BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	)))	
Complainant,	)))	DOCKET NOS. UE-140188 and UG-140189 (*Consolidated*)
v.	))	
AVISTA CORPORATION, DBA AVISTA UTILITIES,	)))	
Respondent.	)))	

CONFIDENTIAL RESPONSE TESTIMONY OF MICHAEL P. GORMAN

ON BEHALF OF

THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

AND THE NORTHWEST INDUSTRIAL GAS USERS

REDACTED VERSION

July 22, 2014

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1	**Q.**	**PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**
2	**A.**	Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	**Q.**	**WHAT IS YOUR OCCUPATION?**
5	**A.**	I am a consultant in the field of public utility regulation and a managing principal of
6		Brubaker & Associates, Inc., energy, economic and regulatory consultants.
7	**Q.**	**PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
8		**EXPERIENCE.**
9	**A.**	These are set forth in Exhibit No. ___(MPG-2).
10	**Q.**	**ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**
11	**A.**	I am appearing on behalf of the Industrial Customers of Northwest Utilities ("ICNU")
12		and the Northwest Industrial Gas Users ("NWIGU"). I am separately sponsoring
13		testimony specifically related to Avista's requested increase to its natural gas rates on
14		behalf of NWIGU alone.
15	**Q.**	**WHAT IS THE PURPOSE OF YOUR TESTIMONY?**
16	**A.**	I will respond to Avista Corporation's ("Avista" or the "Company") positions on the
17		following issues:

18
19
1. Overall rate of return including rate of return, embedded cost of debt, capital structure, and a fair return on equity.

20
21
2. Proposed pension expense and other post-employment benefits ("OPEB") expenses for electric and gas operations.

I. SUMMARY

2   **Q.   PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS**
3   **ON AVISTA'S RATE OF RETURN.**

4   **A.**   My recommended return on equity is developed on my Exhibit No. ___(MPG-3), and

5   produces an overall rate of return of 7.18%. This rate of return is based on a

6   recommended return on equity, and adjustment to the Company's embedded debt

7   structure, and adjustment to the Company's proposed capital structure. Each of these

8   three adjustments will be briefly summarized below.

9   First, I recommend the Washington Utilities and Transportation Commission

10   (the "Commission") award Avista a return on common equity of 9.20%, which is at

11   the midpoint of my recommended range of 8.80% to 9.60%. If the Commission

12   approves the method of setting rates based on a forecasted attrition test year, and

13   approves the additional decoupling regulatory mechanisms proposed by Avista, then I

14   recommend the Commission set an allowed return on equity halfway between the

15   midpoint and the low-end of my recommended range, or 9.00%. Avista's attrition

16   revenue requirement methodology and proposed regulatory mechanisms including

17   expanding its decoupling proposal, will decrease Avista investment risk and support a

18   return on equity toward the low-end of my recommended range. Adjusting the

19   authorized return on equity by approximately 20 basis points is consistent with the

20   market's reduced returns for greater cost recovery assurance and therefore it would

21   also be appropriate and cost justified to reflect the risk reduction in Avista's

22   authorized return on equity.

1   My recommended return on equity will fairly compensate Avista for its current

2   market cost of common equity, and it will mitigate the claimed revenue deficiency in

3   this proceeding by providing Avista fair compensation with the lowest cost to

4   customers.

5   Second, I propose an adjustment to Avista's estimated embedded debt cost.

6   This adjustment reduces Avista's embedded debt cost from 5.42% down to 5.38%.

7   My adjustment to Avista's proposed embedded cost of debt relates to repricing a

8   planned September 2014 bond issue reflecting current market cost of equity, rather

9   than Avista's estimated above-market cost of equity. I did not adjust Avista's claimed

10   bond issue for calendar year 2015.

11   Third, I recommend an adjustment to Avista's proposed capital structure. My

12   proposed capital structure is composed of 47% common equity and 53% debt. I

13   recommend the same capital structure last used to set Avista's overall rate of return in

14   Docket UE-120436.

15   Since Avista's last rate case, Avista has maintained its investment grade bond

16   rating with a Stable outlook, and has been able to attract low-cost capital to fund its

17   large capital improvement program. Further, Avista has initiated acquisition of other

18   utilities. This history demonstrates that Avista's capital structure from its last rate

19   case has supported its access to capital, and maintained a Stable credit rating outlook

20   for the utility. Because the capital structure from its last rate case is lower than its

21   proposed capital structure in this case, using the capital structure approved in its last

22   rate case will mitigate Avista's claimed revenue deficiency in this proceeding. As

23   such, Avista's proposed capital structure with an increased common equity component

1   is more expensive than necessary to support its ability to attract capital under

2   reasonable terms and conditions, and support its investment grade bond rating. For

3   these reasons, I recommend its proposed capital structure be rejected, and the capital

4   structure found appropriate for Avista in its last rate case again be approved in this

5   case.

6   Finally, I will also respond to Avista witness Mr. Adrien McKenzie's proposed

7   return on equity of 10.10%. For the reasons discussed below, Mr. McKenzie's

8   recommended return on equity is excessive and should be rejected.

9   **Q.**   **PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS**
10   **CONCERNING AVISTA'S PENSION AND OPEB EXPENSES.**

11 **A.**   Avista's own evidence shows that its pension and OPEB expenses are decreasing

12   through the forecast period relative to its historical period. As outlined below,

13   Avista's own data shows that its pension expense is decreasing by about $1.7 million

14   per year, and OPEB expense by around $1.1 million. However, these decreased

15   pension and OPEB expenses are significant components of overhead expenses, and

16   were not reasonably reflected in the attrition escalation projections for both electric

17   and gas operations. Therefore, these declines in these material overhead costs should

18   be considered in developing reasonable escalators for electric and gas attrition cost of

19   service.

1	**Q.**	**WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR PROPOSED**
2		**CHANGE IN THE OVERALL RATE OF RETURN FOR AVISTA IN THIS**
3		**CASE?**

4   **A.**   Adjusting Avista's capital structure, embedded debt and return on equity, as I describe

5   in this testimony, lowers Avista's revenue requirement on electric retail rate base by

6   $12.5 million, and by $2.2 million on its natural gas retail rate base.

| 7 | **Q.** | **PLEASE SUMMARIZE HOW YOUR TESTIMONY WILL BE ORGANIZED** |
| 8 | | **FROM THIS POINT.** |

9   **A.**   My testimony will be organized from this point as follows:

10 1. Outline the investment risk of the utility industry, which leads into my
11   recommended overall rate of return for Avista.

12 2. I will investigate and comment on Avista's proposed pension and OPEB expenses.

13 **II. RATE OF RETURN**

14 **II.A. Regulated Utility Industry Market Outlook**

15 **Q.**   **PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.**

16 **A.**   I begin my estimate of a fair return on equity for Avista by reviewing the market's

17 assessment of the regulated utility industry investment risk, credit standing, and stock

18 price performance. I used this information to get a sense of the market's perception of

19 the risk characteristics of regulated utility investments in general, which is then used

20 to produce a refined estimate of the market's return requirement for assuming

21 investment risk similar to Avista's utility operations.

22   Based on the assessments described below, I find the credit rating outlook of

23 the industry to be strong and supportive of the industry's financial integrity, and

24 regulated utilities' stocks have exhibited strong price performance over the last several

25 years.

1   Further, the regulated utility industry is funding large capital expenditure

2   programs, which is creating significant demands for external capital. Credit rating

3   agencies and market participants have embraced the utilities' need for significant

4   amounts of external capital by meeting the capital market demands of regulated

5   utilities at near historical low capital market costs. All of this supports my belief that

6   Avista should have sufficient access to capital to support its capital program, and

7   relatively moderate capital costs are currently available and expected to be available

8   for the next several years.

9   Based on this review of credit outlooks and stock price performance, I

10   conclude that the market continues to embrace the regulated utility industry as a

11   safe-haven investment, and views utility equity and debt investments as low-risk

12   securities.

13 Q. **PLEASE DESCRIBE REGULATED UTILITIES' CREDIT RATING**
14   **OUTLOOK.**

15 A. Utilities' credit ratings have improved over the recent past and the credit outlook is

16   Stable to Improving. Standard & Poor's ("S&P") recently published a report titled

17   "U.S. Regulated Utilities On Stable Trajectory Amid Moderate Economic Growth."

18   In that report, S&P noted the following:

19   **Effect on ratings**

20   Rating activity since the beginning of the year was relatively quiet
21   compared with the large number of rating changes in 2013 (42
22   upgrades and six downgrades).

23   *   *   *

1   **Industry Ratings Outlook**

2   The prospective rating movement for U.S. regulated utilities, as
3   measured by outlooks and CreditWatch listings, is limited, with nearly
4   9% of companies having positive outlooks or positive CreditWatch
5   listings and about 6% carrying negative outlooks. One company
6   (0.5%) has a developing outlook. (Importantly, outlooks and
7   CreditWatch placements do not predict rating changes. Rather, they
8   highlight the potential for rating changes and their direction.) With the
9   remaining 85% of the industry having stable outlooks, and with a
10   moderate influence on the sector's business risk and financial risk
11   profiles as a result of economic volatility, we expect few rating changes
12   in the sector in the near-to-intermediate term.

13   *   *   *

14   We have seen that investors have been responsive to regulated utility
15   debt under all market conditions and we expect pricing and demand to
16   remain robust. The amount of medium- to long-term debt and hybrid
17   securities issued during the first four months of the year was about $11
18   billion. Most utilities continue to proactively manage their liquidity
19   needs by increasing the size and extending the tenor of their revolving
20   credit facilities with maturity dates well into 2018 and beyond. And,
21   several companies have issued common stock to partially fund
22   construction programs, which has helped to support capital structure
23   balance. In addition, many utilities are accessing short-term credit
24   markets and issuing commercial paper at very low rates. The relative
25   certainty of financial performance by utilities operating under relatively
26   predictable regulatory frameworks, an effective monopoly position, and
27   long-lived assets continue to make the utility sector attractive to
28   investors. We believe that utilities will continue to tap the short-term
29   debt markets with relative ease and, as a result, we expect liquidity to
30   remain adequate for most utilities under our criteria. The ability of
31   utilities to issue short-term debt and access liquidity is critical,
32   especially in light of significant capital budgets for aging infrastructure,
33   environmental compliance, plant improvements, and ongoing
34   transmission and distribution investments. [1]

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[1]   *Standard & Poor's RatingsDirect*: "Industry Economic And Ratings Outlook: U.S. Regulated Utilities
On Stable Trajectory Amid Moderate Economic Growth," May 22, 2014 at 4-5.

1   Similarly, Fitch states:

2   **Rating Outlook**

3   **Stable Ratings Outlook:** Fitch Ratings expects the ratings and ratings
4   outlook for the overall U.S. Utilities, Power, and Gas (UPG) sector to
5   remain stable in 2014. Fitch expects modest earnings growth from
6   recent rate base additions and continued maturation of capex projects.
7   Broad macroeconomic conditions remain favorable for the sector; Fitch
8   expects modest economic growth, tepid inflation, low natural gas
9   prices, and a favorable interest rate environment.

10   *   *   *
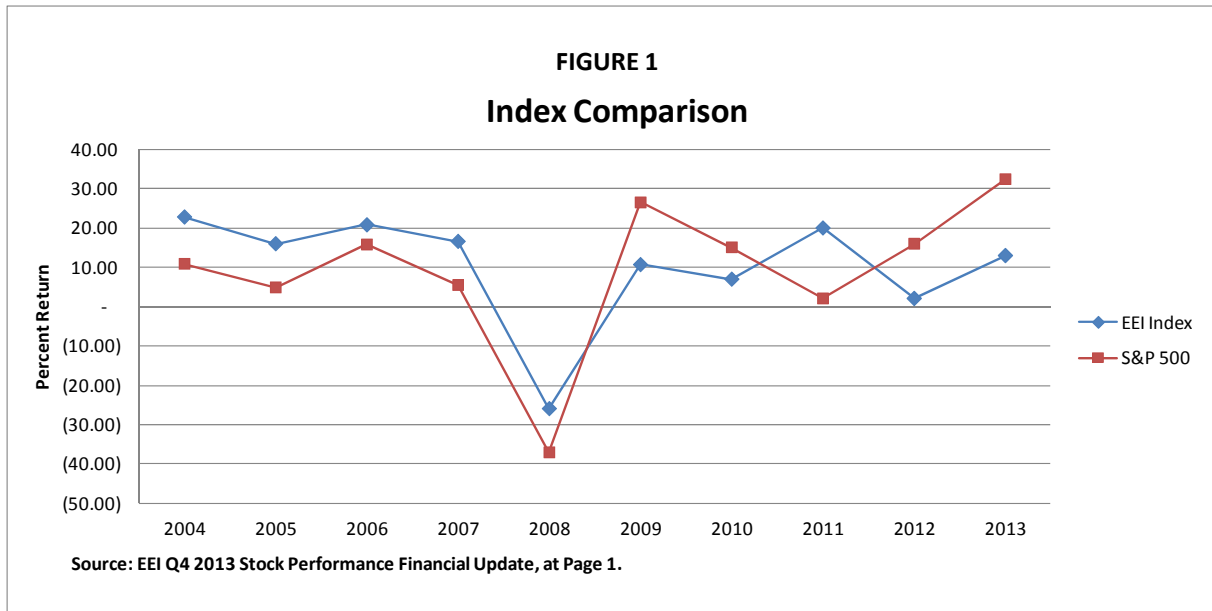
11   **Stable Utility and Utility Parent Company Ratings**

12   Within the context of gradual recovery, low inflation, and stable
13   commodity prices, Fitch expects regulated utilities to maintain their
14   solid investment-grade credit profile. Issuer Default Ratings (IDRs)
15   should remain on the cusp of 'BBB+' to 'A–', with more than 90% of
16   debt issuances being rated in the 'A' category. Long-term debt
17   instrument ratings of Fitch's entire universe of regulated utilities carry
18   investment-grade ratings, a testament to the sound credit profile of the
19   industry.[2/]

20 **Q.** **PLEASE DESCRIBE UTILITY STOCK PRICE PERFORMANCE OVER THE**
21   **LAST SEVERAL YEARS.**

22 **A.** As shown in the graph below, the Edison Electric Institute ("EEI") has recorded utility

23   stock price performance compared to the market. The EEI data shows that its Utility

24   Index has outperformed the market in downturns and trailed the market during

25   recovery. This supports my conclusion that utility stock investments are regarded by

26   market participants as a moderate- to low-risk investment.

