
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A. Mr. Garrett relies exclusively on generic estimates of growth in GDP for his
growth term. This is inconsistent with constant growth DCF theory. In Mr. Garrett's approach,
he assumes that growth for companies in the proxy group will not continue at their current
rates but will immediately converge to the long-term forecast for GDP. There are several
reasons why GDP growth is not relevant in applying the single stage DCF model:

- Practical application of the DCF model does not require a long-term growth estimate over a horizon of 25 years and beyond—it requires a growth estimate that matches investors' expectations.
- Evidence supports the conclusion that investors do not reference longterm GDP growth in evaluating expectations for individual common stocks, including those in the electric utility industry.
- The theoretical proposition that growth rates for all firms immediately converge to overall growth in the economy over the very long horizon does not guide investors' views, and growth rates for electric utilities can and do exceed GDP growth.

In short, there is no demonstrable evidence that investors look to GDP growth rates in the far distant future in assessing their expectations for common stocks. And while the theoretical assumptions underlying this method contemplate an infinite stream of cash flows, this is simply at odds with the practical circumstances in which real-world investors operate. Mr. Garrett's single stage DCF analysis is not valid and the results of this approach should be given no weight.

Q. The DCF model is based on the assumption of an infinite stream of cash flows. Why wouldn't Mr. Garrett's reference to GDP growth make sense?

A. This view confuses the theory underlying the DCF model with the practicalities of its application in the real world. Analytical approaches such as the DCF model are inherently abstractions of reality. The underlying theory requires any number of assumptions,

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many of which differ considerably from the situation that confronts actual investors in the
capital markets. For example, apart from a constant growth rate into perpetuity, the theory
underlying the DCF model also requires that dividends, earnings, and stock prices grow at
exactly the same rate forever.

Such strict assumptions are never met in practice. While this notion of long-term growth should presumably relate to the specific firm at issue, or at the very least to a particular industry, there are no long-term growth projections available for the companies in Mr. Garrett's proxy group or for the electric utility industry as a whole. Rather than applying the DCF model in a way that is consistent with the information that is available to investors and how they use it, the use of GDP growth seeks to mold investor behavior around the theoretical assumptions of a financial model. The only relevant growth rate is the growth rate used by investors. Investors do not have clarity to see far into the future, and there is little to no evidence to suggest that investors share the view that growth in GDP must be considered a limit on earnings growth over the long-term.

Q. Are long-term GDP growth rates commonly referenced as a direct guide to future expectations for specific firms?

A. No. Certainly, investors consider broad secular trends in economic activity as one foundation for their expectations for a particular industry or firm. But the idea that investment advisory services view GDP growth as a direct guide to long-term expectations for a particular firm—much less every firm in an entire industry—is not borne out by evidence.

In contrast to this notion, in the financial media one observes many references to three-to-five year EPS growth forecasts for individual companies and very few references to long-term GDP forecasts. Long-term GDP growth rates are simply not discussed within the context Rebuttal Testimony of Adrien M. McKenzie

of establishing investors' expectations for individual firms. For example, Value Line reports
are routinely relied on as an important guide to apply the DCF model to utilities. ⁵⁷ But despite
Mr. Garrett's suggestion that GDP has a fundamental role in shaping investors' growth
estimates, Value Line does not even mention trends in GDP in its evaluation of the firms in the
electric utility industry. Value Line's purpose is to inform investors of the pertinent factors
that could affect future expectations specific to each of the common stocks it covers. If the
long-term trajectory of GDP growth had direct relevance in investors' evaluation of utility
common stocks, Value Line or other securities analysts would highlight this in their analyses.

Q. How much confidence would investors be likely to place on long-term GDP projections?

A. Very little. Investors understand the complexities and inherent inaccuracies involved in forecasting, and that such uncertainties are significantly compounded for a long-term time horizon. Consider the example of IHS Markit, which is perhaps the world's foremost econometric forecasting service. IHS Market currently publishes GDP projections for the U.S. economy for the next thirty years, but for other important economic variables (*e.g.*, bond yields) their forecast simply holds projected values constant after a five-year horizon.

Q. Are there academic studies that recognize the shortcomings of adopting a generic long-term growth rate, such as GDP growth?

A. Yes. Professor Myron J. Gordon, who pioneered the application of the constant growth DCF approach, concluded that reference to a generic long-term growth rate, such as

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⁵⁷ As noted in *New Regulatory Finance*, "Value Line is the largest and most widely circulated independent investment advisory service, and influences the expectations of a large number of institutional and individual investors." Roger A. Morin, "New Regulatory Finance," *Public Utilities Reports, Inc.* (2006) at 71.

