Exhibit No. ___T (KLE-2T)
Dockets UE-120436, et al.
Witness: Kenneth L. Elgin

BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. AVISTA CORPORATION, d/b/a AVISTA UTILITIES, Respondent.	DOCKETS UE-120436/UG-120437 *(consolidated)*
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. AVISTA CORPORATION d/b/a AVISTA UTILITIES, Respondent.	DOCKETS UE-110876/UG-110877 *(consolidated)*

TESTIMONY OF

Kenneth L. Elgin

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Fair Rate of Return

September 19, 2012

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I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Kenneth L. Elgin. I am a senior financial analyst for the Washington Utilities & Transportation Commission. My business address is, Richard Hemstad Building, S. 1300 Evergreen Park Drive SW, Olympia, Washington 98504.

Q. Please summarize your educational background and professional experience.

A. I earned a B.A. degree in 1974 from University of Puget Sound and an M.B.A.in 1980 from Washington State University. I have been employed by the Commission in several different capacities since 1985. My experience is more fully described in Exhibit No. ___ (KLE-2).

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide the Commission with a recommendation for the fair rate of return (cost of capital) for Avista Utilities ("Avista" or "the Company").

II. COST OF CAPITAL SUMMARY

A. Staff's Cost of Capital Recommendation

Q. What is the overall cost of capital for the regulated operations of Avista?

A. The overall cost of capital for Avista regulated operations is 7.22 percent. The following table shows the capital structure and cost rates:

Component	Percent	Cost	Weighted Cost
Total debt	54.00	5.70%	3.08%
Common	46.00	9.00%	4.14%
Cost of Capital			7.22%

B. Comparing Staff and Company Recommendations

Q. Please compare your cost of capital determination with Avista's cost of capital proposal.

A. The Company proposes an overall cost of capital of 8.25 percent. The major differences between my recommendations and the Company's proposal are: 1) a return on equity ("ROE") of 9.00 percent compared to the Company's proposed 10.90 percent ROE; and 2) a capital structure with 46.00 percent equity compared to the Company's proposed hypothetical equity ratio of 48.40 percent.

There is a small difference in the proposed cost of debt. I calculate a cost of debt to the Company of 5.70 percent, compared to Avista's proposed 5.76 percent. This difference is due to: 1) the cost and amount of short-term debt; and 2) the costs and amounts of debt for Avista that will be issued in 2012. Exhibit No. ___ (KLE-4) contains all the adjustments supporting the cost of debt calculations.

My cost of capital recommendation is also consistent with Staff's position on decoupling in this case. The Commission's Decoupling Policy Statement recognizes correctly that customers should benefit from lower cost of capital due to decoupling. How a specific decoupling proposal actually impacts a utility's cash flows would need to be evaluated once it is adopted. If the Commission accepts a decoupling proposal, the Commission should reduce the equity ratio for ratemaking purposes to reflect the enhanced cash flow benefit decoupling confers on the Company. In future cases, I will need to evaluate the Company's financial position and make a specific recommendation based upon the actual performance of the utility under decoupling. There may be other means to reflect the reduced risk of decoupling on cost of capital.

III. BACKGROUND

Q. Please explain the context of the Commission's cost of capital determination for Avista in this proceeding.

A. This proceeding involves setting the rates for the regulated electric and natural gas utility operations of Avista Utilities in the State of Washington. Avista Utilities is the utility operating company wholly owned by Avista Corporation. Avista Corporation also owns Avista Capital, which contains all of Avista Corporation's unregulated activities.[1] When I use the term "Avista", I am referring to Avista Utilities.

[1] See Exhibit No. ___ (SLM-2), at 2.

Avista Corporation's common stock is publicly traded, and its utility operations account for about 90 percent of Avista Corporation's total revenue.[2] Therefore, it is reasonable for the Commission to use the direct market and financial information relied upon by investors in Avista Corporation's common stock as primary evidence of Avista's cost of equity in this proceeding.

Accordingly, my Discounted Cash flow ("DCF") analysis focuses first on this primary market evidence. I then analyze the financial data of a set of comparable companies to determine if there is any bias in the primary market data for Avista Corporation. Based upon this evidence, I estimate a fair return on equity for Avista.

Q. What are the primary steps involved in the analysis to estimate a fair rate of return for any regulated utility?

A. The primary steps are to: 1) determine the proper capital structure to finance the operations of the utility; 2) estimate the cost of equity capital; and 3) calculate the appropriate cost of debt, including short and long-term debt.

A. Economic and Legal Principles

Q. What primary principle underlies the Commission's determination of the fair rate of return for a regulated utility?

A. The Commission sets rates in order to provide the utility an opportunity to recover its costs, which includes a fair return on and of the capital that investors provide to fund the long-lived assets necessary to provide utility services. This principle is found in

[2] SEC Form 10-K December 31, 2011, at 21. Utilities: $1,443 million; Corporation: $1,620 million.

Commission statutes (see RCW 80.28.010, 80.04.250 & 80.04.350), and it is consistent with both economic and legal theory.

Traditionally, the Commission sets rates using what is commonly referred to as the "rate base - rate of return" method. In a rate case, the Commission establishes the relationship between revenue, expenses, and return on rate base in order to provide the utility an opportunity to recover a fair return on the assets, or rate base, providing utility service. This method presumes utility management is efficient.

This principle is also reflected in two significant decisions by the United States Supreme Court. The first decision is *Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692 (1923). This decision established the following concepts to guide the determination of a fair rate of return in the rate setting process: comparable earnings for comparable risks, maintaining financial integrity of the regulated firm, the ability of the firm to raise capital on reasonable terms and the expectation that the utility is operated efficiently.

The second decision is *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1942). In that decision, the Court affirmed the concepts the Court stated previously in *Bluefield,* and recognized that regulators should balance consumer and investor interests in determining a fair rate of return.

Finally, I want to emphasize a point made by the Court in *Bluefield.* The Court stated,

> "...[a] rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally."[3]

[3] *Bluefield Water Works and Imprv. Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679, 692 (1923).

This principle has particular application in this case. Capital costs have declined substantially. Consistent with the *Bluefield* and *Hope* decisions, the Commission should recognize that fact in determining the profit ratepayers should pay to Avista's owners through rates.

B. General Economic and Financial Conditions

Q. What economic and financial conditions are relevant to your estimate of Avista's cost of equity capital?

A. I rely upon current economic and financial conditions. Efficient markets assume current market conditions shape investor expectations and stock prices reflect those expectations. Stock prices reflect current opportunity costs, not past events.

Q. What is your general expectation regarding the impact of current financial conditions on investor expectations?

A. My general expectation is that the current macro-economic climate will continue in its present state through the rate year, 2013, at least. Furthermore, the current interest rate environment will continue to keep the cost of capital low.

C. Avista's Operations and Risks

Q. Please summarize Avista and its operations.

A. As I described earlier, Avista Utilities ("Avista") is the utility operating company of Avista Corporation. Avista provides regulated utility services in Washington. As an electric company, Avista provides distribution, transmission, generation, purchase and sale of electric energy to customers in the central and eastern region of Washington, and other states. Avista is commonly referred to as a "fully integrated electric utility".

Avista's natural gas operations are commonly referred to as "local distribution." Avista buys natural gas in competitive markets, contracts for interstate pipeline services under FERC-approved tariffs and then distributes this gas supply to its customers over its local distribution facilities.

Q. How do you describe Avista's regulated electric and gas operations from an overall risk perspective?

A. In my judgment, Avista's regulated electric and natural gas operations are a "lower risk" business than utilities with significant unregulated operations, or other holding companies that own utilities but have significant investments in unregulated operations. Standard & Poor's (S&P) lends support to my conclusion, rating Avista Corporation's business risk profile as "Excellent".[4]

IV. CAPITAL STRUCTURE

Q. Please explain what "capital structure" means in the context of the Commission's rate setting process.

[4] Exhibit No. ___ (MTT-1T), at 13, lines 9-10.

A. Capital structure is the mix of debt and equity capital provided by investors to fund the long-lived assets necessary for Avista to deliver utility services.