[2/]   *FitchRatings*: "2014 Outlook: Utilities, Power, and Gas," December 12, 2013 at 1-2.

FIGURE 1

Index Comparison

Source: EEI Q4 2013 Stock Performance Financial Update, at Page 1.

1	**Q.**	**WHAT ARE THE IMPORTANT TAKEAWAY POINTS FROM THIS**
2		**ASSESSMENT OF UTILITY INDUSTRY CREDIT AND INVESTMENT RISK**
3		**OUTLOOKS?**

4 **A.** Credit rating agencies consider the regulated utility industry to be stable and believe

5   investors will continue to provide an abundance of capital to support utilities' large

6   capital programs and at moderate capital costs. All of this supports the continued

7   belief that utility investments are generally regarded as safe-haven or low-risk

8   investments, and the market embraces low-risk investments—like utility investments.

9   The demand for low-risk investments will provide funding for regulated utilities in

10 general.

1   **II.B. Avista Investment Risk**

2   **Q.   PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE**
3   **INVESTMENT RISK OF AVISTA.**

4   **A.**   The market's assessment of Avista's investment risk is described by credit rating

5   analysts' reports. Avista's current corporate and senior secured bond ratings from

6   S&P and Moody's are "BBB" and "A-," and "Baa1" and "A2," respectively.[3/] Both

7   rating agencies have a Stable outlook for Avista.

8   Specifically, S&P states the following:

9   **Business Risk: Strong**

10   Our assessment of Avista's business risk profile is "strong", as
11   defined in our criteria, based on what we consider the utility's
12   "satisfactory" competitive position, "very low" industry risk of
13   the regulated utility industry, and "very low" country risk of the
14   U.S. The company's competitive position incorporates its
15   vertically-integrated electric and natural gas distribution utility
16   operations in Washington and Idaho, and gas distribution in
17   Oregon. The utility has had mixed results through the regulatory
18   process but has filed when needed to recover costs. Since the
19   utility has hydroelectric power exposure, recovery mechanisms
20   are important to mitigate the need to purchase power for
21   customers when the hydro power is unavailable. The company
22   has some flexibility in implementing incremental rate changes
23   through its energy recovery mechanism in Washington and the
24   power cost adjustment in Idaho, but the recovery of excess
25   power costs in Washington is incomplete due to minimum
26   thresholds and deferral bands.

27   *   *   *

28   **Financial Risk: Significant**

29   Based on the medial volatility financial ratio benchmarks, our
30   assessment of Avista's financial risk profile is "significant". Our
31   base case indicates that capital spending along with dividend

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[3/]   *SNL Financial*, July 7, 2014.

1	payments will lead to negative discretionary cash flow over the
2	next few years. External funding will be needed to cover the
3	deficit since internally generated cash flow is insufficient. Our
4	base case forecast suggests mostly steady key credit measures
5	for the next several years. Debt leverage could grow modestly,
6	with debt to EBITDA between 4x and 4.5x. [4/]

7 **II.C. Avista's Proposed Capital Structure**

8 **Q.   WHAT IS AVISTA'S PROPOSED CAPITAL STRUCTURE?**

9 **A.**   Avista's proposed capital structure is shown in Table 1 below.

TABLE 1

Avista's Proposed Capital Structure
(December 31, 2014)

Description	Weight
Total Debt	51.0%
Common Equity	49.0%
Total Regulatory Capital Structure	100.00%

Source: Direct Testimony of Mark Thies,
          Exhibit No. ___(MTT-1T) at 8.

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10 **Q.   IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE REASONABLE?**

11 **A.**   No. Mr. Thies's proposed capital structure should be rejected as unreasonable for

12   several reasons. These reasons include the following:

13   1. Avista is proposing to modify its capital structure that was last used to set rates. It
14   proposes in this case to increase its common equity ratio to 49% from 47%. The
15   increase in this common equity ratio is not necessary, and should be rejected.

[4/]   *Standard & Poor's RatingsDirect Summary:* "Avista Corp.," May 9, 2014 at 3-4.

1   2. Reflects more common equity than Avista actually is using to support its
2   investments in utility plant and equipment.

3   3. Contains more common equity than needed to support Avista's current investment
4   grade bond rating at a "Stable" outlook. It simply is unnecessary to support
5   Avista's current capital program, which already allows the Company to attract
6   sufficient capital to support its large capital program at reasonable terms and
7   prices.

8   4. Unnecessarily increasing the common equity component of the capital structure
9   will put unnecessary rate price pressure on customers during a period where the
10   economy is still experiencing economic difficulty. The Company's proposal in this
11   case simply is unneeded, and is unreasonable.

12 **Q.** **WHAT CAPITAL STRUCTURE WAS USED TO SET AVISTA'S OVERALL**
13   **RATE OF RETURN IN ITS LAST PROCEEDING?**

14 **A.** In Avista's rate case completed in 2012 (Docket No. UE-120436), Avista requested a

15   common equity ratio of 48.4%. However, the Commission found reasonable a

16   common equity ratio of 47.0%.[5] For the reasons outlined below, this capital structure

17   is still reasonable and should continue to be used to set Avista's overall rate of return.

18   This capital structure has contributed to a stable bond rating for Avista, has provided

19   Avista ample access to low-cost capital to support its large capital program, and this

20   capital structure will mitigate the rate impact on customers caused by Avista's

21   increased rate base, particularly for gas operations, over the next several years.

22 **Q.** **PLEASE EXPLAIN WHY YOU BELIEVE AVISTA WITNESS MR. THIES'S**
23   **PROPOSED CAPITAL STRUCTURE CONTAINS MORE COMMON**
24   **EQUITY THAN THAT USED TO SUPPORT AVISTA'S INVESTMENTS IN**
25   **UTILITY PLANT AND EQUIPMENT.**

26 **A.** Mr. Thies's capital structure is based on total Avista Corporation. However, total

27   Avista Corporation has significant investments in a goodwill asset, and below-the-line

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[5]   Washington Utilities and Transportation Commission v. Avista Corp., Docket Nos. UE-120436/UG-
     120437, Order 09 at ¶¶ 32, 112 (Dec. 26, 2012).

1   investments in non-regulated assets. The common equity supporting Avista's goodwill

2   asset, and other non-regulated assets should be removed from a regulatory capital

3   structure that should reflect only capital supporting Avista's utility operations.

4   I propose to remove Avista common equity supporting a goodwill asset and

5   non-regulated assets from its regulated capital structure. Goodwill is an accounting

6   "paper" asset that is created due to an acquisition account from Avista acquisition

7   actions from the past. A goodwill asset is not related to providing utility services.

8   Rather, goodwill simply reflects an accounting entry when Avista Corporation

9   acquired other assets at prices above their fair market or book value. Further, a

10   goodwill asset can only be supported by equity capital, because it is an accounting

11   asset that has no economic value. Specifically, a goodwill asset does not produce cash

12   flows, and therefore cannot be supported by debt service payments. Therefore, Avista

13   Corporation's common equity supporting the goodwill asset should be removed in

14   establishing the capital structure supporting utility operations.

15   If the common equity supporting Avista's investments in non-regulated assets

16   is removed, its regulated capital structure contains a 45.7% common equity ratio.

17   Avista's regulatory capital structure, which removes the common equity supporting the

18   goodwill and non-regulated assets, is developed on my Exhibit_____(MPG-4C).

19   **Q.   PLEASE EXPLAIN WHY YOU BELIEVE MR. THIES'S PROPOSED**
20   **CAPITAL STRUCTURE CONTAINS MORE EQUITY THAN NEEDED TO**
21   **SUPPORT AVISTA'S CURRENT BOND RATING.**

22   **A.**   In the most recent S&P credit report for Avista Corporation, S&P rated Avista's

23   current "BBB" investment bond rating as "Stable." In that report, S&P noted that

1   Avista had a capitalization mix (unadjusted) composed of 53% total debt, and

2   approximately 47% common equity.

3   S&P stated:

4   **Outlook: Stable**

5   The stable outlook reflects our expectation that the company
6   will continue to effectively manage regulatory risks, fund
7   capital spending in a manner that does not meaningfully
8   increase leverage, preserve adequate liquidity, and maintain
9   comparable financial performance.   Under our base case
10   scenario, we expect funds from operations (FFO) to total debt of
11   16%, <u>debt to total debt and equity of 53%</u>, and debt to EBITDA
12   of 4x.[6/]

13   Using S&P's <u>adjusted</u> total debt ratio methodology, S&P estimated that

14   Avista's adjusted debt ratio is 55.1% in 2012, and will stay relatively flat through

15   2014. Hence, a capital structure composed of approximately 47% common equity

16   (unadjusted) has been adequate to support Avista's current bond rating with a "Stable"

17   outlook.

18   I believe this is significant because it demonstrates the capital structure mix

19   that is adequate to support Avista's access to capital at reasonable terms and prices,

20   while minimizing its cost to retail customers.

21 **Q. DO YOU BELIEVE THAT AVISTA'S ACTUAL CAPITAL STRUCTURE HAS**
22 **   SUPPORTED ITS ACCESS TO CAPITAL AT REASONABLE PRICES AND**
23 **   TERMS GIVEN ITS LARGE CAPITAL PROGRAM?**

24 **A.** Yes. Mr. Thies explains at pages 13-14 of his direct testimony that Avista has been

25   able to successfully issue new debt capital to refinance current maturities and fund

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[6/]   *Standard & Poor's RatingsDirect*: "Summary: Avista Corp.," June 21, 2013 at 3 (emphasis added).

1   capital projects at very reasonable rates. In fact, he explains that Avista has issued

2    $392 million in long-term debt since December 2010 at a weighted average rate of

3   3.25% with a weighted maturity of 19 years. During this time period, Avista's

4   Washington jurisdiction had a regulated capital structure consisting of 47% or less

5   common equity. Over the same time period, Avista Corporation received two

6   corporate credit rating upgrades by Moody's and one upgrade by S&P. Throughout

7   this time period, both rating agencies had a stable or positive outlook on Avista

8   Corporation.

9 **Q.   WHAT IS THE CAPITAL STRUCTURE YOU PROPOSE BASED ON YOUR**
10   **FORECASTED AVISTA DECEMBER 31, 2015 CAPITAL STRUCTURE?**

11 **A.**   As shown below in Table 2, my capital structure contains less common equity and

12   more debt capital than Avista's proposed capital structure.

TABLE 2

Gorman Proposed Capital Structure
(December 31, 2015)

Description	Weight
Total Debt	53.0%
Common Equity	47.0%
Total Regulatory Capital Structure	100.0%

Source: Exhibit No. ___(MPG-3).

13   This capital structure is identical to the capital structure used in Avista's last

14   rate case. This capital structure is more consistent with the capital structure mix

15   actually used to support Avista's utility plant investment, provides Avista access to

1   ample capital to support its capital program under reasonable terms and prices, and

2   supports a Stable investment grade bond rating. Avista's proposal to increase the

3   common equity ratio is unreasonable.