Mr. Garrett advocates, was unsupported. ⁵⁸ More specifically, Dr. Gordon concluded that any
assumption of a single time horizon for a transition to a generic long-term growth rate was
highly questionable and failed to reduce error in DCF estimates. Instead, Dr. Gordon
specifically recognized that, "it is the growth that investors expect that should be used" in
applying the DCF model, and he concluded: "A number of considerations suggest that
investors may, in fact, use earnings growth as a measure of expected future growth."59

Similarly, a subsequent paper co-authored by Professor Gordon concluded that:

Analysts do not predict earnings beyond five years, which suggests that any consensus of opinion among investors probably deteriorates quickly after five years.⁶⁰

Dr. Gordon further concluded that "the consensus among investors is that the future has a finite horizon of approximately seven years." In other words, reference to long-term forecasts of GDP growth in applying the DCF model is inconsistent with investor behavior.

Q. Is there evidence that a long-term GDP growth rate understates investors' expectations for electric utilities?

A. Yes. Value Line reports that of the 31 companies included in its electric utility industry group with earnings growth over the last 10 years, 19 of them had earnings growth that exceeded Mr. Garrett's 3.8% GDP growth rate.⁶² These values indicate that firms can and do achieve long-term growth far higher than the GDP growth rate used by Mr. Garrett.

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⁵⁸ Myron J. Gordon, *The Cost of Capital to a Public Utility*, MSU Public Utilities Studies (1974) at 100-01. ⁵⁹ *Id.* at 89.

⁶⁰ Joseph R. Gordon and Myron T. Gordon, *The Finite Horizon Expected Return Model*, Financial Analysts Journal (May-Jun. 1997) at 52-61.

⁶¹ *Id*.

⁶² www.valueline.com (retrieved Aug. 4, 2022). Garrett Direct at 43.

1	Q. Do expectations for the utility industry support an immediate reversion to
2	GDP growth?
3	A. No. Growth rates for electric utilities are not expected to collapse immediately
4	into long term growth. At least in part, growth in the electric utility industry is created by
5	additional infrastructure investment. Contrary to the assumption that growth trends will
6	somehow mirror GDP, investors recognize that the electric utility industry has entered a cycle
7	of significant capital spending on utility infrastructure.
8	Q. What underlying fundamentals support investors' conclusion that electric
9	utilities are embarking on a period of growth that will outpace the economy as a whole?
10	A. The need for additional infrastructure investment in the utility industry is being
11	driven in large part by fundamental changes in generation mix and mandated transitions to
12	renewable resources, with FERC noting that "These shifts create a need for more transmission
13	infrastructure to bring generation to load."63 Consistent with these observations, the Edison
14	Electric Institute has stated that its members commit more than \$120 billion annually to electric
15	utility infrastructure investment. ⁶⁴
16	Similarly, the investment community also understands that utilities are facing the
17	prospect of a long-term commitment to infrastructure investment. For example, RRA
18	concluded that:
19 20 21 22	Projected 2022 capital expenditures for the 47 energy utilities included in the Regulatory Research Associates universe currently exceeds \$154.2 billion, well above the \$131.8 billion of actual investment spent in 2021 by the same companies Multiple drivers are expected to impel elevated

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 $^{^{63}}$ Electric Transmission Incentives Policy Under Section 219 of the Federal Power Act, Notice of Proposed Rulemaking, 170 FERC \P 61,204, at P 27 (2020).

⁶⁴ Edison Electric Institute, Issues & Policy: *Finance & Tax*, https://www.eei.org/issuesandpolicy/Pages/FinanceAndTax.aspx (last visited Mar. 23, 2022).

1 2 3 4 5 6	spending over the next several years. Pent-up demand to replace and modernize aging infrastructure, renewable portfolio standards of multiple states — that include large expansions in low-carbon energy generation capacity — continue to ramp up. Also, federal infrastructure investment plans that are intended to steer conversion of the nation's power generation network to zero-carbon sources by 2035 will come to fruition. ⁶⁵
7	The report further concluded that, "These considerable levels of spending are expected
8	to serve as the basis for solid profit expansion in the sector for the foreseeable future."66
9	S&P confirmed this trend, observing that "capital expenditures are increasing across
10	the sector and are now at or near record highs in a multiyear trend that reflects the proactive
11	deployment of capital to modernize and improve utility generation and network assets."67 S&P
12	documented a 9.5% compound annual growth in utility investment since 2003, as reflected in

the chart reproduced in the figure below.