Consistent with financial theory, a firm should finance its assets to achieve the lowest overall cost of capital. By achieving this objective, management meets its obligation to maximize shareholder value. In turn, the firm is able to keep its prices competitive for the benefit of its customers. The Commission's evaluation of the capital structure ensures management achieves this critical objective that is in the interests of both shareholders and customers.

Q. What is the Commission's policy on capital structure for ratemaking purposes?

A. The Commission's policy is that an appropriate capital structure balances the competing interests of safety and economy. The Commission affirmed this policy recently in a rate case in which PacifiCorp's cost of capital and capital structure were contested.[5]

This policy is consistent with the fundamental principle of finance that a properly balanced capital structure ensures a company efficiently finances its long-lived assets dedicated to public service at the lowest reasonable cost.

I also note that in its PSE rate order issued earlier this year, the Commission stated that "a range of reasonable capital structures and costs [can] accomplish an appropriate balance."[6] However, within such a range, some capital structures are more economical than others. I propose a capital structure that fully satisfies the Commission's "safety and economy" standard, but costs less than the proposal of

[5] *Utilities and Transp. Comm'n v. PacifiCorp,* Docket UE-110749, Order 08 (May 12, 2011), at 4, ¶10.
[6] *Utilities and Transp. Comm'n v. Puget Sound Energy, Inc.,* Dockets UE-111048 & UG-111049, Order 08 (May 7, 2012), at 16 n. 42.

Avista. The Commission should adopt Staff's proposed capital structure because it protects the Company while providing ratepayers reasonable rates at the lowest reasonable cost.

A. Equity Ratio

Q. How do you begin your analysis of Avista's capital structure?

A. I begin my analysis by considering Avista Corporation's actual capital structure and bond ratings. In March 2011, S&P upgraded Avista Corporation's corporate credit rating to BBB.[7] Moody's also upgraded Avista Corporation's corporate credit rating to Baa2.

During the 2008-2012 period, Avista Corporation's equity ratio increased from 40 percent to its present position in the mid-40 percent range. As of the end of fiscal year 2011, Avista Corporation's financed its entire regulated and unregulated operations with 46.4 percent common equity and 53.6 percent debt.[8]

Q. What is the significance of Avista Corporation's actual capital structure for fiscal 2011 containing 46.4 percent equity and 53.6 percent debt?

A. It is the capital structure that supported the upgrades of Avista Corporation's corporate credit rating to BBB by both S&P and Moody's. It also is the capital structure that financed Avista Corporation's entire operations, including the

[7] I refer to Avista Corporation's corporate credit rating throughout my testimony. It is the rating of its unsecured debt. Both S&P and Moody's rate Avista Corporation's secured debt two notches higher at A- and A3 respectively. For most of its financing activities Avista Corporation issues secured debt with an A rating.
[8] Avista Corporation's SEC Form 10-K (December 31, 2011), at 40.

unregulated operations of Avista Capital. In other words, a capital structure with 46.4 percent equity and 53.6 percent debt is both market-based and market-tested.

Moreover, because Avista is able to successfully finance both its regulated and unregulated operations with a 46.4 percent equity ratio, that equity ratio is a conservative measure of the equity ratio Avista could reasonably use to finance its regulated operations alone.

This is ample evidence that an equity ratio no higher than 46 percent for Avista's regulated operations is reasonable.

Q. What other evidence is there that a ratemaking capital structure with 46.00 percent equity ratio is consistent with the Commission's policy that a capital structure should balance economy and safety?

A. That capital structure is safe because it supports a pre-tax interest coverage ratio of approximately 3.0 times.[9] My recommended cost of capital produces a *pro forma* pre-tax coverage ratio of 3.07 times. S&P and Moody's both indicate that current ratings for Avista Corporation are "stable".[10]

Q. What other data indicates that your recommended capital structure is reasonable?

A. My recommended capital structure is consistent with the aggregate capital structure used by the AUS reporting service for the utilities it follows. AUS data show that between 2006 and 2011, both electric companies and combination gas/electric

[9] Id. at Exhibit 12.
[10] Exhibit No. ___ (MTT-2), at 1, second line.

companies have maintained equity ratios on average of 45.2 percent, which is slightly below the 46.00 percent equity ratio I recommend in this case. It is identical to the average equity ratio of the group for 2011. AUS data includes short-term debt in its calculations, which is consistent with my measurements.

Q. What equity ratio should the Commission use to set utility rates in this case?

A. For the reasons I have stated, the Commission should use an equity ratio of 46.00 percent. While both Staff and Company-proposed capital structures are safe, the Commission should reject Avista's hypothetical capital structure with 48.40 percent equity: it places on ratepayers an additional cost burden of $4.1 million annually.

B. Short-Term Debt Ratio

Q. What is a reasonable amount of short-term debt in a utility's capital structure?

A. Three to five percent is a reasonable amount of short-term in a utility's capital structure.

Q. Why should a utility have short-term debt?

A. Traditionally, short-term debt is a very low-cost source of funds. In today's market, it is an exceptionally low-cost source of funds. A utility uses short-term debt to fund its total operations, including its construction budget and to manage its balance sheet. Therefore, a utility should take every opportunity to maximize the use of this source of funds to keep its costs low. For these reasons, a utility should include short-term

debt as part of its permanent capital structure to help achieve the lowest overall cost of capital.

In fact, it would be imprudent for utility management not to use short-term debt for utility operations. As the Commission has stated, "The appropriate capital structure for ratemaking purposes is one that balances economy with safety in view of all of the sources of capital available to a company." [11] Short-term debt is one of those sources, and it is the lowest cost source of funds available today.

Q. Does Avista Corporation currently have credit facilities in place to issue short-term debt?

A. Yes. Avista Corporation has a $400 million short-term credit facility.[12]

Q. What percentage of short-term debt should the Commission include in Avista's ratemaking capital structure?

A. The Commission should include four percent short-term debt, which is $105 million, well within the $400 million available under the Company's credit facility. Avista's response to Staff Data Request No. 137 show that $105 million is consistent with the Company's forecast of the amount of short-term outstanding at the end of 2013.

Q. What amount of short-term debt does Avista include in its proposed ratemaking capital structure?

[11] *Utilities & Transp. Comm'n v. PacifiCorp,* Docket UE-050684, Order 04 (April 17, 2006), at 79, ¶ 224; see also page 82, ¶ 230.
[12] Exhibit No. ___ (MTT-1T), at 5, lines 9-10.

A. The Company includes only $48,687,120 of short-term debt, which is only about a two percent short-term debt ratio.[13]

Q. Is a two percent short-term debt ratio a reasonable amount for the Commission to include in Avista's ratemaking capital structure?

A. No. In today's environment, Avista should be using as much of this low-cost source as possible. While a 4.00 percent of total capital is certainly a reasonable amount of short-term debt in the capital structure, one could argue that in this current market, Avista should use even more short-term debt. Therefore, it is very reasonable and conservative for the Commission to include $105 million of short-term debt. This is roughly one-quarter of the amount available under Avista's short-term credit facility.

V. COST OF DEBT

Q. What is Avista's cost of debt?

A. Avista's cost of debt is 5.70 percent. Exhibit No. ___ (KLE-4) contains the calculations supporting this figure.

Q. Please identify the reasons why Staff's cost of debt of 5.70 percent is appropriate.

A. First, as I just explained, I include $105 million of short-term debt, which is $46 million more than Avista includes. As Mr. Keating explains, that short-term debt

[13] Exhibit No. ___ (MTT-2), at 3, line 28, column (e).

should be priced at 2.14 percent, which is the rate Staff estimates will apply during the rate year.

Second, Avista's long-term debt calculation includes a tranche of $75 million the Company planned to sell in 2012, at a rate of 5.75%.[14] Since Avista filed its testimony, the Company actually sold the new securities, and my schedule reflects the actual cost rate, which is 4.40 percent.[15]

Q. Please summarize Staff's calculation of the total cost of debt.

A. Avista's cost of debt is 5.70 percent. The calculation is in Exhibit No. ___ (KLE-4). The calculation: 1) includes additional short-term debt in the capital structure; 2) recasts the cost of short-term debt under the credit facility; 3) updates the costs to recognize the actual financing activities of Avista; and 4) adjusts the cost of the debt the Company issued in 2012 to its actual cost.