4   Unnecessarily increasing the common equity ratio as Avista proposes will

5   unnecessarily increase retail rates. Because common equity capital is the most

6   expensive form of capital and is subject to income tax expense, increasing the common

7   equity ratio will increase Avista's overall rate of return and income tax expense, and

8   inflate its revenue requirement. Unnecessary increases in its revenue requirement are

9   particularly unjust at this time because Avista's large capital program is increasing its

10   rate base and driving up its rates to recover its cost of service. Therefore, maintaining

11   a stable proven capital structure that supports its access to capital and investment grade

12   bond rating will help mitigate the increase in Avista's rates in this proceeding.

13   **II.D. Embedded Debt Cost**

14   **Q.   WHAT IS AVISTA'S REQUESTED EMBEDDED COST OF DEBT USED TO**
15   **   DEVELOP ITS OVERALL RATE OF RETURN?**

16   **A.**   Avista is proposing embedded cost of debt of 5.42%. This is developed on Mr.

17   Thies's Exhibit No. ___(MTT-2), page 3.

18   **Q.   DO YOU TAKE ISSUE WITH MR. THIES'S ESTIMATED EMBEDDED**
19   **   COST OF DEBT?**

20   **A.**   Yes. There are two planned debt issuances that Mr. Thies included in his embedded

21   cost of debt. Mr. Thies assumed an embedded cost of debt issue cost of 5.5% for a

22   debt issue planned to be made in September 2014. I believe Mr. Thies's estimated

23   embedded cost of debt for this issue significantly exceeds current market observable

1		cost of debt. While it is possible Avista's marginal cost of debt could increase over
2		this time, it is not certain. Therefore, I recommend modifying Avista's embedded cost
3		of debt to reflect a current cost of issuing debt for the September 2014 planned debt
4		issuance.
5		Avista is also planning a debt issuance for January 2015, but I am not taking
6		issue with the estimated interest rate for that bond issue.
7	**Q.**	**PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT TO AVISTA'S**
8		**EMBEDDED DEBT COST.**
9	**A.**	This is shown on my Exhibit No. ___(MPG-5). As shown on that exhibit, I assumed
10		an embedded debt cost issue of 4.94%. This is based on the 13-week average "Baa"
11		rated utility bond yield of 4.74%, increased to 4.94% to reflect debt issuance expense,
12		and the hedging cost to lock-in this interest rate.
13		As shown on this exhibit, adjusting the new debt issuance plan through 2015
14		will reduce Avista's embedded debt cost from 5.42% as estimated by Mr. Thies, down
15		to 5.38%.
16		I believe this embedded debt more accurately reflects current observable
17		interest rates and effectively managed debt structure for Avista.

18	**II.E. Return on Equity**	
19	**Q.**	**PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF**
20		**COMMON EQUITY."**
21	**A.**	A utility's cost of common equity is the return investors require on an investment in
22		the utility. Investors expect to achieve their return requirement from receiving
23		dividends and stock price appreciation.

1	Q.	**PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A**
2		**REGULATED UTILITY'S COST OF COMMON EQUITY.**

3 A. In general, determining a fair cost of common equity for a regulated utility has been

4 framed by two hallmark decisions of the U.S. Supreme Court: <u>Bluefield Water Works</u>

5 <u>& Improvement Co. v. Pub. Serv. Comm'n of W. Va.</u>, 262 U.S. 679 (1923) and <u>Fed.</u>

6 <u>Power Comm'n v. Hope Natural Gas Co.</u>, 320 U.S. 591 (1944).

7 These decisions identify the general standards to be considered in establishing

8 the cost of common equity for a public utility. Those general standards provide that

9 the authorized return should: (1) be sufficient to maintain financial integrity;

10 (2) attract capital under reasonable terms; and (3) be commensurate with returns

11 investors could earn by investing in other enterprises of comparable risk.

12 Q. **PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE**

13 **AVISTA'S COST OF COMMON EQUITY.**

14 A. I have used several models based on financial theory to estimate Avista's cost of

15 common equity. These models are: (1) a constant growth Discounted Cash Flow

16 ("DCF") model using consensus analysts' growth rate projections; (2) a constant

17 growth DCF using sustainable growth rate estimates; (3) a multi-stage growth DCF

18 model; and (4) a Risk Premium model; and (5) a Capital Asset Pricing Model

19 ("CAPM"). I have applied these models to a group of publicly traded utilities that

20 have investment risk similar to Avista's.

1   **II.F. Risk Proxy Group**

2   **Q.   HOW DID YOU SELECT A UTILITY PROXY GROUP SIMILAR IN**
3   **INVESTMENT RISK TO AVISTA TO ESTIMATE ITS CURRENT MARKET**
4   **COST OF EQUITY?**

5   **A.**   I relied on a utility proxy group that I determined to be comparable in investment risk

6   to Avista. My recommended proxy group is based on the same proxy group used by

7   Avista's witness Mr. McKenzie to estimate Avista's return on equity, with the

8   exception being Exelon Corp. I removed Exelon Corp. from Mr. McKenzie's proxy

9   group because of a pending acquisition of Pepco Holdings, which was announced on

10   April 30, 2014.

11   **Q.   PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS**
12   **REASONABLY COMPARABLE IN INVESTMENT RISK TO AVISTA.**

13   **A.**   The proxy group is shown in Exhibit No. ___(MPG-6). This proxy group has an

14   average corporate credit rating from S&P of "BBB," which is identical to S&P's

15   corporate credit rating for Avista of "BBB." The proxy group's corporate credit rating

16   from Moody's of "Baa1" is identical to Avista's corporate credit rating from Moody's.

17   The proxy group has an average common equity ratio of 46.7% (including

18   short-term debt) from SNL Financial ("SNL") and 48.8% (excluding short-term debt)

19   from *The Value Line Investment Survey* ("*Value Line*") in 2013. The proxy group's

20   common equity ratio included in short-term debt is lower than Avista's requested

21   49.0% common equity ratio.

1   I believe that my proxy group reasonably approximates the investment risk of

2   Avista, and can be used to estimate a fair return on equity for Avista.

3   **II.G. Discounted Cash Flow Model**

4   **Q.   PLEASE DESCRIBE THE DCF MODEL.**

5   **A.**   The DCF model posits that a stock price is valued by summing the present value of

6   expected future cash flows discounted at the investor's required rate of return or cost

7   of capital. This model is expressed mathematically as follows:

8          $$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \cdots \frac{D_\infty}{(1+K)^\infty} \text{ where} \qquad \text{(Equation 1)}$$

10   P_0 = Current stock price
11   D = Dividends in periods 1 - ∞
12   K = Investor's required return

13   This model can be rearranged in order to estimate the discount rate or investor-

14   required return, "K." If it is reasonable to assume that earnings and dividends will

15   grow at a constant rate, then Equation 1 can be rearranged as follows:

16         $$K = D_1/P_0 + G \qquad \text{(Equation 2)}$$

17   K = Investor's required return
18   D_1 = Dividend in first year
19   P_0 = Current stock price
20   G = Expected constant dividend growth rate

21   Equation 2 is referred to as the annual "constant growth" DCF model.

22   **Q.   PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF**
23   **   MODEL.**

24   **A.**   As shown in Equation 2 above, the DCF model requires a current stock price,

25   expected dividend, and expected growth rate in dividends.

1 **Q.** **WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT**
2 **GROWTH DCF MODEL?**

3 **A.** I relied on the average of the weekly high and low stock prices of the utilities in the

4 proxy group over a 13-week period ending on June 27, 2014. An average stock price

5 is less susceptible to market price variations than a spot price. Therefore, an average

6 stock price is less susceptible to aberrant market price movements, which may not be

7 reflective of the stock's long-term value.

8 A 13-week average stock price reflects a period that is still short enough to

9 contain data that reasonably reflect current market expectations, but the period is not

10 so short as to be susceptible to market price variations that may not reflect the stock's

11 long-term value. In my judgment, a 13-week average stock price is a reasonable

12 balance between the need to reflect current market expectations and the need to

13 capture sufficient data to smooth out aberrant market movements.

14 **Q.** **WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF**
15 **MODEL?**

16 **A.** I used the most recently paid quarterly dividend, as reported in *Value Line*.[7] This

17 dividend was annualized (multiplied by 4) and adjusted for next year's growth to

18 produce the D_1 factor for use in Equation 2 above.

19 **Q.** **WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR**
20 **CONSTANT GROWTH DCF MODEL?**

21 **A.** There are several methods that can be used to estimate the expected growth in

22 dividends. However, regardless of the method, for purposes of determining the

---

[7] *The Value Line Investment Survey*, May 2, May 23 and June 20, 2014.

1   market-required return on common equity, one must attempt to estimate investors'

2   consensus about what the dividend or earnings growth rate will be, and not what an

3   individual investor or analyst may use to make individual investment decisions.

4   As predictors of future returns, security analysts' growth estimates have been

5   shown to be more accurate than growth rates derived from historical data.[8/] That is,

6   assuming the market generally makes rational investment decisions, analysts' growth

7   projections are more likely to influence investors' decisions which are captured in

8   observable stock prices than growth rates derived only from historical data.

9   For my constant growth DCF analysis, I have relied on a consensus, or mean,

10   of professional security analysts' earnings growth estimates as a proxy for investor

11   consensus dividend growth rate expectations. I used the average of analysts' growth

12   rate estimates from three sources: Zacks, SNL, and Reuters. All such projections

13   were available on June 27, 2014, and all were reported online.

14   Each consensus growth rate projection is based on a survey of security

15   analysts. There is no clear evidence whether a particular analyst is most influential on

16   general market investors. Therefore, a single analyst's projection does not as reliably

17   predict consensus investor outlooks as does a consensus of market analysts'

18   projections. The consensus estimate is a simple arithmetic average, or mean, of

19   surveyed analysts' earnings growth forecasts. A simple average of the growth

20   forecasts gives equal weight to all surveyed analysts' projections. Therefore, a simple

---

[8/]   See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating
        Share Yield," *The Journal of Portfolio Management*, Spring 1989.

1		average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus
2		expectations.
3	**Q.**	**WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT**
4		**GROWTH DCF MODEL?**
5	**A.**	The growth rates I used in my DCF analysis are shown in Exhibit No. ___(MPG-7).
6		The average growth rate for my proxy group is 4.98%.
7	**Q.**	**WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF**
8		**MODEL?**
9	**A.**	As shown in Exhibit No. ___(MPG-8), the average and median constant growth DCF
10		returns for my proxy group are 8.90% and 9.23%, respectively.
11	**Q.**	**DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR**
12		**CONSTANT GROWTH DCF ANALYSIS?**
13	**A.**	Yes. The constant growth DCF analysis for my proxy group was based on a long-term
14		sustainable growth rate of 4.98%. This growth rate is slightly higher than my estimate
15		of a maximum long-term sustainable growth rate of 4.7% which I discuss later in this
16		testimony. I believe the constant growth DCF analysis produces slightly overstated
17		return estimates.
18	**Q.**	**WHAT IS YOUR ESTIMATE OF A MAXIMUM LONG-TERM**
19		**SUSTAINABLE GROWTH RATE?**
20	**A.**	A long-term sustainable growth rate for a utility stock cannot exceed the growth rate
21		of the economy in which it sells its goods and services. Hence, a reasonable proxy for
22		the long-term maximum sustainable growth rate for a utility investment is best proxied
23		by the projected long-term Gross Domestic Product ("GDP"). *Blue Chip Financial*
24		*Forecasts* projects that over the next 5 and 10 years, the U.S. nominal GDP will grow
25		in the range of 4.8% to 4.6%. As such, the average growth rate over the next 10 years

1   is around 4.7%, which I believe is a reasonable proxy of long-term sustainable

2   growth.[9]

3   I discuss in my multi-stage growth DCF analysis academic and investment

4   practitioner evidence that accepts the projected long-term GDP growth outlook as a

5   maximum sustainable growth rate projection. Hence, recognizing the long-term GDP

6   growth rate as a maximum sustainable growth is logical, and generally consistent with

7   academic and economic practitioner accepted practices.

8   **II.H. Sustainable Growth DCF**

9   **Q.   PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE**
10   **LONG-TERM GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF**
11   **MODEL.**

12   **A.**   A sustainable growth rate is based on the percentage of the utility's earnings that is

13   retained and reinvested in utility plant and equipment. These reinvested earnings

14   increase the earnings base (rate base). Earnings grow when plant funded by reinvested

15   earnings is put into service, and the utility is allowed to earn its authorized return on

16   such additional rate base investment.

17   The internal growth methodology is tied to the percentage of earnings retained

18   in the company and not paid out as dividends. The earnings retention ratio is 1 minus

19   the dividend payout ratio. As the payout ratio declines, the earnings retention ratio

20   increases. An increased earnings retention ratio will fuel stronger growth because the

21   business funds more investments with retained earnings.

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[9]   *Blue Chip Financial Forecasts*, June 1, 2014, at 14.