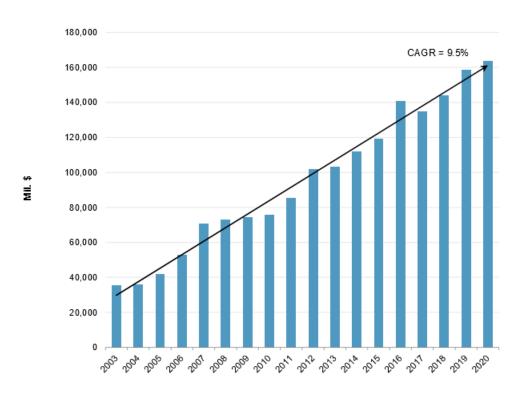
⁶⁵ S&P Global Market Intelligence, *RRA Financial Focus – Utility Capital Expenditures Update* (Apr. 11, 2022).

⁶⁶ *Id.* (emphasis added).

⁶⁷ S&P Global Ratings, *Keeping The Lights On: U.S. Utilities' Exposure To Physical Climate Risks*, RatingsDirect (Sep. 16, 2021).

FIGURE AMM R-5

North America Regulated Utility - Electric, Gas, And Water Capital Spending



Source: S&P Global Ratings.

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Q. Can you further illustrate how Mr. Garrett's reliance on long run GDP growth is inconsistent with constant growth DCF theory?

A. Investors do not consider long-term growth in GDP to be a limiting factor in their ROE estimation process, and so it is wholly inappropriate to use long run growth as the growth rate input in the single stage DCF model. The growth rate in the single stage DCF model should be a proxy for investors' expectations of the growth potential for each firm in a DCF analysis. Nowhere does Mr. Garrett consider analysts' estimates for growth, like I do. He effectively assumes that utility growth will be limited to 3.8% (his GDP growth rate) for every company in the proxy group from now into perpetuity. This is clearly a nonsensical assumption. A cursory review of individual company growth rate estimates from page 2 of my

Exhibit AMM-7 shows that securities analysts expect growth rates well in excess of 3.89	% for
most of the utilities in the proxy group. Mr. Garrett ignores this evidence.	

Mr. Garrett displays his range of GDP growth estimates in Figure 9 and on Exhibit DJG-6. Beyond the 3.8% estimate of nominal GDP growth from the CBO, he also references growth rates based on real GDP growth and the risk-free rate. His 1.8% real GDP growth rate, along with his 3.8% nominal GDP growth rate, implies a 2.0% long term inflation rate. I have already presented substantial evidence that capital markets are expecting inflation rates in the short and intermediate terms that are significantly higher than 2.0%. Beyond that, there is no logical link between investors' long-term growth expectations for common stocks and the current risk-free, Treasury bond yield of 3.2% that Mr. Garrett presents. Combining growth rates based on his real GDP rate of 1.8% or his risk-free rate of 3.2% with the average dividend yield for my proxy group of 3.7% yields DCF outcomes in the range of 5.5% to 6.9%. Such results are clearly unreasonable and provide further proof that the key predicate of his DCF growth rate analysis is flawed beyond repair.

With his devotion to GDP growth, Mr. Garrett misses the forest for the trees. While the theoretical DCF model may be based on the assumption of a constant growth rate into infinity, this is not what investors consider. They surely don't consider CBO's forecast of GDP growth out to 2051 as Mr. Garrett implies. And they likely would be unwilling to take on equity risks in exchange for a DCF return where growth is equal only to expected inflation. By not considering realistic investor expectations, but rather attempting to mechanically adhere to a warped view of academic theory, the end-result of his DCF analysis is not reasonable. Mr. Garrett confuses his views of growth with what investors expect which, of course, is what really matters.

Q.	Is Mr. Garrett's sole dependence on GDP growth rates consistent with his
own descripti	ion of the electric utility industry?

No. Mr. Garrett distinguishes between utilities and "high-growth" firms, noting A. that, "For mature, low-growth firms such as utilities . . . estimating the terminal growth rate is more transparent."68 In other words, unlike firms in the early stage of the corporate lifecycle, utilities are stable, established enterprises and "are already in their 'terminal,' low growth stage."⁶⁹ As a result, there is no basis to assume any transition in investors' growth expectations and near-term growth rates—such as the securities analysts' growth rates considered in my DCF application—provide a reasonable basis to apply the DCF model.

Q. What other information indicates that the long-term GDP forecast referenced by Mr. Garrett is unlikely to equate with investors' growth expectations for common stocks?