VI. COST OF COMMON EQUITY

A. Methods for Determining Cost of Equity

Q. What is the primary method the Commission uses in estimating Return on Investment (ROE)?

[14] Exhibit No. ___ (MTT-1T), at 3, line 29, column (k).
[15] This does not include the cost of the hedges incurred by the Company.

A. Based on my review of the Commission's orders on rate of return over the last forty years, the Commission consistently has relied upon a DCF analysis in estimating ROE using direct market evidence and comparable utility companies in that analysis.

Q. Should the Commission use the DCF method in this case?

A. Yes. I strongly support the Commission's policy and practice to rely on a DCF analysis as the primary basis to determine a fair ROE for utility companies subject to its jurisdiction. The DCF method provides the most reliable indicator of investor's rate of return requirements, consistent with the legal principles of the court decisions I discussed earlier. The cost of equity is estimated by evaluating readily available financial information and stock prices of utilities trading in highly competitive markets. It fully captures investors return requirements under current market conditions and accurately reflects the opportunity costs of investors.

Q. Has the Commission used other analyses to estimate the cost of equity capital?

A. Yes. In the past, the Commission has considered the results of other methods as check on DCF results. However, in the PSE rate order the Commission issued earlier this year, it stated that under current economic conditions, it will give "little weight" to the CAPM and risk premium methods and "primary weight" to the DCF method.[16] More to the point, the Commission accepted an ROE produced by a DCF

[16] *See Puget Sound Energy, Inc. v Utilities & Transp. Comm'n,* Dockets UE-111048 & 111049, Order 0 (May 7, 2012), at 33, ¶ 89.

analysis,[17] and there is nothing in the order to suggest the Commission used CAPM or any other method to check that result.

Because the economic and capital market conditions in that recent PSE docket have not changed, the Commission should again give little, if any, weight to the results produced by CAPM and risk premium methods. For that reason, I address these methods cursorily in my testimony.

1. Discounted Cash Flow Method

Q. Please describe the Discounted Cash Flow (DCF) method, and the underlying theory of that model in estimating the cost of equity.

A. The DCF method relies upon the most fundamental principle of finance: the value (price) of any asset (in this case, a share of common stock in Avista Corporation) is the present value of all future cash flows discounted at the cost of capital.

If one makes some simplifying assumptions about a company's financial performance and cash flows, the DCF formula for cost of equity is the sum of the dividend yield and dividend growth. The following formula is the common equation used by analysts and accepted by regulatory bodies to estimate the cost of equity (K):

[17] Id.

$$K = \frac{D}{P} + g$$

where: K = cost of equity
P = current share price
D = expected dividend payment
g = constant rate of expected dividend growth

This formula recognizes that investors' cost of equity is estimated by considering two factors: expectations of the stock's dividend yield and the long-term constant (sustainable) growth in dividends per share.

Underlying DCF is another fundamental principle of finance: the efficient market hypothesis, which assumes that market prices reflect all known information regarding a security. Therefore, the DCF model provides confidence to the Commission that current stock market prices accurately reflect investor's expectations about the future cash flows, and the opportunity cost associated with the investment decision for any particular security.

Q. Is the DCF method, or any other cost of common equity estimation method a mechanical process?

A. No. Cost of common equity analysis is a process that requires judgment to reach a credible outcome. The analyst must consider relevant financial performance and make reasoned decisions based upon rational future expectations for investors.

Despite its simplicity, applying the DCF model is not a process that produces results supported by precise calculations and mechanistic formulas.

In this regard, my study relies upon published financial information, which, tempered by informed judgment and DCF theory, produces a range of reasonable investor expectations for the Commission to consider.

Q. Please describe the primary issue between you and Dr. Avera in this case?

A. The primary difference between our DCF results are the estimates of dividend growth. Dr. Avera relies almost entirely on earnings estimates as the proxy for long-term dividend growth, while I use a combination of different financial indices.

B. Overall Structure of the Cost of Equity Analysis

Q. How do you structure your analysis on the cost of common equity for Avista?

A. My task is to determine the cost of equity capital for Avista's utility operations. Therefore, I first analyze the financial information and stock price of Avista Corporation. As a check on my estimate for Avista Corporation using that direct evidence, I also prepare a DCF analysis for a proxy group of companies.

As I stated earlier, the Commission should give little, if any weight, to the Capital Asset Pricing Model ("CAPM") and the risk premium analyses in current circumstances. Therefore, I supply only a cursory analysis of those methods.

C. Applying the DCF Model

Q. Please explain how you applied the DCF model to estimate Avista's cost of common equity.

A. As I explained earlier, a DCF study considers the expected dividend yield and dividend growth rate to estimate the investors' required rate of return on common equity. Accordingly, I analyze the available financial information to determine the expected dividend yield for Avista Corporation and to estimate reasonable expectations for long-term growth in dividends.

Q. How did you evaluate the dividend yield component of the DCF equation?

A. I evaluated the dividend yield based on the actual dividend paid and a range of "expected" prices. This process accounts for the diversity of expectations investors have with respect to future dividends over time. Finally, as a check, I compare this dividend yield calculation for both Avista Corporation and my proxy group to the yield estimates provided by *Value Line*, *Morningstar* and Dr. Avera's estimate.

Q. Turning to dividend growth, please explain the context of this part of the DCF formula.

A. In contrast to dividend yield, an investor's expectation for future dividend growth ('g") is much more difficult to estimate. As a result, this part of the DCF method is more controversial because analysts use different metrics to support their conclusions.

It is important, however, to recognize that each investor has a unique perspective on the information used to form their growth expectations, and each investor individually considers and weighs the alternative indicators in deriving their return expectations. This is supported by the fact that markets reflect two distinct and complementary investment decisions simultaneously: a decision to buy stock matched by another decision to sell that same stock. Because two investors reach different decisions at the same market price, their expectations must differ.

In other words, no single indicator of growth is used by all investors. Therefore, my analysis is an effort to consider the various alternative financial metrics available to investors. I then infer from this data reasonable future expectations of investors for the long-term growth rate of dividends.

Q. What financial information did you rely on in estimating investors' expectations of long-term sustainable dividend growth in your DCF analysis?

A. I considered several different financial metrics reported by *Value Line* as an indicator of sustainable growth. This data includes dividends per share, internal growth, book value per share and earnings per share. This information, when considered as a whole indicates what investors can reasonably expect as a proxy for long-term sustainable dividend growth. Each of these prospective indicators reflects the different information available to an investor in making an investment decision.

While each of these financial indicators is important, no single indicator is sufficient to estimate investor expectations of dividend growth for the group of proxy companies. However, some indicators are more important than others.

Q. What financial information is the most significant and carries considerable weight for investors in utility stocks?

A. Investors in utility stocks recognize the unique characteristics of the industry. In particular, investors recognize the capital intensive nature of utilities, and the fact that long-term utility returns are a function of investment, or rate base. In other words, long-term growth is a function of the rate earned on the book value and future investment that will increase book value. It follows that investor expectations for future growth are in large part driven by expectations for growth in book value and internal growth.

These two figures (growth in book value and internal growth), along with expectations for earned returns on book value, represent the long-term financial fundamentals of a utility subject to rate base rate of return regulation. Therefore, I give added weight to these metrics in my analysis.

Q. You state that an important financial metric for investors is expected "internal growth." What is "internal growth" and how it is calculated?

A. Internal growth is a function of the amount of earnings retained by a company after paying dividends, and thus it is a key measure of future growth prospects for any utility. Internal growth is measured by multiplying the rate of earnings on book equity times the amount of earnings retained for future growth. It is a prime indicator of what an investor could reasonably expect as proxy for sustainable long-term sustainable dividend growth. Furthermore, internal growth is directly tied to

dividend yield. A utility that retains more earnings will have higher growth prospects compared with a utility that pays out more of its earnings in dividends.

Q. How do investors evaluate expectations for internal growth?

A. The common form of internal growth is calculated using the formula *"b*r"*, where "*b*" is the retention ratio[18] and "*r*" is the earned return on book equity. Indeed, these factors show why earnings growth should be evaluated in the context of this important financial index. In other words, earnings can only grow to the extent that earned returns on book equity are sufficiently robust to support expectations for future earnings growth. I will show the math later in my testimony.