1   The payout ratios of the proxy group are shown in my Exhibit No.

2   ___(MPG-9). These dividend payout ratios and earnings retention ratios then can be

3   used to develop a sustainable long-term earnings retention growth rate. A sustainable

4   long-term earnings retention ratio will help gauge whether analysts' current three- to

5   five-year growth rate projections can be sustained over an indefinite period of time.

6   The data used to estimate the long-term sustainable growth rate is based on the

7   Company's current market-to-book ratio and on *Value Line's* three- to five-year

8   projections of earnings, dividends, earned returns on book equity, and stock issuances.

9   As shown in Exhibit No. ___(MPG-10), page 1, the average sustainable

10   growth rate for the proxy group using this internal growth rate model is 4.62%.

11 **Q.   WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-**
12 **TERM GROWTH RATES?**

13 **A.**   A DCF estimate based on these sustainable growth rates is developed in Exhibit No.

14   ___(MPG-11). As shown there, a sustainable growth DCF analysis produces proxy

15   group average and median DCF results of 8.55% and 8.40%, respectively.

16 **II.I. Multi-Stage Growth DCF Model**

17 **Q.   HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?**

18 **A.**   Yes. My first constant growth DCF is based on consensus analysts' growth rate

19   projections, so it is a reasonable reflection of rational investment expectations over the

20   next three to five years. The limitation on the constant growth DCF model is that it

21   cannot reflect a rational expectation that a period of high/low short-term growth can be

22   followed by a change in growth to a rate that is more reflective of long-term

1		sustainable growth. Hence, I performed a multi-stage growth DCF analysis to reflect
2		this outlook of changing growth expectations.
3	**Q.**	**WHY DO YOU BELIEVE GROWTH RATES CAN CHANGE OVER TIME?**
4	**A.**	Analyst projected growth rates over the next three to five years will change as utility
5		earnings growth outlooks change. Utility companies go through cycles in making
6		investments in their systems. When utility companies are making large investments,
7		their rate base grows rapidly, which accelerates their earnings growth. Once a major
8		construction cycle is completed or levels off, growth in the utility rate base slows, and
9		its earnings growth slows from an abnormally high three- to five-year rate to a lower
10		sustainable growth rate.
11		As major construction cycles extend over longer periods of time, even with an
12		accelerated construction program, the growth rate of the utility will slow simply
13		because rate base growth will slow, and the utility has limited human and capital
14		resources available to expand its construction program. Hence, the three- to five-year
15		growth rate projection should be used as a long-term sustainable growth rate but not
16		without making a reasonable informed judgment to determine whether it considers the
17		current market environment, the industry, and whether the three- to five-year growth
18		outlook is sustainable.
19	**Q.**	**PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.**
20	**A.**	The multi-stage growth DCF model reflects the possibility of non-constant growth for
21		a company over time. The multi-stage growth DCF model reflects three growth
22		periods: (1) a short-term growth period, which consists of the first five years; (2) a

1		transition period, which consists of the next five years (6 through 10); and (3) a
2		long-term growth period, starting in year 11 through perpetuity.
3		For the short-term growth period, I relied on the consensus analysts' growth
4		projections described above in relationship to my constant growth DCF model. For
5		the transition period, the growth rates were reduced or increased by an equal factor,
6		which reflects the difference between the analysts' growth rates and the long-term
7		sustainable growth rate. For the long-term growth period, I assumed each company's
8		growth would converge to the maximum sustainable long-term growth rate.
9 10	**Q.**	**WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?**
11	**A.**	Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the
12		economy in which they sell services. Utilities' earnings/dividend growth is created by
13		increased utility investment or rate base. Such investment, in turn, is driven by service
14		area economic growth and demand for utility service. In other words, utilities invest
15		in plant to meet sales demand growth, and sales growth, in turn, is tied to economic
16		growth in their service areas.
17		The Energy Information Administration ("EIA") has observed that utility sales
18		growth tracks the U.S. GDP growth, albeit at a lower level, as shown in Exhibit No.
19		___(MPG-12). Utility sales growth has lagged behind GDP growth for more than a
20		decade. As a result, nominal GDP growth is a very conservative proxy for utility sales
21		growth, rate base growth, and earnings growth. Therefore, the U.S. GDP nominal
22		growth rate is a conservative proxy for the highest sustainable long-term growth rate
23		of a utility.

1	**Q.**	**IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER**
2		**THE LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT**
3		**GROW AT A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?**

4 **A.** Yes. This concept is supported in both published analyst literature and academic

5 work. Specifically, in a textbook entitled "Fundamentals of Financial Management,"

6 published by Eugene Brigham and Joel F. Houston, the authors state as follows:

> 7   The constant growth model is most appropriate for mature companies
> 8   with a stable history of growth and stable future expectations.
> 9   Expected growth rates vary somewhat among companies, but dividends
> 10 for mature firms are often expected to grow in the future at about the
> 11 same rate as nominal gross domestic product (real GDP plus
> 12 inflation).[10/]

13	**Q.**	**IS THERE ANY ACTUAL INVESTMENT HISTORY THAT SUPPORTS THE**
14		**NOTION THAT THE CAPITAL APPRECIATION FOR STOCK**
15		**INVESTMENTS WILL NOT EXCEED THE NOMINAL GROWTH OF THE**
16		**U.S. GDP?**

17 **A.** Yes. This is evident by a comparison of the compound annual growth of the U.S.

18 GDP compared to the geometric growth of the U.S. stock market. Morningstar

19 measures the historical geometric growth of the U.S. stock market over the period

20 1926-2013 to be approximately 5.8%. During this same time period, the U.S. nominal

21 compound annual growth of the U.S. GDP was approximately 6.2%.[11/]

22   As such, the compound geometric growth of the U.S. nominal GDP has been

23 lower but comparable to the nominal growth of the U.S. stock market capital

24 appreciation. This historical relationship indicates the U.S. GDP growth outlook is a

25 conservative estimate of the long-term sustainable growth of U.S. stock investments.

[10/] *"Fundamentals of Financial Management*," Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

[11/] *Morningstar, Inc., Ibbotson SBBI 2014 Classic Yearbook* inflation rate of 3.0%, and U.S. Bureau of Economic Analysis, April 30, 2014.

1	**Q.**	**HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH**
2		**RATE THAT REFLECTS THE CURRENT CONSENSUS OUTLOOK OF THE**
3		**MARKET?**

4 **A.** I relied on the consensus analysts' projections of long-term GDP growth. *Blue Chip*

5 *Financial Forecasts* publishes consensus economists' GDP growth projections twice a

6 year. These consensus analysts' GDP growth outlooks are the best available measure

7 of the market's assessment of long-term GDP growth. These analyst projections

8 reflect all current outlooks for GDP, as reflected in analyst projections, and are likely

9 the most influential on investors' expectations of future growth outlooks. The

10 consensus economists' published GDP growth rate outlook is 4.8% to 4.6% over the

11 next 10 years.[12]

12 Therefore, I propose to use the consensus economists' projected 5- and 10-year

13 average GDP consensus growth rates of 4.8% and 4.6%, respectively, as published by

14 *Blue Chip Financial Forecasts,* as an estimate of long-term sustainable growth. *Blue*

15 *Chip Financial Forecasts'* projections provide real GDP growth projections of 2.6%

16 and 2.4%, and GDP inflation of 2.1%[13] over the 5-year and 10-year projection

17 periods, respectively. This consensus GDP growth forecast represents the most likely

18 views of market participants because it is based on published consensus economist

19 projections.

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[12] *Blue Chip Financial Forecasts*, June 1, 2014 at 14.
[13] Id.

1	**Q.**	**DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM**
2		**GDP GROWTH?**

3 **A.** Yes, and these sources corroborate my consensus analysts' projections. The U.S. EIA

4 in its *Annual Energy Outlook* projects real GDP out until 2040. In its *2014 Annual*

5 *Report*, the EIA projects real GDP through 2040 to be in the range of 1.9% to 2.8%,

6 with a midpoint or reference case of 2.4%.[14]

7 Also, the Congressional Budget Office ("CBO") makes long-term economic

8 projections. The CBO is projecting real GDP growth of 2.8% to 2.1% during the next

9 5 and 10 years, respectively, with GDP price inflation of 2.0%.[15] The CBO's real

10 GDP and GDP inflation projections are slightly lower than the consensus economists.

11 The real GDP and nominal GDP growth projections made by the U.S. EIA and

12 those made by the CBO support the use of the consensus analyst 5-year and 10-year

13 projected GDP growth outlooks as a reasonable estimate of market participants'

14 long-term GDP growth outlooks.

15	**Q.**	**WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE**
16		**IN YOUR MULTI-STAGE GROWTH DCF ANALYSIS?**

17 **A.** I relied on the same 13-week stock price and the most recent quarterly dividend

18 payment data discussed above. For stage one growth, I used the consensus analysts'

19 growth rate projections discussed above in my constant growth DCF model. The first

20 stage growth covers the first five years, consistent with the term of the analyst growth

21 rate projections. The second stage, or transition stage, begins in year 6 and extends

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[14] *DOE/EIA Annual Energy Outlook 2014 With Projections to 2040*, April 2014 at MT-2.
[15] *CBO: The Budget and Economic Outlook:* Fiscal Years 2014 to 2024, February 2014 at 152.

1   through year 10. The second stage growth transitions the growth rate from the first

2   stage to the third stage using a linear trend. For the third stage, or long-term

3   sustainable growth stage, which starts in year 11, I used a 4.7% long-term sustainable

4   growth rate, which is based on the consensus economists' long-term projected nominal

5   GDP growth rate.

6 **Q.**   **WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF**
7   **MODEL?**

8 **A.**   As shown in Exhibit No. ___(MPG-13), the average and median DCF returns on

9   equity for my proxy group are 8.68% and 8.69%, respectively.

10 **Q.**   **PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.**

11 **A.**   The results from my DCF analyses are summarized in Table 3 below:

TABLE 3

Summary of DCF Results

Description	Proxy Group	
	Average	**Median**
Constant Growth DCF Model (Analysts' Growth)	8.90%	9.23%
Constant Growth DCF Model (Sustainable Growth)	8.55%	8.40%
Multi-Stage Growth DCF Model	<u>8.68%</u>	<u>8.69%</u>
Average	8.71%	8.77%

12   My DCF studies indicate a return on equity of 8.80% is a reasonable return for

13   Avista in this case.

1   **II.J. Risk Premium Model**

2   **Q.   PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

3   **A.**   This model is based on the principle that investors require a higher return to assume

4   greater risk. Common equity investments have greater risk than bonds because bonds

5   have more security of payment in bankruptcy proceedings than common equity and

6   the coupon payments on bonds represent contractual obligations. In contrast,

7   companies are not required to pay dividends or guarantee returns on common equity

8   investments. Therefore, common equity securities are considered to be more risky

9   than bond securities.

10   This risk premium model is based on two estimates of an equity risk premium.

11   First, I estimated the difference between the required return on utility common equity

12   investments and U.S. Treasury bonds. The difference between the required return on

13   common equity and the Treasury bond yield is the risk premium. I estimated the risk

14   premium on an annual basis for each year over the period 1986 through March 2014.

15   The common equity required returns were based on regulatory commission-authorized

16   returns for electric utility companies. Authorized returns are typically based on expert

17   witnesses' estimates of the contemporary investor-required return.

18   The second equity risk premium estimate is based on the difference between

19   regulatory commission-authorized returns on common equity and contemporary

20   "A" rated utility bond yields by Moody's. I selected the period 1986 through March

21   2014 because public utility stocks consistently traded at a premium to book value

22   during that period. This is illustrated in Exhibit No. ___(MPG-14), which shows that

23   the market to book ratio since 1986 for the electric utility industry was consistently

1   above a multiple of 1.0x. Over this period, regulatory authorized returns were

2   sufficient to support market prices that at least exceeded book value. This is an

3   indication that regulatory authorized returns on common equity supported a utility's

4   ability to issue additional common stock without diluting existing shares. It further

5   demonstrates that utilities were able to access equity markets without a detrimental

6   impact on current shareholders.

7   Based on this analysis, as shown in Exhibit No. ___(MPG-15), the average

8   indicated equity risk premium over U.S. Treasury bond yields has been 5.35%. Of the

9   29 observations, 23 indicated risk premiums fall in the range of 4.41% to 6.18%.

10   Since the risk premium can vary depending upon market conditions and changing

11   investor risk perceptions, I believe using an estimated range of risk premiums provides

12   the best method to measure the current return on common equity using this

13   methodology.

14   As shown in Exhibit No. ___(MPG-16), the average indicated equity risk

15   premium over contemporary Moody's utility bond yields was 3.97% over the period

16   1986 through March 2014. The indicated equity risk premium estimates based on this

17   analysis primarily fall in the range of 3.03% to 5.01% over this time period.

18 **Q.** **DO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES**
19   **ARE BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT**
20   **TO DRAW ACCURATE CONCLUSIONS CONCERNING CONTEMPORARY**
21   **MARKET CONDITIONS?**

22 **A.** No. The time period I use in this risk premium study is a generally accepted period to

23   develop a risk premium study using "expectational" data.