Mr. Garrett bases his DCF growth rate for every electric utility on the long-term GDP projections of the CBO. But the purpose of the CBO is not to serve as a resource for investors and its published projections are not likely to represent a realistic proxy for investors' expectations. Rather, the CBO's role is to conduct independent analyses of budgetary and economic issues to support the Congressional budget process and its mission is to help Congress make effective budget and economic policy. In performing these specific duties, the CBO's projections are based on the assumptions that current laws governing taxes and spending will generally remain unchanged.

As the CBO makes clear, "Because current laws surely will change, CBO's projections

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⁶⁹ *Id.* at 34.

⁶⁸ Garrett Direct at 31.

are not predictions of what the agency thinks will actually happen." While ignoring expected
changes in fiscal policies may provide a useful baseline for legislators, this assumption is
divorced from the realities faced by the investment community in assessing future
expectations. The CBO has concluded as much, noting, "CBO's projections differ from those
of the other forecasters at least partly because they are based on current law, whereas the other
forecasters are probably assuming that changes in law will take place."71

Q. Apart from his failure to consider investor expectations, what is wrong with over reliance on very long-term forecasts of GDP from forecasting services such as the CBO?

A. The CBO indicates that its projections are "highly sensitive to changes in factors underlying them," and that they "are very uncertain." The CBO recognized that the pandemic has exacerbated this uncertainty for the forecast data relied on by Mr. Garrett:

Demographic and economic projections over 30 years are subject to high degrees of uncertainty because small changes in some factors, compounding over many years, can greatly affect projected budgetary outcomes decades in the future. Furthermore, the pandemic's potential effects on long-term trends are unknown, so the projections in this report are subject to an unusually high degree of uncertainty.⁷⁴

Forecasts are inherently uncertain and the longer the forecast horizon the greater the doubt as to the meaningfulness of the data. Mr. Garrett presents no evidence to support the notion that investors anticipate growth for utilities will be equal to that of the overall economy,

⁷⁰ Congressional Budget Office, *The 2017 Long-Term Budget Outlook* (March 2017) at iv, https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52480-ltbo.pdf.

⁷¹ Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2017 to 2027* (June 2017) at 12, https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52801-june2017outlook.pdf.

⁷² Congressional Budget Office, *The 2019 Long-Term Budget Outlook*, (June 2019) at b.

⁷³ *Id.* at 8.

⁷⁴ Congressional Budget Office, *The 2021 Long-Term Budget Outlook*, (March 2021) at 28.

1	but in any event, reliance on highly uncertain estimates as to the state of the U.S. economy in
2	2051 must be discounted accordingly. ⁷⁵

Q. Mr. Garrett references a "circular reference problem" in his growth rate discussion.⁷⁶ Is this a valid concern?

A. No. In essence, Mr. Garrett says that if a regulator awards a higher ROE than the market requires, this could lead to higher growth rate estimates from analysts. If those same estimates are used in the DCF model in the next case, it could lead to a higher awarded ROE; and the cycle continues. This argument rests on the same faulty premise as discussed earlier; namely, that regulators consistently set the ROE higher than the market requires. Mr. Garrett is implying that regulators are either intentionally biased in favor of investors or lacking sufficient knowledge to properly exercise their statutory authority, and that they are somehow artificially inflating allowed rates of return.

In my view, this assertion reflects a fundamental mischaracterization of the regulatory process, which involves detailed consideration of extensive record evidence to establish an ROE based on market expectations. There is no reason to believe that regulatory commissions operate in any other manner and Mr. Garrett's circular reference concerns are unwarranted.

⁷⁵ For example, as I noted earlier in my rebuttal testimony CPI inflation is now running over 9%. To the extent that long-term inflation expectations rise accordingly, Mr. Garrett's assumption of a 3.8% nominal growth rate could actually imply *negative* real growth. This further highlights the tenuous nature of his unsupported growth rate assumption.

⁷⁶ Garrett Direct at 42.

B. <u>Capital Asset Pricing Model</u>

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Q. What is wrong with Mr. Garrett's application of the CAPM?

A. Like with the DCF model, Mr. Garrett fails to critically test the end-result of his application of a theoretical model. At 8.3%, his CAPM result is below any practical measure of the Company's cost of equity.