D. DCF Analysis of Avista Corporation

Q. What is a reasonable dividend yield for investors in Avista Corporation's common equity?

A. Based on a stock price between $25.00 and $26.00 and the current annual dividend of $1.16 per share, a reasonable expectation for the dividend yield is in the range of 4.40 to 4.60 percent. During the most recent 3 month period its stock traded between $25.50 and $28.00, which implies a range of 4.1 to 4.5 percent. Data from *Value Line* shows a current dividend yield of 4.5 percent and *Morningstar*[19] shows an expected (forward) dividend yield of 4.5 percent. I also note Dr. Avera estimates a

[18] Retention ratio is complementary to the dividend payout ratio. 1 - payout ratio = retention ratio.
[19] *Morningstar* data is extracted from data reported by Yahoo finance.

dividend yield of 4.6 percent.[20] Considering the most recent information, Avista's current stock price produced a dividend yield of 4.5 percent. *Morningstar* shows the same figure for its estimate of expected dividend yield.

Q. What do you conclude from this data as a reasonable expectation of dividend yield for investors in Avista Corporation's common stock?

A. I give primary weight to the stock price trading in the range of $25 to $26 per share. The average yield of the two figures is 4.50 percent. I will use 4.50 as a fair dividend yield estimate.

Q. Turning to dividend growth, please summarize the relevant data investors would rely upon to determine a sustainable long-term growth in dividends for Avista Corporation.

A. As I explained earlier, the most important financial indicators of long-term dividend growth are growth in book value per share and internal growth. Accordingly, these factors weighed most heavily in my analysis. I also examine the growth rates in dividends per share, and growth in earnings per share.

Q. What does *Value Line* indicate is the expected growth rate in book value per share for Avista Corporation?

A. *Value Line* indicates that the average book value growth for the 2014 to 2016 time period is 3.4 percent. It also indicates that the historical rate of growth in book value per share was 4.0 percent, for both the past five and ten year historical periods.

[20] Exhibit No. ___ (WEA-5), at 1, line 5, last column: "Yield".

Q. How would a rational investor evaluate this data for Avista Corporation?

A. Investors know it will be making $200 to $250 million per year in new capital expenditures in the next few years. Therefore, it is reasonable for investors to expect the growth in book value to be at the higher end of the range. A 4.0 percent growth rate based upon historical data is a more reasonable expectation.

Q. What does the *Value Line* data show with respect to anticipated internal growth for Avista Corporation?

A. First, I must consider the underlying information supporting this metric. The data shows Avista Corporation's retention ratio is 40 percent and the expected earned return on book is 9.0 percent. This indicates internal growth of 3.6 percent.[21] An investor expecting Avista to achieve sustainable long-term growth of 4.0 percent would need to see an earned return on book equity of 10.00 percent.[22] The raw data indicate a growth rate of at most 4.0 percent.

Similarly, I can calculate what it would need to earn of book to achieve a growth of 5.0 percent based upon its retention rate of 40 percent. Avista Corporation would have to earn 12.5 percent on book equity.[23] It is unreasonable for investors to expect Avista Corporation to earn that amount on book in this environment. In fact, *Value Line* indicates future earnings on book of 9.0 percent for Avista Corporation.

[21] 0.40 * 9.0% = 3.6%.
[22] 4.0% ÷ 0.40 = 10.00%.
[23] 5.0% ÷ 0.4 = 12.5%.

Q. What is your conclusion of this data using internal growth metrics?

A. These figures demonstrate why any expectation of long-term dividend growth rate of 5 percent is very unlikely and unreasonable for investors to expect. The data show that a 4.0 percent internal growth rate would require it to realize an increase in earned returns on book to 10.0 percent, and it shows that a growth rate of 4.5 percent, with an implied earned return on book of 11.25 percent, is the upper end of any reasonable internal growth rate for Avista Corporation.

Q. What does *Value Line* report for growth in dividends per share for Avista Corporation?

A. *Value Line* data shows the dividend in 2012 of $1.16 increasing to $1.40 in 2016/2017. This represents an expected annual growth in dividends of 4.1 to 5.0 percent over that time period. The average is 4.5 percent.

Q. What does *Value Line* report for growth in earnings per share for Avista Corporation?

A. *Value Line* indicates Avista Corporation's earnings will increase from $1.80 to $2.25 per share by 2017, which represents an annual expected growth in earnings of 5.00 to 5.5 percent. However, the data presented by *Value Line* for earnings growth does show some inconsistency. In one instance, *Value Line* shows that book value is $24.00 and earnings of $2.40 per share, which implies an earned return on book of 10.0 percent. However, Value Line also shows elsewhere earned return on book of 9.0 percent, which would produce earnings of only $2.16 per share on a book value

of $24.00. Therefore, under this particular scenario of earnings of $2.16, Avista Corporation would only achieve a 4.0 percent growth rate in earnings. I conclude, that the data indicate a reasonable expectation of earnings growth is no more that 4.50 percent.

Q. What other relevant data do investors consider to determine a sustainable long-term growth in dividends?

A. Investors will consider earnings estimates from other sources. I considered the analysts' earnings growth estimates for Avista Corporation from IBES and Zachs, which Dr. Avera provided. These sources show earnings growth estimates of 4.0 and 4.7 percent, respectively.[24]

Q. Please summarize the data you relied upon in estimating investors' expected dividend growth for Avista Corporation.

A. A reasonable estimate of both book value and internal growth is 4.0 percent. Internal growth estimates of 4.5 percent are only indicated if earned returns on book can increase. Estimated dividend growth ranges between 4.1 and 5.0 percent. Growth in earnings, as reported by IBES is 4.0 percent and Zachs, is estimated to be 4.7 percent and *Value Line* data indicate earnings growth of 4.50 percent.

Q. What conclusion do you reach from this data?

[24] Exhibit No. ___ (WEA-5), at 2, line 5, columns (a) & (b), respectively.

A. The data indicate that a reasonable expectation for investors for long-term dividend growth for Avista Corporation is in the range of 4.0 to 4.5 percent. The data do not support a long-term sustainable growth rate of 5.0 percent. As I have shown, the Company would have to realize a return on book of 12.5 percent to achieve a 5 percent long-term growth rate. No utility in today's environment could expect to achieve such a high return.

Q. Based upon these factors, what is the indicated ROE for investors in Avista Corporation common equity?

A. I conclude that a reasonable range in the cost of equity for Avista Corporation is between 8.50 percent and 9.10 percent. The upper end of this range is produced by adding each of the high end data points for dividend yield and growth: 4.60 percent dividend yield plus 4.50 percent dividend growth, which is 9.10 percent. A point estimate of 9.0 percent based upon this data is a reasonable conclusion.

E. DCF Analysis of the Proxy Group

1. Selecting the Proxy Group

Q. What companies are in the proxy group you used for purposes of your cost of common equity analysis for Avista?

A. My proxy group consists of the following seven utility companies: ALLETE, Black Hills, CLECO, Great Plains, IdaCorp, PGE and Westar.

Q. Is this the same set of proxy companies the Company used?

A. No.

Q. Please explain the difference.

A. For my analysis, I started with Dr. Avera's proxy group of 26 utility companies. I then applied selection criteria to focus on utilities that are more comparable to Avista. This additional screening produces a smaller group of utilities much more comparable to Avista and the risks of owning a regulated utility such as Avista.

Q. What selection criteria did you apply?

A. I first eliminated any company not classified as "mid-cap" by *Value Line*. As a result over half of the firms in Dr. Avera's utility proxy group were dropped. Second, I removed the largest mid-cap companies-those with a market capitalization approximating $4 billion. I removed El Paso because 45 percent of its electric generation was nuclear and investors would not consider a hydro utility such as Avista similarly. I removed Hawaiian Electric because of its exceptionally high rates and concentrated market risk, and it is therefore quite dissimilar to Avista. Finally, I eliminated UIL Holdings because it is a distribution only company, not a fully integrated utility such as Avista. The result is the group of seven utilities I listed above.