1   Contemporary market conditions can change dramatically during the period

2   that rates determined in this proceeding will be in effect. A relatively long period of

3   time where stock valuations reflect premiums to book value is an indication that the

4   authorized returns on equity and the corresponding equity risk premiums were

5   supportive of investors' return expectations and provided utilities access to the equity

6   markets under reasonable terms and conditions. Further, this time period is long

7   enough to smooth abnormal market movement that might distort equity risk

8   premiums. While market conditions and risk premiums do vary over time, this

9   historical time period is a reasonable period to estimate contemporary risk premiums.

10   Alternatively, studies have recommended that use of "actual achieved

11   investment return data" in a risk premium study should be based on long historical

12   time periods. The studies find that achieved returns over short time periods may not

13   reflect investors' expected returns due to unexpected and abnormal stock price

14   performance. Short-term abnormal actual returns would be smoothed over time and

15   the achieved actual investment returns over long time periods would approximate

16   investors' expected returns. Therefore, it is reasonable to assume that averages of

17   annual achieved returns over long time periods will generally converge on the

18   investors' expected returns.

19   My risk premium study is based on expectational data, not actual investment

20   returns, and, thus, need not encompass a very long historical time period.

1 **Q. BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU**
2 **USED TO ESTIMATE AVISTA'S COST OF COMMON EQUITY IN THIS**
3 **PROCEEDING?**

4 **A.** The equity risk premium should reflect the relative market perception of risk in the

5 utility industry today. I have gauged investor perceptions in utility risk today in

6 Exhibit No. ___(MPG-17). On that exhibit, I show the yield spread between utility

7 bonds and Treasury bonds over the last 35 years. As shown on this exhibit, the

8 average utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utility

9 bonds for this historical period are 1.53% and 1.94%, respectively. The utility bond

10 yield spreads over Treasury bonds for "A" and "Baa" rated utilities during January-

11 March 2014 are 0.88% and 1.35%, respectively. The current average "A" and "Baa"

12 rated utility bond yield spreads over Treasury bond yields are now lower than the

13 35-year average spreads.

14 A current 13-week average "A" rated utility bond yield of 4.31%, when

15 compared to the current Treasury bond yield of 3.43% as shown in Exhibit No.

16 ___(MPG-18), page 1, implies a yield spread of around 88 basis points. This current

17 utility bond yield spread is lower than the 35-year average spread for "A" utility bonds

18 of 1.53%. Similarly, the current spread for the "Baa" utility yields of 1.31% is lower

19 than the 35-year average spread of 1.94%.

20 These utility bond yield spreads are clear evidence that the market considers

21 the utility industry to be a relatively low-risk investment and demonstrates that utilities

22 continue to have strong access to capital.

| 1 | Q. | **HOW DID YOU ESTIMATE AVISTA'S COST OF COMMON EQUITY WITH** |
| 2 | | **THIS RISK PREMIUM MODEL?** |

3　A.　I added a projected long-term Treasury bond yield to my estimated equity risk

4　　premium over Treasury yields. The 13-week average 30-year Treasury bond yield,

5　　ending June 27, 2014, was 3.43%, as shown in Exhibit No. ___(MPG-18), page 1.

6　　*Blue Chip Financial Forecasts* projects the 30-year Treasury bond yield to be 4.40%,

7　　and a 10-year Treasury bond yield to be 3.70%.[16] Using the projected 30-year

8　　Treasury bond yield of 4.40%, and a Treasury bond risk premium of 4.41% to 6.18%,

9　　as developed above, produces an estimated common equity return in the range of

10　　8.81% (4.40% + 4.41%) to 10.58% (4.40% + 6.18%). My risk premium estimates fall

11　　in the range of 8.81% to 10.58%.

12　　　　I next added my equity risk premium over utility bond yields to a current

13　　13-week average yield on "Baa" rated utility bonds for the period ending June 27,

14　　2014 of 4.74%. Adding the utility equity risk premium of 3.03% to 5.01%, as

15　　developed above, to a "Baa" rated bond yield of 4.74%, produces a cost of equity in

16　　the range of 7.77% (4.74% + 3.03%) to 9.75% (4.74% + 5.01%).

17　Q.　**WHAT IS YOUR RECOMMENDED RETURN FOR AVISTA BASED ON**
18　　**YOUR RISK PREMIUM STUDY?**

19　A.　My recommendation considers both utility security risk and market interest rate risk.

20　　Current interest rate spreads suggest the market is embracing utility investments as

21　　relatively low-risk investment alternatives. This is clearly evident from the low utility

22　　bond spreads relative to Treasury bonds currently compared to the historical time

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[16]　　*Blue Chip Financial Forecasts*, July 1, 2014 at 2.

1	period studied.[17] Also, the market is pricing "Baa" utility bonds to produce lower
2	yields compared to general corporate "Baa" bonds. On average over time, "Baa"
3	utility bond yields are higher than "Baa" corporate bond yields, but not currently.[18]
4	All of this supports my conclusion that the utility industry is perceived as a low-risk
5	stable investment.
6	On the other hand, the Federal Reserve has been procuring long-term Treasury
7	and collateralized bonds in an effort to stimulate the U.S. economy. This stimulus has
8	reduced long-term interest rates. This government stimulus initiative has been
9	reduced and is expected to be suspended in the near future. The suspension of the
10	Federal Reserve's stimulus in long-term interest rate markets could cause long-term
11	market interest rates to increase. I believe there is additional risk in long-term interest
12	rate markets created by this Federal Reserve stimulus policy.
13	I recommend giving more weight to the high-end of my risk premium results to
14	reflect the greater current market interest rate risk. I propose to provide 70% weight to
15	the high-end of my risk premium estimates and 30% to the low-end of my risk
16	premium estimates. Providing more weight to the high-end risk premium captures the
17	greater market interest rate risk. This results in a risk premium estimate over Treasury
18	bond yields of 10.05%,[19] and a risk premium estimate over "Baa" utility bond yields
19	of 9.16%.[20]

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[17]   <u>See</u> Exhibit Nos. ___(MPG-17 and MPG-18).
[18]   <u>Id.</u>
[19]   70% (10.58%) + 30% (8.81%) = 10.05%.
[20]   70% (9.75%) + 30% (7.77%) = 9.16%.

1   My risk premium analyses produce a return estimate in the range of 9.16% to

2   10.05%, with a midpoint of approximately 9.60%.

3   **II.K. Capital Asset Pricing Model ("CAPM")**

4   **Q.   PLEASE DESCRIBE THE CAPM.**

5   **A.**   The CAPM method of analysis is based upon the theory that the market-required rate

6   of return for a security is equal to the risk-free rate, plus a risk premium associated

7   with the specific security. This relationship between risk and return can be expressed

8   mathematically as follows:

9           $R_i = R_f + B_i \times (R_m - R_f)$ where:

10   R_i =   Required return for stock i
11   R_f =   Risk-free rate
12   R_m =   Expected return for the market portfolio
13   B_i =   Beta - Measure of the risk for stock

14   The stock-specific risk term in the above equation is beta. Beta represents the

15   investment risk that cannot be diversified away when the security is held in a

16   diversified portfolio. When stocks are held in a diversified portfolio, firm-specific

17   risks can be eliminated by balancing the portfolio with securities that react in the

18   opposite direction to firm-specific risk factors (e.g., business cycle, competition,

19   product mix, and production limitations).

20   The risks that cannot be eliminated when held in a diversified portfolio are

21   non-diversifiable risks. Non-diversifiable risks are related to the market in general and

22   are referred to as systematic risks. Risks that can be eliminated by diversification are

23   regarded as non-systematic risks. In a broad sense, systematic risks are market risks,

24   and non-systematic risks are business risks. The CAPM theory suggests that the

1		market will not compensate investors for assuming risks that can be diversified away.
2		Therefore, the only risk that investors will be compensated for are systematic or
3		non-diversifiable risks. The beta is a measure of the systematic or non-diversifiable
4		risks.
5	**Q.**	**PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**
6	**A.**	The CAPM requires an estimate of the market risk-free rate, the company's beta, and
7		the market risk premium.
8	**Q.**	**WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE**
9		**RATE?**
10	**A.**	As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond
11		yield is 4.40%.[21] The current 30-year Treasury bond yield is 3.43%, as shown in
12		Exhibit No. ___(MPG-18), page 1. I used *Blue Chip Financial Forecasts*' projected
13		30-year Treasury bond yield of 4.40% for my CAPM analysis.
14	**Q.**	**WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN**
15		**ESTIMATE OF THE RISK-FREE RATE?**
16	**A.**	Treasury securities are backed by the full faith and credit of the United States
17		government, so long-term Treasury bonds are considered to have negligible credit risk.
18		Also, long-term Treasury bonds have an investment horizon similar to that of common
19		stock. As a result, investor-anticipated long-run inflation expectations are reflected in
20		both common-stock required returns and long-term bond yields. Therefore, the
21		nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a

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[21]   *Blue Chip Financial Forecasts*, July 1, 2014 at 2.

1		long-term bond yield is a reasonable estimate of the nominal risk-free rate included in
2		common stock returns.
3		Treasury bond yields, however, do include risk premiums related to
4		unanticipated future inflation and interest rates. A Treasury bond yield is not a
5		risk-free rate. Risk premiums related to unanticipated inflation and interest rates are
6		systematic or market risks. Consequently, for companies with betas less than 1.0,
7		using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis
8		can produce an overstated estimate of the CAPM return.
9	**Q.**	**WHAT BETA DID YOU USE IN YOUR ANALYSIS?**
10	**A.**	As shown in Exhibit No. ___(MPG-19), the proxy group average *Value Line* beta
11		estimate is 0.75.
12	**Q.**	**HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?**
13	**A.**	I derived two market risk premium estimates, a forward-looking estimate and one
14		based on a long-term historical average.
15		The forward-looking estimate was derived by estimating the expected return
16		on the market (as represented by the S&P 500) and subtracting the risk-free rate from
17		this estimate. I estimated the expected return on the S&P 500 by adding an expected
18		inflation rate to the long-term historical arithmetic average real return on the market.
19		The real return on the market represents the achieved return above the rate of inflation.
20		Morningstar's *Stocks, Bonds, Bills and Inflation 2014 Classic Yearbook*
21		estimates the historical arithmetic average real market return over the period 1926 to

1   2013 as 8.9%.[22] A current consensus analysts' inflation projection, as measured by

2   the Consumer Price Index, is 2.3%.[23] Using these estimates, the expected market

3   return is 11.40%.[24] The market risk premium then is the difference between the

4   11.40% expected market return, and my 4.40% risk-free rate estimate, or

5   approximately 7.0%.

6   The historical estimate of the market risk premium was also estimated by

7   Morningstar in *Stocks, Bonds, Bills and Inflation 2014 Classic Yearbook*. Over the

8   period 1926 through 2013, Morningstar's study estimated that the arithmetic average

9   of the achieved total return on the S&P 500 was 12.1%,[25] and the total return on

10   long-term Treasury bonds was 5.9%.[26] The indicated market risk premium is 6.2%

11   (12.1% - 5.9% = 6.2%). The average of my market risk premium estimates is 6.6%

12   (6.2% to 7.0%).

13 **Q.**   **HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE**
14   **COMPARE TO THAT ESTIMATED BY MORNINGSTAR?**

15 **A.**   Morningstar's analysis indicates that a market risk premium falls somewhere in the

16   range of 6.2% to 7.0%. My market risk premium falls in the range of 6.2% to 7.0%.

17   My average market risk premium of 6.6% is within Morningstar's range.

18   Morningstar estimates a forward-looking market risk premium based on actual

19   achieved data from the historical period of 1926 through 2013. Using this data,

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[22] *Morningstar, Inc., Ibbotson SBBI 2014 Classic Yearbook*: Market Results for Stocks, Bonds, Bills, and Inflation 1926-2013 at 92.
[23] *Blue Chip Financial Forecasts*, July 1, 2014 at 2.
[24] $\{\ [\ (1 + 0.089) * (1 + 0.023)\ ] - 1\ \} * 100.$
[25] *Morningstar, Inc., Ibbotson SBBI 2014 Classic Yearbook* at 87.
[26] Id.

1   Morningstar estimates a market risk premium derived from the total return on large

2   company stocks (S&P 500), less the income return on Treasury bonds. The total

3   return includes capital appreciation, dividend or coupon reinvestment returns, and

4   annual yields received from coupons and/or dividend payments. The income return, in

5   contrast, only reflects the income return received from dividend payments or coupon

6   yields. Morningstar argues that the income return is the only true risk-free rate

7   associated with Treasury bonds and is the best approximation of a truly risk-free

8   rate.[27] I disagree with this assessment from Morningstar, because it does not reflect a

9   true investment option available to the marketplace and therefore does not produce a

10   legitimate estimate of the expected premium of investing in the stock market versus

11   that of Treasury bonds. Nevertheless, I will use Morningstar's conclusion to show the

12   reasonableness of my market risk premium estimates.