Q. Have you identified other problems with his CAPM analysis?

A. Yes. Mr. Garrett ultimately relies on a selected survey from the IESE Business School, a number cited in a Duff & Phelps report, a number selected from a finance professor, as well as his own calculation for the market risk premium he used to apply the CAPM.⁷⁷

Q. Are there any shortcomings with the IESE source that Mr. Garrett relies on?

A. Yes. The 5.6% market risk premium from the *IESE Business School Survey* is the result of a mass solicitation to more than 15,000 email addresses, out of which approximately 1,600 responses were received.⁷⁸ While many of the responses were undoubtedly from informed professionals, there is no ability to verify the experience or familiarity of the respondents with the subject matter. In addition, the wording of the surveys is imprecise and open to interpretation. For example, the 2022 survey simply asks, "The Market Risk Premium that I am using in 2022 for USA is ________%,"⁷⁹ which is entirely unclear. The respondent has no idea whether he or she is being queried for a risk premium during 2022

⁷⁷ Garrett Direct at Figure 10 and Exh. DJG-11 (citing 5.6% CAPM equity risk premium from IESE Business School Survey, 5.5% CAPM equity risk premium from Duff & Phelps Report, 5.6% from Aswath Damodaran, and 5.8% from his own calculation).

⁷⁸ Pablo Fernandez, Teresa G. de Santos, and Pablo F. Acin, *Survey: Market Risk Premium and Risk-Free Rate used for 95 Countries in 2022* (Jun. 1, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3803990. The paper was purportedly based on 1,624 email responses.

⁷⁹ *Id.*

or over some other time period; nor is the basis on which the risk premium is calculated eve
specified. ⁸⁰

Q. Please address the reference to a risk premium from Duff & Phelps cited in Mr. Garrett's testimony.⁸¹

A. The Duff & Phelps publication relied on by Mr. Garrett does not provide any specific guidance as to the basis of this statistic, but prior reports have noted that it is based on a review of "academic studies and financial literature and various empirical studies." Aside from the fact that is does not appear to be based strictly on forward-looking data, the 8.21% market return supported by this report is lower than Mr. Garrett's ROE recommendation for a regulated utility. Like the other sources cited by Mr. Garrett, this makes no economic sense because it presumes a lower required return for a higher risk investment.

The fundamental problem with Mr. Garrett's approach is that it does not look directly at an equity risk premium based on current expectations—which is what is required in order to properly apply the CAPM and is the approach I took. While there are many potential definitions of the equity risk premium, the only relevant issue for application of the risk premium and CAPM methods in a regulatory context is what return investors currently expect

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⁸⁰ One respondent to a previous *Fernandez* survey characterized the imprecision and ambiguity this way: "You don't define exactly what you mean by "Market Risk Premium". Different authorities define it in different ways. Is it expected return over short-term government securities (*e.g.*, 30 or 90 day T-Bills), or longer-term government bonds?" Pablo Fernandez, Alberto Ortiz Pizarro, and Isabela F. Acin, "Market Risk Premium Used in 71 Countries in 2016: A Survey with 6,932 Answers," (May 2016)

 $https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2776636_code12696.pdf? abstractid=2776636\& mirid=1\&type=2.$

⁸¹ Garrett Direct at Figure 10.

⁸² Duff & Phelps, *Duff & Phelps Decreases U.S. Equity Risk Premium Recommendation to 5.0%, Effective February 28, 2013*, Client Alert (Mar. 20, 2013).

⁸³ Combining a 5% market equity risk premium with Mr. Garrett's risk-free rate of 3.21% (Garrett Direct at 46) implies a cost of equity for the market as a whole of 8.21%.

to	earn	on	money	invested	today.	In	contrast	to	Mr.	Garrett,	my	approach	represents	a
str	aight	forv	vard and	direct ap	proach t	o ai	nswer thi	s ve	ery q	uestion.				

Q. Mr. Garrett also relies on a statistic derived by Dr. Aswath Damodaran. Are there any shortcomings with this number?

A. Yes. The approach used to derive a market risk premium from the Damodaran source cited by Mr. Garrett forces the growth rate for all competitive firms to a constant long-term rate after five years. In addition, Damodaran inexplicably assumes that this long term rate of growth will equal the current yield on U.S. Treasury bonds, or 3.02% in the rendition cited by Mr. Garrett.⁸⁴ This is significantly below the 3.8% GDP growth rate cited by Mr. Garrett. There is no logical link between investors' long-term growth expectations for common stocks and the current Treasury bond yield, and I know of no credible source of investment guidance that is expecting growth for all companies in the economy to collapse to less than 4.0% over the next five years.

- Q. Mr. Garrett also purports to develop his own implied market risk premium using a derivation of the DCF model.⁸⁶ What is the primary difference between this analysis and the approach described in your direct testimony?
- A. The fundamental difference between my approach and that of Mr. Garrett is that, while my analysis looks to the future return expectations of investors in the capital markets, Mr. Garrett's CAPM under his "implied equity risk premium" methodology is based on historical data. As Mr. Garrett explained, the inputs to his calculations are based on data

⁸⁴ https://pages.stern.nyu.edu/~adamodar/.