Q. Are your selection criteria appropriate?

A. Yes. My criteria results in a group of seven utilities with characteristics similar to Avista Corporation. I am confident I can judge the financial information from these utilities to test my specific ROE estimate for Avista Corporation.

Q. Does the composition of the proxy group have any material impact on the estimate of ROE?

A. No. The key difference in ROE estimates is driven by the fact that Dr. Avera uses analyst's earnings estimates as the proxy for long-term dividend growth and his selective use of data in that analysis to support his excessive estimate of ROE. I will critique his study more completely later in my testimony.

2. Proxy Group DCF Analysis

Q. How do you conduct your DCF analysis of your proxy group?

A. My proxy group analysis is similar to my analysis for Avista Corporation. I begin by calculating an expected dividend yield for the proxy group, and then evaluate certain critical financial information to inform my opinion for long-term sustainable growth in dividends per share.

Q. Please identify the information you evaluated to estimate the dividend yield for your proxy group.

A. I evaluated the dividend yield quotes from *Value Line*, *Morningstar* and Dr. Avera's indicated dividend yield calculation for the seven companies in my proxy group. *Value Line* indicates that the average dividend yield for the group is 4.1 percent through 2016. Dr. Avera's calculations of average dividend yield for my proxy group is 4.0 percent.[25] Finally, *Morningstar* indicates a forward dividend yield of 4.1 percent for the proxy group.

Just prior to filing my testimony, I reviewed the market prices and dividend yields for the proxy group. Currently, the average dividend yield is 3.9 percent. *Morningstar* shows 3.9 percent for the forward dividend yield as well. This confirms the data I used earlier remains valid.

Q. Based on this information, what is a reasonable estimate of the dividend yield for your proxy group for purposes of your DCF analysis?

A. A dividend yield of 4.0 percent is reasonable for my proxy group.

Q. Turning to dividend growth, you earlier testified that the most important financial indicators relative to dividend growth are growth in book value and internal growth. What does *Value Line* report for growth in book value for your proxy group?

A. Based on *Value Line* reports, the average growth in book value is 3.3 percent for proxy group between 2007-2015. *Value Line* data indicate the expected growth rate in book value for the 2011 to 2014 time period also averages 3.3 percent. For the

[25] Exhibit No. ___ (WEA-5), at 1, last column (Yield), the average of the figures on lines 1, 6, 7, 12, 14, 19 & 26.

same reasons I mentioned earlier, I expect investors to consider that this figure may well understate the future growth in book value due to the current investment cycle of the industry.

Q. What does *Value Line* report for internal growth for your proxy group?

A. The average of *Value Line*'s internal growth estimates for the utilities in proxy group is 3.7 percent. However, within the proxy group there is an outlier - Black Hills - showing internal growth rate of a 2.6 percent. If I remove this observation, the average for the proxy group rises to 3.9 percent.

Q. How does this data compare to Dr. Avera's estimate of internal growth for the companies in your proxy group?

A. Dr. Avera's calculations for the companies in my group show internal growth averages 3.6 percent. This average also contains the low data point for Black Hills. Removing that data point similarly raises the average to 4.0 percent.

Q. What other financial data did you evaluate in developing your estimate for long-term growth in dividends for the proxy group?

A. I also considered earnings growth estimates for the proxy group. *Value Line* shows average earnings growth for my proxy group is 3.90 percent for 2008-2016. I also considered the data provided by Dr. Avera for earnings estimates from Thompson/Reuters (IBES), and Zachs for the companies in my proxy group. These services indicate that the average earnings growth rate for my proxy group is

expected to be 4.5 percent (IBES) and 5.5 percent (Zachs).[26] The simple average of all three is 4.7 percent.

Q. How will rational investors evaluate these earnings estimates?

A. First, rational investors will recognize these earnings estimates show some variability, and will view them as reasonable if they are consistent with other financial data.

Consider the estimates in the context of the traditional *"b*r"* formula. *Value Line* shows the group's internal growth rate of 3.9 percent. Dr. Avera's internal growth rate for my comparable group is 4.0 percent. If investors evaluate IBES and Zachs' earnings estimates for these companies with this data in mind, a 4.0 percent dividend growth rate is reasonable. As I have previously shown, a rational investor would consider 5.0 percent dividend growth rate reasonable only if the investor also expected the utility to achieve an earned return on equity of 12.5 percent[27]. This is not realistic in the current and prospective environment.

Q. Please summarize the data for the proxy group that indicates to investors of the expected growth in dividends for the proxy group.

A. The data show historical growth in book value of 3.1 percent, but investors should expect higher growth in book value prospectively of at least 4.0 percent, due to ongoing and growing capital expenditures. *Value Line* shows expected internal growth of 3.9 percent. Finally, earnings growth of 4.5 to 5.0 percent is indicated, but

[26] Source: Exhibit No. ___ (WEA-5), at 3 - Zachs does not provide an estimate for CLECO.
[27] 12.5% * 0.40 = 5.0 percent.

whether 5.0 percent is achievable is unlikely unless earned returns increase significantly.

Q. What is your conclusion from this proxy group data?

A. I conclude that a reasonable expectation of long-term growth in dividends is in the range of 4.0 to 4.5 percent.

Q. Please summarize your DCF analyses for your proxy group.

A. Combining the dividend yield of 4.1 with the expected long-term growth in dividends of 4.50 percent produces an ROE of 8.6 percent. Only if I use an aggressive estimate of potential dividend growth of 5.0 percent, the analysis shows a best case estimate for ROE of 9.1 percent. The data from the proxy group support my specific Avista DCF result as fair and reasonable.

Q. Is a ROE estimate of under 9.0 percent for the proxy group a reasonable figure given current market conditions?

A. Yes. As I stated in the earlier part of my testimony, the cost of capital is declining. The cost of equity to Avista and other comparable companies is lower than it has been in the past, and rates should reflect this fact. Consistent with *Hope* and *Bluefield*, customers should not be burdened with rates supporting excessive profits.

F. Capital Asset Pricing Model Analysis

Q. Please explain why the Commission should not use the CAPM method in this case.

A. First, as I pointed out earlier, in its recent PSE rate order, the Commission noted that CAPM should be given minimal weight in current market conditions, and the Commission used a DCF study to determine ROE in that case, and apparently did not use CAPM as a check. Those same market conditions persist today.

Second, the CAPM is very complex to implement because there are simply too many issues of controversy surrounding the model's inputs. For example, what is the risk-free rate? What is the return on market? How is *beta* calculated and what of a particular stock to a market proxy? In effect, β does not fully measure risk.[28]

Finally, many experts using the CAPM use the rate of long-term United States Treasury securities as the risk-free rate (R_f). However, using today's prices for long-term Treasury securities as a proxy for the risk-free rate produces an extremely low ROE.

Q. What does CAPM produce for an ROE in today's markets?

A. Using current estimates of a market return of 10.0 percent and a risk free rate of 2.75 percent, the CAPM produces a ROE estimate of 7.83 percent. Under a more aggressive estimate of total market return on 12.0 percent, the CAPM produces a ROE estimate of 9.23 percent.[29] The average of the two is 8.5 percent.

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[28] See *Journal of Finance*, Fama & French. "The Cross-Section of Expected Stock Returns". June 1992, at.427

[29] [10.05% - 2.75%]*.70 + 2.75% = 7.83% & [12.0%-2.75%] * .70%+2.75 = 9.23%.

The bottom line is the Commission should give very little weight to a CAPM analysis in this case, as it did most recently for PSE. Under a reasonable assumption for a return on the market, CAPM produces a rather low estimate of ROE.

G. Risk Premium Analysis

Q. Did you undertake a Risk Premium analysis as a check on your cost of equity capital recommendation?

A. Yes, though indirectly. I am not an advocate of risk premium methodologies. In addition, I agree with the Commission's reluctance to use this method under current economic conditions as it did with CAPM in the PSE case. In particular, these studies are too dependent on the selection of both the interest rate and spread that constitutes the estimate of the equity risk premium. However, in this case, the point of the study is, at best, to act as a check on the DCF results.