13   Morningstar's range is based on several methodologies. First, Morningstar

14   estimates a market risk premium of 7.0% based on the difference between the total

15   market return on common stocks (S&P 500) less the income return on Treasury bond

16   investments. Second, Morningstar found that if the New York Stock Exchange (the

17   "NYSE") was used as the market index rather than the S&P 500, that the market risk

18   premium would be 6.8%, not 7.0%. Third, if only the two deciles of the largest

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[27]   Id. at 153.

1   companies included in the NYSE were considered, the market risk premium would be

2   6.2%.[28]

3   Finally, Morningstar found that the 6.7% market risk premium based on the

4   S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios

5   relative to earnings and dividend growth during the period 1980 through 2001.

6   Morningstar believes this abnormal P/E expansion is not sustainable.[29] Therefore,

7   Morningstar adjusted this market risk premium estimate to normalize the growth in the

8   P/E ratio to be more in line with the growth in dividends and earnings. Based on this

9   alternative methodology, Morningstar published a long-horizon supply-side market

10   risk premium of 6.1%.[30]

11 **Q.   WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**

12 **A.** As shown in Exhibit No. ___(MPG-20), based on Morningstar's market risk premium

13   of 6.2% to 7.0%, a risk-free rate of 4.40%, and a beta of 0.75, my CAPM analysis

14   produces a return of 9.04% to 9.61% with a midpoint of approximately 9.32%.

15   This CAPM estimate reflects a projected risk-free rate that is more than

16   95 basis points higher than the current long-term risk-free rate as proxied by the U.S.

17   Treasury security. Using this projected Treasury bond yield largely captures the

18   additional risk in the marketplace related to the uncertainty of long-term interest rates

19   after the Federal Reserve discontinues its economic stimulus intervention.

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[28]   Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization
       benchmarks. Id. at 152.
[29]   Id. at 156.
[30]   Id.

1   **II.L. Return on Equity Summary**

2   **Q.**   **BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY**
3   **ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY**
4   **DO YOU RECOMMEND FOR AVISTA?**

5   **A.**   Based on my analyses, I estimate Avista's current market cost of equity to be 9.20%.

TABLE 4

Return on Common Equity Summary

Description	Results
DCF	8.80%
Risk Premium	9.60%
CAPM	9.32%

6   My recommended return on common equity of 9.20% is the midpoint of my

7   estimated range of 8.80% to 9.60%. The high-end of my estimated range is based on

8   my risk premium studies, and the low-end is based on my DCF studies. The midpoint

9   of this range reflects current market capital costs, increased interest rate risk in the

10   current market due to Federal Reserve policies and other factors, and represents fair

11   compensation to Avista's investors for the total investment risk of its regulated utility.

12   **II.M. Financial Integrity**

13   **Q.**   **WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT**
14   **AN INVESTMENT GRADE BOND RATING FOR AVISTA?**

15   **A.**   Yes. I have reached this conclusion by comparing the key credit rating financial ratios

16   for Avista, at my proposed return on equity and capital structure, to S&P's benchmark

17   financial ratios using S&P's new credit metric ranges.

| 1 | Q. | **PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO** |
| 2 | | **CREDIT METRIC METHODOLOGY.** |

3 A. S&P publishes a matrix of financial ratios that correspond to its assessment of the

4 business risk of the utility companies and related bond rating. On May 27, 2009, S&P

5 expanded its matrix criteria[31] by including additional business and financial risk

6 categories. Based on S&P's most recent credit matrix, the business risk profile

7 categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and

8 "Vulnerable." Most utilities have a business risk profile of "Excellent" or "Strong."

9 The financial risk profile categories are "Minimal," "Modest," "Intermediate,"

10 "Significant," "Aggressive," and "Highly Leveraged." Most of the utilities have a

11 financial risk profile of "Aggressive." Avista has a "Strong" business risk profile and

12 a "Significant" financial risk profile.

| 13 | Q. | **PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK** |
| 14 | | **RATIOS IN ITS CREDIT RATING REVIEW.** |

15 A. S&P evaluates a utility's credit rating based on an assessment of its financial and

16 business risks. A combination of financial and business risks equates to the overall

17 assessment of Avista's total credit risk exposure. On November 19, 2013, S&P

18 updated its methodology. In its update, S&P published a matrix of financial ratios that

19 defines the level of financial risk as a function of the level of business risk.

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[31]   S&P updated its 2008 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1   S&P publishes ranges for three primary financial ratios that it uses as guidance

2   in its credit review for utility companies. The two core financial ratio benchmarks it

3   relies on in its credit rating process include: (1) Debt to Earnings Before Interest,

4   Taxes, Depreciation and Amortization ("EBITDA"); and (2) Funds From Operations

5   ("FFO") to Total Debt.[32]

6 **Q.   HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE**

7   **REASONABLENESS OF YOUR RATE OF RETURN**

8   **RECOMMENDATIONS?**

9 **A.**   I calculated each of S&P's financial ratios based on Avista's cost of service for its

10   retail jurisdictional operations. While S&P would normally look at total consolidated

11   Avista financial ratios in its credit review process, my investigation in this proceeding

12   is not the same as S&P's. I am attempting to judge the reasonableness of my proposed

13   cost of capital for rate-setting in Avista's retail regulated utility operations in

14   Washington. Hence, I am attempting to determine whether my proposed rate of return

15   will in turn support cash flow metrics, balance sheet strength, and earnings that will

16   support an investment grade bond rating and Avista's financial integrity.

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[32] *Standard & Poor's RatingsDirect*: "Criteria: Corporate Methodology," November 19, 2013.

1   **Q.**   **DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT EQUIVALENTS?**

2   **A.**   Yes. As shown on page 4 of my Exhibit No. ___(MPG-21C), I included

3   of off-balance sheet debt equivalents including purchased power

4   agreements and operating leases and their associated interest and depreciation

5   expenses. I did not include some of the off-balance sheet debt equivalents that S&P

6   includes in its credit rating review. Certain off-balance sheet debt equivalents, such as

7   pension and OPEB accrued interest expense, were excluded from my jurisdictional

8   metric study because these items are controllable by utility management, or do not

9   relate to regulated cost of service.

10   Specifically, companies' obligations for pension and OPEB are largely

11   impacted by management's decisions to make cash contributions to the trust

12   supporting these employee benefits. In ratemaking, companies are allowed to fully

13   recover their pension and OPEB expenses from ratepayers over time in a manner

14   consistent with regulatory commission decisions. The debt-like nature of these

15   obligations is controlled in part by management's discretion in making cash

16   contributions to the pension/OPEB trust, and in part by the regulatory commissions

17   finding an appropriate regulatory treatment for these employee costs.

18   All interest expense associated with investment in utility plant and equipment

19   is included in this analysis, and any accrued interest expense is not related to regulated

20   operations in this jurisdiction.

1   As such, I believe my off-balance sheet adjustments to my credit metrics

2   reasonably reflect the credit metrics consistent with the rate structure used to provide

3   full recovery of Avista's cost of service on its regulated investment serving

4   Washington.

5   These adjustments are necessary to measure the financial integrity of the retail

6   cost structure. To ignore these items places customers in Washington at risk of paying

7   a higher return to support financial obligations that are not related to Washington retail

8   utility operations.

9   **Q.   PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS**
10   **FOR AVISTA'S ELECTRIC RETAIL OPERATIONS.**

11   **A.**   The S&P financial metric calculations for Avista at a 9.20% return are developed on

12   Exhibit No. ___(MPG-21C), page 1.

13   Avista's adjusted total debt ratio is approximately 54%. This adjusted total

14   debt ratio will support an investment grade bond rating.

15   Based on an equity return of 9.20%, Avista will be provided an opportunity to

16   produce a debt to EBITDA ratio of 4.6x. This is within S&P's "Aggressive" guideline

17   range of 4.5x to 5.5x.[33/] This ratio also supports an investment grade credit rating.

18   Avista's retail operations FFO to total debt coverage at a 9.20% equity return

19   is 13%, which is within S&P's "Significant" metric guideline range of 13% to 23%.

20   This FFO/total debt ratio will support an investment grade bond rating.

[33/]   Id.

1   At my recommended return on equity of 9.20% and my proposed capital

2   structure, Avista's financial credit metrics are supportive of its current investment

3   grade utility bond rating.

4 **Q.**   **PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS**
5   **FOR AVISTA'S GAS RETAIL OPERATIONS.**

6 **A.**   The S&P financial metric calculations for Avista at a 9.20% return are developed on

7   Exhibit No. ___(MPG-21C), page 2.

8   Avista's adjusted total debt ratio is approximately 54%. This adjusted total

9   debt ratio will support an investment grade bond rating.

10   Based on an equity return of 9.20%, Avista will be provided an opportunity to

11   produce a debt to EBITDA ratio of 3.1x. This is within S&P's "Intermediate"

12   guideline range of 2.5x to 3.5x.[34] This ratio also supports an investment grade credit

13   rating.

14   Avista's retail operations FFO to total debt coverage at a 9.20% equity return

15   is 25%, which is within S&P's "Intermediate" metric guideline range of 23% to 35%.

16   This FFO/total debt ratio will support an investment grade bond rating.

17   At my recommended return on equity of 9.20% and my proposed capital

18   structure, Avista's financial credit metrics are supportive of its current investment

19   grade utility bond rating.

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[34]   Id.

1   **II.N. Response To Avista Witness Mr. Adrien Mckenzie**

2   **Q.   WHAT IS AVISTA'S RETURN ON EQUITY RECOMMENDATION?**

3   **A.**   Avista's rate of return witness, Mr. McKenzie, recommends a return on equity of

4   10.10%, which is within his recommended range of 9.65% to 11.15%.[35/] Mr.

5   McKenzie's range is based on a bare bones range of 9.5% to 11.0%, plus a 15 basis

6   point flotation cost adjustment to arrive at his recommended rate of 9.65% to

7   11.15%.[36/]

8   Mr. McKenzie's recommended range, and his proposed flotation cost

9   adjustment, are unreasonable and should be disregarded. For the reasons below, the

10   15 basis point flotation cost adjustment is not shown to be just and reasonable for

11   Avista, and his bare bones cost estimate of 9.5% to 11.0% overstates a fair return on

12   equity for Avista. These findings are described in detail below.

13   **Flotation Costs**

14   **Q.   DID MR. MCKENZIE INCLUDE A FLOTATION COST ADJUSTMENT IN**
15   **   HIS RECOMMENDED RETURN FOR AVISTA?**

16   **A.**   Yes. Mr. McKenzie asserts that it is appropriate to include a flotation cost adjustment

17   to historical equity issues regardless if the utility is planning on issuing additional

18   shares of stock. He acknowledges that there is no standard method for reflecting

19   flotation costs in return on equity methodology, so he proposes a methodology

20   advocated in certain regulatory finance books and that used by Morgan Stanley.[37/]

[35/]   Direct Testimony of Adrien McKenzie, Exh. No.___(AMM-1T) at 4.
[36/]   Id. at 45.
[37/]   Id. at 38.

1   He develops a flotation cost adder using a dividend yield of around 4.2%,

2   multiplied by a flotation adjustment of 3.6% (4.2% x 3.6% = 0.15%).

3   **Q.   WHY IS MR. MCKENZIE'S FLOTATION COST ADJUSTMENT FLAWED?**

4   **A.**   Mr. McKenzie's flotation cost adjustment is not based on the recovery of prudent and

5   reasonable flotation expenses for Avista. Rather, as discussed at pages 35 through 38

6   of Mr. McKenzie's direct testimony, he derives a flotation cost adjustment based on

7   generic cost information of other companies based on a published study. Because he

8   does not show that his adjustment is based on Avista's actual and verifiable flotation

9   expenses, there simply are no means of verifying whether Mr. McKenzie's proposal is

10   reasonable or appropriate for Avista.

11   Stated differently, Mr. McKenzie's flotation cost adder is not based on known

12   and measurable Avista costs. Therefore, the Commission should reject Mr.

13   McKenzie's proposed flotation expense return on equity adder.

14   **Q.   HOW DID MR. MCKENZIE DEVELOP HIS BARE BONES RETURN ON**
15   **   EQUITY RANGE?**

16   **A.**   Mr. McKenzie developed his return on equity recommendation by applying the DCF,

17   Empirical CAPM ("ECAPM"), and Risk Premium model to his utility proxy group.

18   He then corroborates his results by comparing them to the results of a traditional

19   CAPM and Expected Earnings model applied to the same utility proxy group, and a

20   constant growth DCF applied to a non-utility low-risk proxy group.