⁸⁵ Exh. DJG-6.

⁸⁶ Garrett Direct at 51-53.

"for the S&P 500 over the past six years."87	In other words, the actual return on the market is
completely backward-looking.	

As a result, this methodology is inconsistent with the assumptions of the CAPM, which is predicated on the forward-looking expectations of investors. Mr. Garrett also recognize the frailties of such an approach, noting that, "What matters in the CAPM model, however, is not the actual risk premium from the past, but rather the current and forward-looking risk premium."

Q. Do the market risk premiums referenced by Mr. Garret make economic sense?

A. No. For example, Mr. Garrett's Figure 10 reveals his equity risk premium range of 5.5% to 5.8%. Combining a market equity risk premium of 5.5% from *Duff & Phelps* with Mr. Garrett's 3.21% risk-free rate results in an indicated cost of equity for the <u>market as a whole</u> of 8.71%, which is lower than his cost of equity recommendation of 8.75% for Avista in this case. It follows that a market rate of return that does not significantly exceed his own downward biased ROE recommendation of 8.75% emphatically proves the point that his CAPM results are unrealistically low and have no relation to the current expectations of real-world investors.

⁸⁷ *Id.* at 53.

⁸⁸ *Id.* at 49.

Q.	Are there other reputable sources that suggest much higher market rates
of return tha	n those selected by Mr. Garrett?

A. Yes. Morningstar, which is a widely recognized source of current investment information, reports a current dividend yield of 1.65% for the S&P 500, with an expected long-term EPS growth rate of 11.88%.⁸⁹ This implies an expected rate of return for the S&P 500 of 13.53%, versus the 13.3% used in my application of the CAPM.

Q. Are there other deficiencies associated with Mr. Garrett's CAPM analyses?

A. Yes. Mr. Garrett ignores the necessity to adjust for the implications of firm size in applying the CAPM. The result of this key deficiency is a CAPM estimate that is too low.

Q. Is the size adjustment necessary when applying the CAPM?

A. Yes. A size adjustment is necessary to account for the portion of the return to small stocks that is not accounted for by beta. As discussed in my direct testimony, empirical findings demonstrate that beta does not fully account for the higher returns of smaller companies and specific size adjustments have been quantified to adjust CAPM results to account for this size premium.⁹⁰

Q. Is the size adjustment incorporated in your analysis consistent with how FERC applies the CAPM?

A. Yes. FERC has observed that "[t]his type of size adjustment is a generally accepted approach to CAPM analyses," and includes the size adjustment in the CAPM under

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⁸⁹ Morningstar, *S&P 500 PR*, https://www.morningstar.com/indexes/spi/spx/portfolio (last visited Aug. 5, 2022).

⁹⁰ Exh. AMM-3 at 19-20.

⁹¹ Coakley v. Bangor-Hydro-Elec. Co., Opinion No. 531-B, 150 FERC ¶ 61,165 at P 117 (2015).

1	its ROE meth	odology for electric utilities and natural gas and oil pipelines. 92 More recently,
2	FERC affirme	ed its practice of including a size adjustment, concluding that "the size adjustment
3	is necessary t	o correct for the CAPM's inability to fully account for the impact of firm size
4	when determi	ning the cost of equity."93
5	Q.	What would be the impact of correcting Mr. Garrett's CAPM analyses to
6	incorporate t	the size adjustment?
7	A.	The average of the size adjustments corresponding to the companies included
8	in Mr. Garre	tt's proxy group is 0.49%. The AG's CAPM results should be increased
9	accordingly.	
10		III. <u>CAPITAL STRUCTURE</u>
11	Q.	What is Mr. Garrett's capital structure recommendation?
12	A.	Mr. Garrett recommends a hypothetical capital structure that employs a
13	common equi	ty ratio of 45.6%, which he says "is reflective of the average capital structure of
14	the proxy gro	up." ⁹⁴
15	Q.	Does Avista's requested capital structure distinguish the Company from
16	others in the	utility industry?
17	A.	No. As I noted in my direct testimony, ⁹⁵ the Company's requested common
18	equity ratio is	s well within the ranges of current and projected common equity ratios for the

 $^{^{92}}$ Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-A, 171 FERC \P 61,154 (2020); Policy Statement on Determining Return on Equity for Natural Gas and Oil Pipelines, 171 FERC \P 61,155 (2020).

⁹³ Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-B, 173 FERC ¶ 61,159 at P 100 (2020).

⁹⁴ Garrett Direct at 64.