Q. Please explain your analysis.

A. Avista Corporation recently issued new long-term (30 year maturity) debt with a coupon of 4.50 percent.[30] Assuming a DCF estimate of 9.00 percent, which is near the top of range of my DCF results, this represents an equity market premium of 450 basis points.[31]

[30] Exhibit No. ___ (MTT-2), at 3, line18, column (b). Most recently, Avista sold debt at with a coupon of 4.25%.
[31] 9.00% - 4.50% = 4.50%, or 450 basis points.

Q. Is a 450 basis point premium reasonable for equity investors?

A. Yes. In fact, a 450 basis point spread could easily be considered excessive compensation for equity owners over those investing in Avista Corporation's long-term bonds. A more reasonable equity risk premium in today's market is, at most, 400 basis points. Therefore, on the basis of a risk premium analysis, a fair ROE for Avista in today's capital markets is in the mid-8 percent range.

Q. Please summarize your CAPM and risk premium analyses.

A. Again, if the Commission decides to use these results, it should proceed with caution. However, within the context of considering investors' opportunity costs in today's markets, these studies do support what my DCF study generally shows: the cost of equity has declined in step with overall interest rates.

H. Summary of Staff's Return on Equity Recommendation

Q. Please summarize the results of your cost of common equity analyses for Avista.

A. I place primary reliance on my DCF study. The upper end of the range of my DCF analysis for Avista Corporation is 9.10 percent. My DCF result for my proxy group supports my company specific DCF result.

The CAPM analysis produces an estimate of 7.83 to 9.22 percent. My risk premium analysis shows that a 9.0 percent ROE provides 450 basis point spread over Avista's current long-term debt costs. I use these methods only to support the fact that capital costs have declined, and the ROE should reflect that.

I conclude my DCF-based cost of common equity of 9.00 percent for Avista is reasonable and fair in today's capital market.

I. Flotation Cost Recovery

Q. Is the Company proposing a flotation adjustment to its cost of equity?

A. Yes. In fact, Avista is proposing "double recovery" of these costs.

Q. What are flotation costs?

A. Flotation costs are the costs a company incurs when it sells new common stock, such as underwriting fees, copying costs, legal fees and the like.

Q. Please explain how Avista proposes double recovery of flotation costs.

A. Avista seeks to recover flotation costs once through Mr. Thies' addition of prior issuance costs in his calculation of Avista's hypothetical capital structure, and then again in Dr. Avera's explicit flotation cost adder in his calculation of ROE.

Q. Please explain Mr. Thies' addition of stock issuances costs to the amount of equity in his calculation of Avista's proposed hypothetical capital structure.

A. Mr. Thies increases Avista's equity investment by $14.2 million to account for the costs of issuing new equity.[32] This "adjustment" is improper, because capital stock expense is properly recorded as a reduction to equity. Therefore, the Company is

[32] Exhibit No. ___ (MTT-2), at 6, fn 6.

asking the Commission to provide an equity return and associated income taxes on equity that is not on the Company's books.

Q. Please explain Dr. Avera's explicit flotation cost adder in his calculation of ROE.

A. Dr. Avera increases his ROE estimate by 20 basis points, which he says is to cover common stock flotation costs.[33]

Q. What is the purpose and basis of a flotation cost recovery adjustment?

A. The purpose of flotation cost recovery is to ensure that value of the shareholder's investment in the company's stock is not diluted due to issuing new equity.

The basis for this "mark-up" is directly tied to DCF theory: if a utility earns its "bare bones" cost of equity, its market value and book value are the same, i.e., the market to book ratio will be 1.0. However, if a utility with a market-to-book ratio of 1.0 issues new equity, the market value of its stock will decline because the costs of issuing that equity dilutes book value. As a result of issuing new equity, the stock will trade for less than book value, which is dilution.

Q. Does this concern about dilution apply to Avista in this case?

A. No.

[33] Exhibit No. ___ (WEA-1T), at 54, line 7.

Q. Why not?

A. Avista Corporation's common stock is currently trading in excess of its book value. In other words, the market is providing evidence that the expected earned returns to Avista Corporation are sufficient and provide adequate compensation to Avista Corporation's shareholders on its book equity, including all costs of issuing new equity. Today, when Avista Corporation sells additional equity at current market prices, its book value increases, and there is no dilution. Newly issued equity is earning its cost of capital and therefore, there is no reason to further compensate investors for flotation costs.

Q. The Company asserts that the Commission has accepted an adjustment for flotation costs in the past.[34] How do you respond?

A. The Company's assertion is correct. However, the context of those past cases was different, and the Company fails to account for the different context.

When the Commission accepted flotation cost adjustments, the utility industry was experiencing market-to-book ratios below one, and therefore, the utility suffered dilution when it issued new equity to finance its operations. A flotation cost adjustment was necessary to provide investors with adequate returns to achieve a market-to-book ratio above one.

Staff supported such adjustments under those circumstances. However, circumstances have changed; Avista Corporation is able to sell equity above book value. Therefore, a flotation cost adjustment is not warranted at this time.

[34] Exhibit No. ___ (WEA-1T), at 52, lines 11-13.

VII. SUMMARY ON COST OF CAPITAL

Q. What is the total cost of capital for Avista?

A. As shown on the table on page 2 of my testimony, Avista's total cost of capital is 7.22 percent.

Q. Is a 7.22 percent cost of capital adequate to provide the Company a sufficient level of earnings to maintain its financial integrity?

A. Yes.

VIII. RESPONSE TO COMPANY COST OF CAPITAL TESTIMONY

Q. Have you reviewed the testimony of Avista's cost of capital witnesses, Mr. Mark Thies and Dr. William Avera?

A. Yes.

Q. What are the primary differences between your cost of capital recommendation and the Company's proposal?

A. There are two primary differences: 1) Equity Ratio – I recommend a 46 percent equity ratio; the Company proposes a 48.40 percent equity ratio; and 2) Cost of Equity – I recommend a ROE of 9.0 percent; Dr. Avera proposes a significantly higher ROE: 10.9 percent.

A. Equity Ratio

Q. What ratemaking capital structure is Avista requesting in this case?

A. Avista proposes a 48.4 percent equity ratio.

Q. What is the basis for Avista's proposed 48.4 percent equity ratio?

A. It is the result of various adjustments to Avista Corporation's consolidated capital structure as of December 31, 2012[35]. Avista calls its proposed equity ratio the "Adjusted Regulatory Balance 12/31/2013". In fact, the Company's proposal is a hypothetical capital structure.

Q. Is the Company's "Adjusted Regulatory Balance" equity ratio proper for ratemaking?

A. No. The name "Adjusted Regulatory Balance" equity ratio suggests this is the capital structure that supports only Avista's regulated operations. However, that is not the case, because Avista Corporation's capital structure on December 31, 2012 contains $72 million equity investment in unregulated operations. It also includes costs associated with prior issuances of common equity. The result is that Avista's "Adjusted Regulatory balance" capital structure overstates the actual equity investment supporting Avista's regulated utility operations.

[35] Exhibit No. ___ (MTT-2), at 6 & 2.

Q. What would Avista's regulatory capital structure be as of year-end 2012?

A. If I remove the $72 million of equity that supports Avista Corporation's unregulated operations and include expected changes to equity for earnings and dividends, I estimate Avista's 2012 equity ratio will be less than 46 percent. I analyzed Avista's capital structure for 2011, 2012 and 2013, from data contained in Avista's response to Staff Data Request No. 137. In each instance, the equity ratio was below the 46 percent I recommend in this case.

Q. How much more costly to ratepayers is the Company's proposed 48.4 percent equity ratio, compared to Staff's proposed 46 percent equity ratio?

A. The Company's proposed capital structure costs approximately $4.1 million each year; $3.5 million for electric operations and $600 thousand for natural gas operations. I calculated this figure by using the Company's direct case, changing only the equity ratio, from 48.4 to 46.0 percent.