21   As shown below in Table 5, Mr. McKenzie's analyses produce a return on

22   equity in the range of 9.5% to 11.0%. However, reasonable adjustments to

1   Mr. McKenzie's DCF, CAPM and RP studies reduces his return on equity estimate for

2   Avista to below 9.5%.

TABLE 5

Mr. McKenzie's ROE Analysis
(Utility Proxy Group)

Model	McKenzie Average (1)	Adjusted (2)
DCF	8.6% - 9.8%	8.6% - 9.8%
Midpoint		9.2%
ECAPM (Current)		
Unadjusted	10.7%	9.09%
Size Adjusted	11.7%	7.6%
Midpoint		8.35%
ECAPM (Projected)		
Unadjusted	10.8%	9.59%
Size Adjusted	11.8%	7.7%
Midpoint		8.7%
Risk Premium		
Current	10.4%	8.78%
Projected	11.2%	10.10%
Average		9.4%
Range	9.5% - 11.0%	8.60 – 9.80%
Flotation Cost Adder	0.15%	Reject
Adjusted Range	9.6% - 11.1%	8.35% – 9.4%
Recommended ROE	10.1%	8.35% - 9.4%
CAPM (Current)		
Unadjusted	10.2%	9.1%
Size Adjusted	11.1%	Reject
CAPM (Projected)		
Unadjusted	10.3%	9.6%
Size Adjusted	11.2%	Reject
Expected Earnings		
Industry	10.4%	Reject
Proxy Group	9.7%	Reject

Sources: Exhibit No. ___(AMM-1T) at 4,
and Exhibit No. ___(AMM-4).

1   As shown under Column 2 in Table 5 above, reasonable adjustments to certain

2   of Mr. McKenzie's return on equity estimates support a return on equity in the range of

3   8.6% to 9.8%. This range throws out Mr. McKenzie's lowest and highest estimates.

4   This range implies a point estimate of 9.2% which supports my recommended return

5   on equity for Avista in this proceeding.

6 **Q.   PLEASE DESCRIBE MR. MCKENZIE'S DCF ANALYSIS.**

7 **A.**   Mr. McKenzie applied the traditional DCF model to his utility proxy group. Based on

8   his utility proxy group, the DCF results average in the range of 8.6% to 9.8%, with a

9   midpoint range of 9.5% to 11.3%.[38]

10   In developing his recommended DCF range, Mr. McKenzie excluded what he

11   found to be low-end results. However, he did not make corresponding adjustments to

12   exclude high-end results. Therefore, his estimated DCF range is biased and

13   overstated. Nevertheless, even with this bias, Mr. McKenzie's utility proxy group's

14   constant growth DCF study is clear proof that capital market costs today are quite low,

15   and a return on equity of 9.20% is well within his bare bones DCF range of 8.6% to

16   9.8%.

17 **Q.   DO YOU BELIEVE THAT MR. MCKENZIE'S METHOD OF**
18 **INTERPRETING HIS DCF RESULTS IS BALANCED?**

19 **A.**   No. It is not balanced to exclude low-end estimates, without also excluding high-end

20   estimates. To the extent there are outliers within the range, a more appropriate means

21   of estimating the central tendency of the results of the proxy group is simply to rely on

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[38]   Exh. No.___(AMM-4).

1   all the individual company estimates but measure the group median result. As shown

2   on my Exhibit No. ___(MPG-22), Mr. McKenzie's proxy group estimates, relying on

3   all the proxy group companies, produce median DCF estimates in the range of 7.8% to

4   8.5%.

5   Q. **PLEASE DESCRIBE MR. MCKENZIE'S CURRENT AND PROJECTED**
6   **MARKET RISK PREMIUM ECAPM ANALYSES.**

7   A. Mr. McKenzie developed an ECAPM analysis based on current and projected

8   Treasury bond yields. Mr. McKenzie estimates a current and projected return on the

9   market of 12.4%. From this market return estimate he subtracts his risk-free rates of

10   3.9% and 4.4%, to arrive at market risk premiums of 8.5% and 8.0%, respectively.[39]

11   He then uses an ECAPM model that applies a 25% weighting factor to the

12   market beta of one, and a 75% weighting factor to the utility beta.

13   He relies on the *Value Line* utility betas for the companies included in his

14   utility proxy group[40] to produce an average cost of equity for his utility proxy group

15   of 10.7% to 10.8%.[41]

16   He then adds a size adjustment to his ECAPM return estimate of

17   approximately 1.00% to arrive at his cost of equity for the utility proxy group of

18   11.7% to 11.8%.[42]

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[39]   Exh. No.___(AMM-8).
[40]   Exh. No.___(AMM-1T) at 43.
[41]   Exh. No.___(AMM-8).
[42]   Id.

1	**Q.**	**ARE MR. MCKENZIE'S CURRENT AND PROJECTED ECAPM ANALYSES**
2		**REASONABLE?**

3   **A.**   No. Mr. McKenzie's ECAPM analyses are based on market risk premiums of 8.0% to

4   8.5%. These market risk premium estimates are based on an inflated DCF return on

5   the market. Mr. McKenzie's DCF market return estimate of 12.4% is based on a

6   growth rate projection of 10.1% and a dividend yield of 2.3%.

7   This market DCF return is not reasonable because it is based on an irrationally

8   high market long-term growth outlook of 10.1%.[43] It is not rational to expect that the

9   market can grow at a 10.1% annual rate for an indefinite period of time.

10   This is important because the DCF model requires a sustainable long-term

11   growth rate, not simply a growth rate that might be appropriate for the next five years.

12   The growth rate for the overall securities market must reflect the economy in which its

13   companies operate, and the earnings and dividend-paying ability of those companies.

14   Companies produce earnings and dividends by selling goods and services in the

15   marketplace. Hence, companies' earnings growth and sales growth opportunities

16   cannot be substantially in excess of the expected growth in the overall economy. It is

17   simply not a rational expectation to believe that, for an extended period of time, the

18   growth rate of companies will exceed the growth of the overall economy in which they

19   sell their goods and services.

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[43]   In the footnotes of Exh. No. ___(AMM-8), Mr. McKenzie asserts that this growth rate is a weighted average I/B/E/S growth rate estimate, three- to five-year outlook. However, he used the three- to five-year outlook in a constant growth model, which requires a growth rate that is sustainable indefinitely. As such, despite the source of growth rate data he relied on, he uses this growth rate as a long-term sustainable growth rate on the market.

1   As I mentioned above, *Blue Chip Financial Forecasts* projects an average 5- to

2   10-year nominal growth in the GDP, or overall U.S. economy, of 4.7%.[44] Hence,

3   expecting a growth rate of 10.1%, in essence, assumes that the securities market can

4   grow at a rate more than twice that of the overall U.S. economy. This is simply not a

5   rational expectation because it defies economic logic.

6   **Q.   DO YOU HAVE ANY ADDITIONAL CONCERNS WITH MR. MCKENZIE'S**
7   **ECAPM ANALYSIS?**

8   **A.**   Yes. Mr. McKenzie's ECAPM analysis is flawed and should be rejected. Mr.

9   McKenzie's ECAPM analysis is flawed because he develops this model with adjusted

10   utility betas. An ECAPM analysis flattens the security market line, and is designed for

11   raw beta estimates, not adjusted betas. Beta adjustments accomplish virtually the

12   same thing as an ECAPM analysis. They flatten the security market line, and increase

13   the intercept at the risk-free rate. ECAPM analysis is not designed to be used with

14   adjusted betas, but rather is designed to be used with unadjusted betas. Mr.

15   McKenzie's proposal to use adjusted betas within an ECAPM analysis is unreasonable

16   and double counts the attempt to flatten the security market line and increase CAPM

17   estimates for companies with betas below 1, and decrease CAPM estimates for

18   companies with betas greater than 1.

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[44]   *Blue Chip Financial Forecasts*, June 1, 2014 at 14.

1 **Q.** **PLEASE DESCRIBE WHY MR. MCKENZIE'S ECAPM ANALYSIS DOUBLE**
2 **COUNTS THE ATTEMPT TO FLATTEN THE SECURITY MARKET LINE,**
3 **AND INCREASE THE CAPM RETURN ESTIMATES FOR COMPANIES**
4 **WITH BETAS LESS THAN 1.**

5 **A.** This flattening of the security market line, or the CAPM return estimate, is redundant

6 with the use of *Value Line*'s adjusted betas and, therefore, is unreasonable. The *Value*

7 *Line* beta Mr. McKenzie relied on to estimate a utility beta is already adjusted for the

8 tendencies of betas lower than 1 to increase toward the market beta of 1 over time.

9 That is, an adjusted beta will increase a CAPM return estimate for companies with raw

10 betas less than 1, and decrease CAPM return estimates for companies with raw betas

11 greater than 1. A raw beta is an unadjusted beta. *Value Line* adjusts its raw beta by

12 weighting the raw beta with a market beta of 1. Specifically, *Value Line*'s adjusted

13 beta formula is to apply a weight as follows:

14 Adjusted Beta = Raw Beta x 67% + Market Beta x 35%.

15 The practical effect of *Value Line*'s beta adjustment is that it flattens the

16 security market line in the same way that the ECAPM does. Consequently, *Value*

17 *Line*'s beta adjustment formula accomplishes the same thing as the ECAPM analysis.

18 Hence, the use of *Value Line* adjusted betas in an ECAPM double-counts this return

19 adjustment. Indeed, comparison is made of the implied ECAPM beta estimate, versus

20 traditional *Value Line* beta estimates on my Exhibit No. ___(MPG-23), for the proxy

21 group companies. The suggestion that ECAPM is a different adjustment to the CAPM

22 results simply defies mathematical reality.

23 Mr. McKenzie's use of an adjusted beta in an ECAPM analysis double-counts

24 the increase to a CAPM return estimate for utility betas less than 1. I am not aware of

1   any academic support for use of an adjusted beta in an ECAPM analysis.

2   Consequently, Mr. McKenzie's application of an ECAPM analysis with an adjusted

3   beta distorts and erroneously increases the CAPM return estimate for his utility proxy

4   group.

5 **Q. IS MR. MCKENZIE'S PROPOSAL TO INCREASE HIS CAPM RETURN**
6 **ESTIMATE BY APPROXIMATELY A ONE PERCENTAGE POINT SIZE**
7 **ADJUSTMENT RETURN ADDER APPROPRIATE?**

8 **A.**   No. Mr. McKenzie's size adjustment return on equity adder is based on estimates

9   made by Morningstar in its *Ibbotson SBBI 2013 Valuation Yearbook*. In that

10   publication, Morningstar estimates various size adjustments based on differentials in

11   utility beta estimates tied to the size of a company. There are two problems with this

12   size adjustment. First, the size adjustment, in the way applied by Mr. McKenzie, is

13   not risk comparable for Avista. Second, Mr. McKenzie did not fully apply

14   Morningstar's CAPM build-up methodology. Morningstar's CAPM build-up

15   methodology includes many external adjustments, including: (1) a size adjustment as

16   recognized by Mr. McKenzie; and (2) also an industry risk premium adjustment to

17   reflect the unique risk characteristics of the industry the company operates within. Mr.

18   McKenzie simply ignored the industry risk premium factor recommended by

19   Morningstar in its CAPM build-up methodology.

20 **Q. WHY IS MR. MCKENZIE'S SIZE ADJUSTMENT TO HIS CAPM RETURN**
21 **NOT RISK COMPARABLE TO AVISTA?**

22 **A.**   His size adjustment reflects risks that are not reflective of Avista. The size adjustment

23   recommended by Mr. McKenzie reflects companies that have beta estimates in excess

1   of 1.00.[45/] These beta estimates are substantially higher than the average proxy group

2   beta of 0.74 used by Mr. McKenzie as reflective of Avista's investment risk.

3   Therefore, his size adjustment produces a CAPM return estimate that does not produce

4   a risk appropriate return for Avista and, therefore, is not a reasonable and fair return

5   for Avista.

6   **Q.   PLEASE DESCRIBE WHY MR. MCKENZIE'S PROPOSED SIZE**
7   **ADJUSTMENT IS AN INCOMPLETE APPLICATION OF MORNINGSTAR'S**
8   **PROPOSED CAPM RETURN BUILD-UP METHODOLOGY.**

9   **A.**   Morningstar's CAPM return build-up methodology includes adjustments to the raw

10   CAPM estimate for both size and industry risk differentials. Mr. McKenzie only

11   included the size adjustment. However, failing to reflect the reduced risk associated

12   with the regulated utility industry resulted in a significant overstatement of a fair

13   CAPM return estimate for Avista.

14   Specifically, Mr. McKenzie estimates a size adjustment that is appropriate for

15   Avista of a CAPM return adder of 1.00%. However, the regulated industry CAPM

16   return estimate advocated by Morningstar would be a reduction to the CAPM return

17   estimate of 4.09%.[46/] As such, a balanced application of Morningstar's proposed

18   CAPM build-up methodology would have a medium increase in the CAPM return

19   estimate for a size adjustment, but a significant decrease in the CAPM return estimate

20   to reflect the low-risk nature of the regulated utility industry. It simply was

21   imbalanced and inaccurate for Mr. McKenzie to propose the size adjustment, without

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[45/]   *Morningstar, Inc., Ibbotson 2013 2013 Valuation Yearbook* at 89.
[46/]   *Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook:* Market Results for Stocks, Bonds, Bills and Inflation 1926-2012 at 37.