⁹⁵ Exh. AMM 1T at 39-40.

- firms in my proxy group, which Mr. Garrett's adopted for purposes of his analyses. ⁹⁶ Avista's requested equity ratio is comparable to the average for the group of electric utility operating companies owned by the firms in my proxy group, with 24 of the 32 operating companies having equity ratios equal to or greater than the common equity ratio of 48.50% requested by Avista. ⁹⁷
 - Q. Is this conclusion confirmed by reference to recent findings in other regulatory proceedings?
 - A. Yes. The table below presents the common equity ratios approved for electric utilities over the past eight quarters, as reported by RRA Regulatory Focus:

TABLE AMM R-3
ELECTRIC UTILITY ALLOWED COMMON EQUITY RATIOS

	Low	High	Average
Q3-20	46.00%	56.83%	51.33%
Q4-20	48.00%	56.83%	51.50%
Q1-21	43.25%	52.07%	51.18%
Q2-21	49.21%	52.07%	51.08%
Q3-21	48.50%	52.50%	50.15%
Q4-21	48.51%	55.00%	51.52%
Q1-22	48.00%	55.69%	51.80%
Q2-22	44.54%	52.00%	50.04%
Average	47.00%	54.12%	51.08%

Source: S&P Global Market Intelligence, *Major Rate Case Decision*, RRA Regulatory Focus (Feb. 2, 2021, Feb. 10 & Jul. 27, 2022). Excludes capital structures that include cost-free items.

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⁹⁶ Garret Direct at 20.

⁹⁷ Exh. AMM-6, pages 2-3.

As demonstrated in table above, the 48.50% common equity ratio requested by Avista falls well within the range of capital structures approved for other electric utilities, and below the average of 51.08%.

Q. What is your response to Mr. Garrett's capital structure recommendation?

A. I do not agree with his adjustment to lower the common equity ratio. As discussed in my direct testimony, the common equity ratio requested by Avista is consistent with the Company's need to maintain its credit standing and financial flexibility, with the range of capitalizations for other operating utilities, and with the importance of an adequate equity layer to accommodate the pressures of funding significant capital investments.

The importance of a healthy equity layer is even more critical in the face of the much lower ROE recommendation from Mr. Garrett. If the Company is to maintain a balanced risk position, increased operating risk (in this case, reflected in the reduced ROE recommendation of Mr. Garrett) must be offset with decreased financial risk (reflected in a higher common equity ratio). In other words, the ROE cannot be set in a vacuum; the impact on the overall risk profile of the Company must be considered. It is simply not reasonable to compound the harmful effects of a lower ROE with a lower equity level.

- Q. Mr. Garrett argues for a reduction in the Company's equity ratio because it is higher than the average for the proxy group.⁹⁸ What is the fundamental flaw in this argument?
- A. Focusing exclusively on capital structure, and the relative risk associated with debt leverage, ignores the fact that this is only one facet of a company's overall investment

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⁹⁸ Garrett Direct at 64.

risk. The fair ROE is not evaluated in isolation; it is predicated on analyses for a group of comparable risk utilities, with the relative reliance on equity financing being only one factor considered in this overall assessment. As a result, there is simply no basis for Mr. Garrett's proposed adjustment based only on variations in equity ratios between individual utilities.

Q. Is capital structure already considered by the credit rating agencies in their evaluation?

A. Absolutely. The ratings assigned to a utility by the rating agencies encompass a comprehensive evaluation of the utility's overall business and financial risks. The evaluation of financial risk involves an examination of financial data concerning earnings protection, capital structure, cash flow adequacy, and financial flexibility. The degree of debt leverage implicit in a utility's capital structure is one aspect of credit analysis that ultimately determines assigned ratings; a utility's relative reliance on debt leverage is factored into the analysis of overall risks that results in an assigned rating. Credit ratings consider business risk and financial risk, and similar credit ratings provide a strong indicator of comparability of risk. As indicated in Table 1 of my Exhibit AMM-3, Avista's S&P and Moody's credit ratings are identical to or within one notch of the proxy group average.

Q. Mr. Garrett offers a comparison of debt ratios for other industries in support of his claim that Avista's requested capital structure contains too much common equity.⁹⁹ Is this comparison probative?

A. No. Once again, Mr. Garrett's singular focus on the debt ratio ignores key considerations that influence a firm's use of debt leverage and investors' overall risk

⁹⁹ *Id.* at 62-64.

perceptions, which are paramount. There are many considerations in the capital structure
decision. In general, the goal is to employ the mix of capital that minimizes the weighted
average cost of capital, while ensuring the financial integrity of the firm and continuous access
to capital, even during times of unfavorable market conditions.