Q. What is the Company's justification for its pro forma 48.40 percent equity ratio?

A. Mr. Thies asserts it is necessary for Avista to provide financial flexibility necessary for the Company to access additional sources of external capital to fund its requirements as a public service company, and his proposed capital structure is part of a Company plan to achieve a higher bond rating: BBB+ consistent with industry averages.[36] Finally, Dr. Avera observes that the higher equity ratio is consistent with the inherent uncertainty and risks in today's markets. Dr. Avera says the industry is

[36] Exhibit No. ___ (MTT-1T), at 11, lines 19-20.

moving to a more conservative amount of financial leverage, and he offers that rating agencies suggest that a 50 percent equity ratio is reasonable for a utility like Avista.[37]

Q. What is your response?

A. A 48.4 percent equity ratio would provide Avista additional financial flexibility and the possibility of higher bond ratings, and it will allow the Company to continue to have access to capital on reasonable terms as it does today.

However, the issue is cost. The Commission policy is to balance safety and economy. Simply put, the Company's direct case failed to demonstrate this additional equity is cost justified. In particular, the Company failed to quantify the benefits (economy) of its proposed capital structure and it failed to quantify the benefits of having a BBB+ corporate credit rating.

A 48.40 percent equity ratio is too expensive. In other words, the Company has not shown ratepayers will get equal value for the over $4.1 million in higher rates Avista wants them to pay, each and every year, to support a higher equity ratio.

As I explained in detail earlier, my recommended 46 percent equity ratio is market-tested and is appropriate and sufficient for Avista Corporation to achieve a corporate credit rating of "BBB" and a secured bond rating of "A-". The evidence is clear that this capital structure enables the Company to access any new external capital requirements on reasonable terms.

Q. Is there any objective proof that a 46 percent equity ratio is reasonable for Avista?

[37] Id. at 30, line 11, and at 32, lines 6-9.

A. Yes. As I testified earlier, in both S&P and Moody's recent credit opinions for Avista, both rating agencies indicate the Company has "stable" credit quality. I have shown that Avista is able to sell debt on reasonable terms, and it is able to issue new equity at prices above book value. There is no obvious reason why ratepayers should pay millions more each year for energy services to Avista to be "even more stable."

Q. Mr. Thies argues that more equity in the capital structure is necessary to cope with the Company's significant capital budget and the corresponding need to access capital to carry out its obligations as a public service company[38]. What is your response?

A. That testimony is inconsistent with the facts. Avista Corporation is generating all the cash it needs to fund its utility construction budget from its internal sources. As a result of its ability to generate all of its construction budget with internally generated cash, the Company's needs for accessing new external capital is primarily to turn-over the debt on its balance sheet.[39]

Avista Corporation's SEC 10-K, dated December 31, 2011, shows the following facts. In 2009, Avista Corporation's internally generated cash ($258.8 million) exceeded its construction expenditures ($205.4 million) by $53.4 million. Similarly, in 2010, internal cash generation ($228.4 million) exceeded construction expenditures ($202.2 million) by $26.2 million. Finally, in 2011, Avista's internal cash generation ($269.5 million) exceeded construction expenditures ($239.8 million) by $29.7 million.

[38] Exhibit No. ___ (MTT-1T), at 2.
[39] Exhibit No. ___ (MTT-1T), at 19, Illustration 6.

Q. In two recent contested rate cases involving PacifiCorp and Puget Sound Energy, the Commission rejected your recommendation to use a capital structure with 46 percent equity. Does that change your recommendation?

A. No. A 46 percent equity ratio is reasonable for Avista as it was in those two prior cases. It supports a BBB corporate credit rating for Avista Corporation, and it will enable Avista to attract capital on reasonable terms, consistent with *Bluefield* and *Hope*. No more is required.

In those rate cases I just cited, the Commission confirmed its safety and economy standard for determining an appropriate equity ratio. I applied that standard in this case. However, I note that in neither order did the Commission state that 46 percent equity was unsafe or uneconomic, or was otherwise inconsistent with Commission policy. I also note that in that PSE order, the Commission determined that a range of equity ratios would be consistent with its stated policy and stated that accepting the higher equity ratio would help address its alleged attrition.[40] That is not a factor here, because Staff is directly measuring attrition in this case.

Q. Through various witnesses, the Company contends that its proposed equity ratio is necessary to provide the Company access to capital markets to support its large capital requirements.[41] What is your response?

A. The facts do not support the Company's contention. As I have explained, Avista Corporation has successfully raised new debt on reasonable terms with a 46 percent

[40] *Utilities and Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-111048 & UG-111049, Order 08 (May 7, 2012), at 21 ¶ 56.
[41] E.g., Thies, Exhibit No. ___ (MTT-1T), at 2, lines 8-16.

equity ratio, and the Company is generating all of its construction requirements with internally generated cash. The Company offers no reason why it cannot continue to successfully finance its utility operations with a 46 percent equity ratio.

Moreover, the Company is able to issue new equity at prices far in excess of its book value. In short, an equity ratio of no more than 46 percent fully satisfies the financial integrity and capital attraction tests of *Bluefield* and *Hope*.

B. DCF Growth Rates and Earnings Estimates

Q. Please critique Dr. Avera's DCF constant growth estimate for dividend growth for his utility proxy group.

A. Dr. Avera's DCF estimate is flawed, which the Commission can easily see by the significant variability of his estimates.

Q. Please describe this high variability of Dr. Avera's results.

A. For example, Dr. Avera's Exhibit No. ___ (WEA-5), at 3 shows a ROE estimate for Ameren using IBES earnings estimates is 1.2 percent, yet using Zachs earnings estimates, it is 9.1 percent.

In another instance, the exhibit shows a ROE for Hawaiian Electric of 16.2 percent using IBES earnings estimates.

In other words, within his comparable group, Dr. Avera shows a range of ROE estimates between 1.2 percent and 16.2 percent using IBES estimates. His exhibit also shows one ROE estimate of 18.4 percent. It strains any sense of

reasonableness that a set of utility companies allegedly "comparable" to Avista can have ROE estimates between 1.2 and 18.4 percent. Even more perplexing is that Dr. Avera's study indicates a ROE of either 1.2 to 9.1 percent for the same company, simply by using different earnings estimates from data sources he deems reasonable.

Q. What do you conclude from this evidence?

A. On its face, this high degree of variability inherent in Dr. Avera's study suggests there are significant problems with the data he considers reliable for purposes of estimating long-term dividend growth. In my opinion, these highly variable estimates of growth render his study useless.

Q. Does Dr. Avera do anything to address this high degree of variability in his results?

A. Yes. In an attempt to address the obviously high variability of his point estimates, Dr. Avera selectively eliminates results he thinks are anomalous. He spends considerable effort describing instances where he discards results he considers "implausibly low or high."[42]

As Dr. Avera's Exhibit No. ___ (WEA-5) shows, Dr. Avera removed only one of his ROE estimates because he believed it to be too high, but he removed sixteen observations because he believed them to be too low.[43]

[42] Exhibit No. ___ (WEA-3), at 20, lines 6-12, and at 21, lines 1-4.
[43] Dr. Avera eliminated each point estimate enclosed in a box on Exhibit No. ___ (WEA-5), at 3.

Q. Did Dr. Avera provide any objective basis for rejecting an ROE result from his analysis because it is "too low" or "too high"?

A. No.

Q. In particular, did Dr. Avera remove results for certain companies based on statistical analysis?

A. No.

Q. What was the single company Dr. Avera removed on the basis the result was "too high"?

A. That company was OGE. Dr. Avera's ROE estimate for OGE is 18.4 percent.

Q. Did Dr. Avera remove any other of his very high ROE estimates for other utilities in his proxy group?

A. No. For example, Dr. Avera's *Value Line*-based ROE results generated ROE estimates of 15.8 percent for Hawaiian, 13.9 percent for TECO, 13.1 percent for Westar, and 12.8 percent for Black Hills.[44] Apparently, Dr. Avera considers none of these observations "anomalous." From my perspective, these data points are anomalous and he should have removed them, too.

Nonetheless, a more credible DCF study would not require arbitrary elimination of data. If data is skewed and eliminated, a rational and transparent explanation is required. Dr. Avera's explanation is neither transparent nor rational.

[44] Exhibit No. ___ (WEA-5), at 3, first column (a) labeled "V Line".

Q. What is the primary cause of such wide variations in Dr. Avera's results?

A. The primary cause of this wide variation is Dr. Avera's reliance on analysts' estimates of earnings growth as a proxy for long-term dividend growth.