1		reflecting the return on equity reduction appropriate with low-risk regulated industries
2		as proposed by Morningstar.
3	**Q.**	**HOW WOULD MR. MCKENZIE'S CURRENT AND PROJECTED ECAPM**
4		**RETURN ESTIMATES CHANGE IF A REASONABLE MARKET RISK**
5		**PREMIUM WERE USED?**
6	**A.**	Applying a market risk premium estimate of 7.0%, a beta of 0.75, and using Mr.
7		McKenzie's current and projected risk-free rates of 3.9% and 4.4%, will produce a
8		CAPM return in the range of 9.09% to 9.59%.
9		Also, reflecting a complete build-out as recommended by Morningstar on a
10		basic CAPM return estimate, which includes the beta-adjusted CAPM return, a size
11		adjustment and an industry risk premium, Mr. McKenzie's size-adjusted CAPM return
12		estimates would decline from 11.7% and 11.8% down to 7.6% and 7.7%, respectively.
13	**Q.**	**PLEASE DESCRIBE MR. MCKENZIE'S UTILITY RISK PREMIUM**
14		**ANALYSIS.**
15	**A.**	Mr. McKenzie's utility bond yield versus authorized return on common equity risk
16		premium is shown in his Exhibit No. ___(AMM-9). As shown on page 3 of this
17		exhibit, Mr. McKenzie estimated an annual equity risk premium by subtracting
18		Moody's average bond yield from the electric utility regulatory commission
19		authorized return on common equity over the period 1974 through 2013. Based on
20		this analysis, Mr. McKenzie estimates an average indicated equity risk premium over
21		current utility bond yields of 3.53%.
22		Mr. McKenzie then adjusts this average equity risk premium using a regression
23		analysis based on an expectation that there is an ongoing inverse relationship between
24		interest rates and equity risk premiums. Based on this regression analysis, Mr.

1   McKenzie increases his equity risk premium from 3.53%, up to 5.15% and 4.59%

2   relative to current and projected "BBB" rated bond yields.[47/] He then adds this

3   inflated equity risk premium to the current and projected "BBB" rated utility bond

4   yield of 5.25% to 6.60%, to produce a return on equity of 10.40% to 11.19%.[48/]

5   Mr. McKenzie's risk premium analysis is overstated because of a highly

6   suspect and inflated projected "BBB" bond yield of 6.60%, and his development of

7   risk premiums is based on the flawed and incomplete assumption that equity risk

8   premiums change by only changes in interest rates. Rather, academic literature is

9   quite clear that equity risk premiums change based on differences in the perceived risk

10   of equity securities versus bond securities, not simply caused by only changes in

11   nominal interest rates.

12   **Q.   DO YOU HAVE ANY COMMENTS CONCERNING MR. MCKENZIE'S**
13   **PROJECTED UTILITY YIELD OF 6.60%?**

14   **A.**   Yes. Mr. McKenzie uses a projected "AA" utility bond yield for the period 2014

15   through 2018 in the range of 5.75% to 6.04%, with a midpoint of 5.89%.[49/] This

16   projected yield is simply stale and incomplete.   Current "AA" utility bond yields are

17   approximately 4.3%. Mr. McKenzie's projected increase to "AA" utility bond yields

18   has not been shown to reflect consensus market outlooks.

[47/]   Exh. No. ___(AMM-9) at 1-2.
[48/]   Id.
[49/]   Exh. No. ___(AMM-3) at 25.

1   **Q.   WHY IS MR. MCKENZIE'S USE OF A SIMPLE INVERSE RELATIONSHIP**
2   **BETWEEN INTEREST RATES AND EQUITY RISK PREMIUMS NOT**
3   **REASONABLE?**

4   **A.**   Mr. McKenzie's belief that there is a simplistic inverse relationship between equity

5   risk premiums and interest rates is not supported by academic research. While

6   academic studies have shown that, in the past, there has been an inverse relationship

7   with these variables, researchers have found that the relationship changes over time

8   and is influenced by changes in perception of the risk of bond investments relative to

9   equity investments, and not simply changes to interest rates.[50]

10 In the 1980s, equity risk premiums were inversely related to interest rates, but

11 that was likely attributable to the interest rate volatility that existed at that time.

12 Interest rate volatility currently is much lower than it was in the 1980s.[51] As such,

13 when interest rates were more volatile, the relative perception of bond investment risk

14 increased relative to the investment risk of equities. This changing investment risk

15 perception caused changes in equity risk premiums.

16 In today's marketplace, interest rate variability is not as extreme as it was

17 during the 1980s. Nevertheless, changes in the perceived risk of bond investments

18 relative to equity investments still drive changes in equity premiums. However, a

19 relative investment risk differential cannot be measured simply by observing nominal

20 interest rates. Changes in nominal interest rates are highly influenced by changes to

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[50] "The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," Robert S. Harris and Felicia C. Marston, *Journal of Applied Finance*, Volume 11, No. 1, 2001; "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *Financial Management*, Spring 1985.

[51] *Morningstar, Inc., Ibbotson SBBI 2014 Classic Yearbook* at 95-96.

1   inflation outlooks, which also change equity return expectations. As such, the relevant

2   factor needed to explain changes in equity risk premiums is the relative changes to the

3   risk of equity versus debt securities investments, not simply changes to interest rates.

4   Importantly, Mr. McKenzie's analysis simply ignores investment risk

5   differentials. He bases his adjustment to the equity risk premium exclusively on

6   changes in nominal interest rates. This is a flawed methodology and does not produce

7   accurate or reliable risk premium return on equity estimates. His results should be

8   rejected by the Commission.

9   Q.   **CAN MR. MCKENZIE'S RISK PREMIUM ANALYSES BASED ON**
10   **PROJECTED YIELDS BE MODIFIED TO PRODUCE MORE REASONABLE**
11   **RESULTS?**

12 A.   Yes. Eliminating the inverse relationship adjustment to the equity risk premium of

13   3.53% and relying on Mr. McKenzie's current "BBB" rated utility yield of 5.25% will

14   result in a return on equity risk premium of 8.78% (3.53% + 5.25%).

15   The high-end range of equity premiums appears to generally fall in the range

16   of about 4.2% to 5.5% based on the last 10 years excluding extreme highs and lows.

17   Using Mr. McKenzie's current "BBB" bond yield of 5.25%, this would imply a

18   common equity return in the range of 9.45% and 10.75%, with a point estimate of

19   around 10.1%. I believe this more reasonably captures a fair equity risk premium

20   estimate using the data in Mr. McKenzie's study.

21 Q.   **PLEASE DESCRIBE MR. MCKENZIE'S CURRENT AND PROJECTED**
22   **MARKET RISK PREMIUM CAPM ANALYSES.**

23 A.   Mr. McKenzie developed a CAPM analysis based on current and projected Treasury

24   bond yields. Mr. McKenzie estimates a current and projected return on the market of

1   12.4%. From this market return estimate he subtracts his risk-free rates of 3.9% and

2   4.4%, to arrive at market risk premiums of 8.5% and 8.0%, respectively.[52]   These are

3   the same market risk premiums he used in his ECAPM analyses.

4   He relies on the same *Value Line* utility betas for the companies included in his

5   utility proxy group to produce an average cost of equity for his utility proxy group of

6   10.2% to 10.3%.

7   He then adds a size adjustment to his CAPM return estimate of approximately

8   1.00% to arrive at his cost of equity for the utility proxy group of 11.1% to 11.2%.[53]

9 Q. **ARE MR. MCKENZIE'S CURRENT AND PROJECTED CAPM ANALYSES**
10   **REASONABLE?**

11 A. No. Mr. McKenzie's ECAPM analyses are based on market risk premiums of 8.0% to

12   8.5%. These market risk premium estimates are based on an inflated DCF return on

13   the market. Mr. McKenzie's DCF market return estimate of 12.4% is based on a

14   growth rate projection of 10.1% and a dividend yield of 2.3%.

15   This market DCF return is not reasonable because it is based on an irrationally

16   high market long-term growth outlook of 10.1%.[54] It is not rational to expect that the

17   market can grow at a 10.1% annual rate for an indefinite period of time. I discussed

18   my concerns with Mr. McKenzie's market risk premium estimates at length previously

19   in my testimony.

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[52] Exh. No. ___(AMM-10).
[53] Id.
[54] In the footnotes of his Exh. No. ___(AMM-10), Mr. McKenzie asserts that this growth rate is a
weighted average I/B/E/S growth rate estimate, a three-to-five year outlook. However, he used the
three- to five-year outlook in a constant growth model, which requires a growth rate that is sustainable
indefinitely. As such, despite the source of growth rate data he relied on, he uses this growth rate as a
long-term sustainable growth rate on the market.

1 **Q. IS MR. MCKENZIE'S PROPOSAL TO INCREASE HIS CAPM RETURN**
2 **ESTIMATE BY APPROXIMATELY A ONE PERCENTAGE POINT SIZE**
3 **ADJUSTMENT RETURN ADDER APPROPRIATE?**

4 **A.** No. Mr. McKenzie's proposal to adjust his traditional CAPM results upward by a size

5 adjustment is inappropriate and should be rejected for the same reasons discussed at

6 length previously in my testimony.

7 **Q. HOW WOULD MR. MCKENZIE'S CURRENT AND PROJECTED CAPM**
8 **RETURN ESTIMATES CHANGE IF A REASONABLE MARKET RISK**
9 **PREMIUM WERE USED?**

10 **A.** Applying a market risk premium estimate of 7.0%, a beta of 0.75, and using Mr.

11 McKenzie's current and projected risk-free rate, of 3.9% and 4.4%, will produce a

12 CAPM return in the range of 9.09% to 9.59%.

13 **Q. PLEASE DESCRIBE MR. MCKENZIE'S EXPECTED EARNINGS**
14 **ANALYSIS.**

15 **A.** Mr. McKenzie's expected earnings analysis is based on *Value Line*'s projected earned

16 return on book equities for his utility proxy group, adjusted to reflect average year

17 equity returns. Based on a review of projected earnings over the next three to five

18 years, Mr. McKenzie estimates an average and midpoint return on equity for Avista of

19 9.7% and 10.8%, respectively.[55]

20 **Q. IS THE EXPECTED EARNINGS ANALYSIS A REASONABLE METHOD**
21 **FOR ESTIMATING A FAIR RETURN ON EQUITY FOR AVISTA?**

22 **A.** No. An expected earnings analysis does not measure the return an investor requires in

23 order to make an investment. Rather, it measures the earned return on book equity

24 that companies have experienced in the past or are projected to achieve in the future.

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[55] Exh. No. ___(AMM-11).

1   The returns investors require in order to assume the risk of an investment are

2   measured from prevailing stock market prices. An expected earnings analysis

3   measures an accounting return on book equity. Therefore, such a return is not

4   developed from observable market data. A return estimate using an expected earnings

5   analysis can differ significantly from the return investors currently require. Therefore,

6   Mr. McKenzie's expected earnings approach should be rejected.

III. PENSION AND OPEB

8   **Q.**   **IS PENSION EXPENSE DECLINING FROM THE 12 MONTHS ENDING**
9   **JUNE 30, 2013 LEVEL?**

10 **A.**   Yes. Based on the testimonies of Avista witnesses Elizabeth M. Andrews, Exh. No.

11   ___(EMA-IT), and Karen S. Feltes, Exh. No. ___(KSF-IT), pensions are expected to

12   decrease from the 12 months ending June 2013 total system level of $26.6 million to

13           $19.8 million for 2014. Washington's share of this expense decline is $1.7 million.

14 **Q.**   **ARE OPEB EXPENSES ALSO DECLINING FROM THE 12 MONTHS**
15   **ENDING JUNE 30, 2013 LEVEL?**

16 **A.**   Yes. Based on the testimonies of these Avista witnesses, OPEB expense is also

17   expected to decrease from the 12 months ending June 2013 level through 2014.

18   In Avista's response to ICNU Data Request 3.14, OPEB expenses were

19   expected to decline by $2.4 million on a total system basis. However, the most current

20   estimate shows a total system expense decline of $4.4 million from the 12 months

21   ending June 2013 level. Based on the same allocation as pensions, Washington's

22   share of the total decline in OPEB expense through 2014 is approximately $1.1

23   million.

1 **Q. DOES THIS CONCLUDE YOUR RESPONSE TESTIMONY?**

2 **A.** Yes, it does.