Given the interplay between costs of debt and equity, the impact of taxes, bankruptcy costs, and the level of business risks (operating leverage), determining a firm's optimal capital structure is an imprecise exercise. In practice, capital structure decisions must be made by considering managements' judgment, numerical analysis, and investors' risk perceptions specific to each enterprise or industry. The fact that some industries may employ greater debt leverage than Avista while others use less is hardly surprising. As one recognized textbook in finance recognized, "As might be expected, wide variations in the use of financial leverage occur both across industries and among individual firms in each industry." For example, debt ratios in the financial services industry reflect the fact that banks borrow large amounts of money to facilitate loans, which has no relevant comparison to electric utilities. Moreover, Mr. Garrett's Figure 15 does not provide the Commission with a complete picture of debt ratios associated with other sectors of the economy. A review of his underlying data source reveals that 48% of the industries covered have average book value debt ratios that fall *below* the 51.50% requested by Avista in this case. 101

Finally, while book value has particular significance for regulated utilities, in the competitive world the focus is on market value capital structures. Indeed, regulated utilities

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¹⁰⁰ Eugene F. Brigham and Louis C. Gapenski, *Financial Management Theory and Practice*, Dryden Press, Ninth ed. (1999) at 647.

¹⁰¹ http://pages.stern.nyu.edu/~adamodar/New Home Page/datafile/dbtfund.htm.

1	have always been an exception to the general rule of financial theory and practice, in which
2	market values are the appropriate indicia of capital structure. To be able to raise capital,
3	competitive firms must pay returns that are competitive at the current market price of their
4	securities, not the embedded book value of the mix of stock and bonds. S&P highlighted the
5	problems associated with relying on book accounting data to assess financial leverage:
6 7 8 9	The popular total-debt-to-capital ratio has the inherent weakness of measuring a firm's "going concern" equity value based on historical accounting. Basing the denominator on a market measure, as the supplemental ratio does, helps to correct some of this distortion. 102
10	In Cost of Capital, Estimation and Applications, Shannon Pratt affirmed that market values are
11	the only correct basis for the cost of capital:
12 13 14	The critical point is that the relative weightings of debt and equity or other capital components are based on the market values of each component, not on the book values. ¹⁰³
15	Reference to Mr. Garrett's source indicates that on a market value basis, the debt ratios for the
16	represented industry groups averaged 31.3%, implying a common equity ratio of 68.7%. 104
17	Q. What other failings are associated with Mr. Garrett's comparative
18	analysis?
19	A. Mr. Garrett's simplistic comparison completely ignores the implications of
20	higher debt ratios on overall investment risk. Many of the firms included in the industry groups

¹⁰² Standard & Poor's, *CreditStats: Adjusted Key U.S. Industrial Financial Ratios*, RatingsDirect, p. 5 (Aug. 13, 2002).

¹⁰³ Shannon P. Pratt, *Cost of Capital, Estimation and Applications*, John Wiley & Sons, Inc. (1998) at 45 (emphasis in original).

Once adjusted for leases, the average debt ratio is 31.7%, or an implied market value common equity ratio of 68.3%.

surveyed by Mr. Garrett have credit ratings that fall well below investment grade. 105 There is
a fundamental disconnect between the equity layer that is required to support Avista's existing
credit standing and those that are associated with firms characterized by high-risk, speculative
grade debt ratings. This is illustrated by a comparison with the firms included in my
comparable-risk proxy group of non-utility companies. The average common equity ratio for
this group of 44 firms is 51.38%, which is slightly higher than the 48.50% common equity
ratio requested by Avista.

The Commission should reject Mr. Garrett's baseless industry comparison, as well as his recommended capital structure, which substitutes his personal judgement in place of the experienced professionals who raise and invest capital for utility companies, the requirements of investors, and standard regulatory practice.

- Q. Does this complete your rebuttal testimony in this case?
- 13 A. Yes, it does.

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¹⁰⁵ For example, within Value Line's Air Transport industry group, Alaska Air Group (BB), Allegiant Travel (B+) and Spirit Airlines (B) are all rated by S&P in the speculative grade category. Oil/Gas Distribution firms Cheniere Energy (BB+) and EnLink Midstream LLC (BB+), as well as insurance firms Genworth Financial Inc. (B+) and NMI Holdings Inc. (BB) also fall in the junk bond category. Similarly, Lamar Advertising Co. (BB), OUTFRONT Media (B+) and Thryv Holdings (B), which are included in Value Line's Advertising sector, are also rated far below investment grade.