Q. Are earnings estimates a reliable indicator of long-term sustainable growth in dividends per share for use in the DCF formula?

A. No. Analysts' estimates of earnings growth are not a good measure of long-term sustainable growth in dividends - especially for the utility industry that is regulated on the basis of a rate of return applied to book value. Earnings estimates might be good indicators of future growth for competitive firms not subject to rate of return regulation, or firms with no significant investment in long-lived assets. However, such estimates are not a reliable indicator of dividend growth in the long run for a regulated firm.

Under DCF theory, earnings growth must eventually be supported by similar growth in retained earnings, constant earnings on book and growth in book value. It is not lost on investors that earned book returns for an electric utility would have to increase significantly to support higher earnings, which in turn support of higher long-term dividend growth.

Q. Does Dr. Avera's recognize this principle of DCF theory?

A. Yes.[45] However, his recommendation ROE in this case essentially ignores this important DCF principle and the result his own data show.

[45] Exhibit No. ___ (WEA-3), at 17, lines 18-22 and 18, lines 1-4.

Q. Can you demonstrate how Dr. Avera's DCF study ignores that important DCF principle?

A. Yes. Dr. Avera's Exhibit No. ___ (WEA-5), at 3, contains the summary data showing his estimates of ROE for his utility proxy group. At the bottom of the page, in the far right column, he shows the average ROE estimate using internal growth as the measure for long-term sustainable dividend growth. Earlier in my testimony, I explained why this data is a very strong indicator of dividend per share growth.

As his exhibit shows, if Dr. Avera relied on internal growth rather than analysts' earnings estimates, his DCF estimate would be 9.0 percent - exactly my recommendation in this case.

Dr. Avera simply believes earnings estimates are a more reliable indicator of sustainable growth.[46] As I have shown, he is mistaken.

Q. Are there other facts that prove Dr. Avera's 10.9 percent ROE is excessive, and his 9.0 percent DCF constant growth ROE is reasonable?

A. Yes. Dr. Avera estimates a 10.9 percent ROE for Avista. Using his dividend yield of 4.5 percent, the dividend growth rate must be 6.4 percent.[47] Yet, according to Dr. Avera's own data, Avista's retention ratio is 30 percent,[48] which means that to achieve a 6.4 percent dividend growth rate, an investor would expect Avista Corporation to earn over 21 percent on book value[49] and sustain at that level of growth over the long-term.

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[46] Exhibit No. ___ (WEA-3), at 18, lines 5-6.
[47] 6.4 + 4.5 = 10.9.
[48] Exhibit No. ___ (WEA-6), at 1, line 5 column "b".
[49] 21.3% * 0.3 = 6.4%.

In my opinion, it is not reasonable for investors in Avista Corporation to expect sustained earned returns of 21 percent, and this is further proof why Dr. Avera's recommendation in this case is highly unrealistic, to say the least.

Q. What does Dr. Avera's specific DCF analysis for Avista Corporation show?

A. Dr. Avera's specific DCF estimate for Avista Corporation based on earnings estimates from Value Line, IBES and Zachs are: 9.10, 8.60 and 9.30 percent respectively, and his estimate for Avista Corporation using sustainable growth is 7.80 percent.[50] These results average 8.95 percent, which is quite close to my 9.0 percent estimate, but far from Dr. Avera's 10.9 percent recommendation.

Q. What are the most important points the Commission should understand about Dr. Avera's DCF results?

A. The three most important points are: 1) Dr. Avera's earnings estimates as a proxy for dividend growth results in highly variable ROE estimates; 2) Dr. Avera's final DCF estimate is the result of highly subjective analysis, primarily his removal of many DCF estimates he believes are "too low" and only one that is "too high". The result is that he overstates ROE; and 3) If Dr. Avera used his internal growth estimates rather than analysts' earnings estimates, his DCF ROE would be the same as mine.

In short, the high variability in Dr. Avera's data and his selective elimination of data render his analysis unreliable and biased in favor of an ROE estimate that is too high.

[50] Exhibit No. ___ (WEA-5), at 3, line 5, column (a).

C. Expected Earnings Approach

Q. Dr. Avera also calculates an estimate of ROE based on what he calls the expected earnings approach. What is your critique of that study?

A. This is another study by Dr. Avera that produces highly volatile results. As shown in his Exhibit No. ___ (WEA-11), the ROEs resulting from this study range from 7.1 percent to 13.3 percent.

Once again, Dr. Avera arbitrarily removes data from the study. This time, he removes only low observations: ROEs of 7.1 percent and 7.2 percent. He removed no observations from the high end of his range. The bottom line is that an "analysis" that renders such wide-ranging results and undefended, selective elimination of data is simply not credible.

Q. What other comments do you have about Dr. Avera's comparable earnings study and whether such an analysis offers evidence of a fair ROE for Avista?

A. Although as I testified, I do not advocate use of a comparable earnings analysis, it is important to consider *Value Line's* data for Avista in the context of Dr. Avera's comparable earnings-based recommendation. This data is compelling in that it shows the relationship between market expectations and current stock prices.

Value Line shows Avista Corporation earned 8.5 percent on book equity in 2011, and estimates that it will earn 8.5 percent in 2012. *Value Line* then shows it expects Avista to earn 9.0 percent on book in 2014 through 2016.

DCF theory states that if Avista is earning its cost of capital the market value of its stock will equal its book value. Therefore, one can consider *Value Line's* estimates of Avista's future market to book ratio under the expectation that it will earn 9.0 percent now and into future.

Q. What does *Value Line* show investors to expect for Avista with respect to these two financial factors?

A. It shows in 2011 that Avista Corporation's book value is $20.35 and its stock is trading at $26.00 based upon an 8.5 percent earned return on book. Since its market value exceeds its book value by a substantial amount, this data clearly shows that Avista should be afforded an opportunity to earn no more than 9.0 percent on equity. Under expected market conditions, *Value Line* estimates Avista Corporation will earn 9.0 percent on book producing a market-to-book ratio of 1.25 times. This data is compelling: anything above 9.0 percent provides excessive profits to owners.

Q. Dr. Avera also presents a CAPM study. What is your critique of that study?

A. There are several elements of his CAPM study are problematic. First, a 12.8 percent expected return on the market (Rm) is far too optimistic in today's capital markets. Even his own DCF study for his non-utility proxy group,[51] which could be used as a surrogate for an estimate of the market return, shows that this result is overstated. Furthermore, Dr. Avera is wrong to use an earnings estimate of only dividend-paying

[51] Exhibit No. ___ (WEA-1T), at 45, lines 3-5, Table WEA-4, "DCF Results – Non-Utility Group."

firms in the S&P 500 as a proxy for the market return. This group of equities is too narrow a proxy for the total market.

Also, Dr. Avera's estimate of the risk-free rate is too high. Current 30-year Treasury bonds are yielding 2.75 percent, yet he uses 4.7 percent for his risk-free rate. Dr. Avera's size adjustment increasing the estimate by 0.94 percent is also incorrect: β captures the non-diversifiable risk of a particular security to the market. In other words, β captures all elements of risk for a stock that require compensation, including any risk associated with size differences for any firm in the market.

In conclusion, the components of Dr. Avera's CAPM analysis are all overstated producing an estimate that is too high. It should not be given any weight by the Commission in its determination of a fair ROE.

IX. SUMMARY

Q. Please summarize your cost of capital testimony.

A. Avista is a healthy utility. It is generating cash flows sufficient to fund its entire utility capital budget. It is able to sell new equity above book value and consistently is able to issue new debt on reasonable terms with its solid investment grade rating.

A 7.22 percent rate of return, a 9.0 percent return on equity and an equity ratio of 46 percent supports Avista's current financial position and fairly compensates shareholders for their investment in utility operations. My recommendation is consistent with the standards of *Bluefield* and *Hope*: it fairly balances investor and consumer interests. Capital costs have declined, and my

recommendation reflects the impact of changed circumstances in capital markets and it fairly compensates Avista's owners.

Dr. Avera's cost of equity recommendation reflects none of this and his result is excessive.

Q. Does this conclude your direct testimony?

A. Yes.