

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-05-\_\_\_\_\_

DOCKET NO. UG-05-\_\_\_\_\_

DIRECT TESTIMONY OF WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

DIRECT TESTIMONY OF WILLIAM E. AVERA

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EXHIBIT NO. \_\_\_\_ (WEA-2)

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**I. INTRODUCTION**

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

A. William E. Avera, 3907 Red River, Austin, Texas, 78751.

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

A. I am the President of FINCAP, Inc., a firm providing financial, economic, and policy consulting services to business and government.

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

A. A description of my background and qualifications, including a resume containing the details of my experience, is attached as Appendix A.

**A. Overview**

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

A. The purpose of my testimony is to present to the Washington Utilities and Transportation Commission (the "Commission" or "WUTC") my independent evaluation of the fair rate of return on equity ("ROE") for the jurisdictional utility operations of Avista Corp. ("Avista" or "the Company").

**Q. Please summarize the basis of your knowledge and conclusions concerning the issues to which you are testifying in this case.**

A. As is common and generally accepted in my field of expertise, I have accessed and used information from a variety of sources. I am familiar with the

1 organization, operations, finances, and operation of Avista from my participation in  
2 prior proceedings before the WUTC, the Idaho Public Utilities Commission  
3 ("IPUC"), and the Oregon Public Utility Commission ("OPUC"). In connection with  
4 the present filing, I considered and relied upon corporate disclosures and  
5 management discussions, publicly available financial reports and filings, and other  
6 published information relating to Avista. I also reviewed information relating  
7 generally to current capital market conditions and specifically to current investor  
8 perceptions, requirements, and expectations for Avista's utility operations. These  
9 sources, coupled with my experience in the fields of finance and utility regulation,  
10 have given me a working knowledge of investors' ROE requirements for Avista as it  
11 competes to attract capital, and form the basis of my analyses and conclusions.

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

13 **A.** The rate of return on common equity serves to compensate investors  
14 for the use of their capital to finance the plant and equipment necessary to provide  
15 utility service. Investors only commit money in anticipation of earning a return on  
16 their investment commensurate with that available from other investment  
17 alternatives having comparable risks. Consistent with both sound regulatory  
18 economics and the standards specified in the *Bluefield*<sup>1</sup> and *Hope*<sup>2</sup> cases, the return on

1 investment allowed a utility should be sufficient to: 1) fairly compensate capital  
2 invested in the utility, 2) enable the utility to offer a return adequate to attract new  
3 capital on reasonable terms, and 3) maintain the utility's financial integrity.

4 **Q. How did you go about developing your conclusions regarding a fair**  
5 **rate of return for Avista?**

6 A. I first reviewed the operations and finances of Avista and the general  
7 conditions in the utility industry and the economy. With this as a background, I  
8 conducted various well-accepted quantitative analyses to estimate the current cost of  
9 equity for a benchmark group of western utilities, including an application of the  
10 discounted cash flow ("DCF") model and alternative risk premium analyses. Based  
11 on the cost of equity estimates indicated by my analyses, the Company's ROE was  
12 evaluated taking into account the specific risks and economic requirements for  
13 Avista consistent with restoration and preservation of its financial integrity. Finally, I  
14 tested the reasonableness of my conclusions by reference to a benchmark based on  
15 earned rates of return expected for industrial firms.

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<sup>1</sup> *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679 (1923).

<sup>2</sup> *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

1 **B. Summary of Conclusions**

2 **Q. What are your findings regarding the fair rate of return on equity for**  
3 **the 2006 rate year?**

4 A. I conclude that the 11.5 percent ROE requested by Avista falls at the  
5 low end of a reasonable range applicable to Avista's 2006 rate year and endorse  
6 strongly the Company's request that this value be used as the rate of return on  
7 common equity for purposes of determining the weighted average cost of capital.

8 **Q. Dr. Avera, what are the salient factors that should be considered in**  
9 **evaluating a fair rate of return on equity for Avista?**

10 A. Avista must compete for investors' capital with other utilities and  
11 businesses of comparable risk. If the Company is not provided an opportunity to  
12 earn a return that is sufficient to compensate for the underlying risks, investors will  
13 be unwilling to supply capital. There are two broad categories of risks that form the  
14 backdrop for an evaluation of investors' required return and should be considered in  
15 establishing an ROE for Avista:

16 **1. Market Risks:**

- 17 • Investors recognize that utilities continue to face the potential for volatile  
18 commodity prices, especially in the west;
- 19 • For utilities that rely on hydro generation, these uncertainties are  
20 compounded by exposure to the negative impact of ongoing drought  
21 conditions;
- 22 • In the wake of the western power market crisis, the risk that investors  
23 associate with utilities has shifted sharply higher, which has only  
24 heightened the importance of supportive regulatory actions; and

- 1 • A widely anticipated increase in interest rates implies higher capital  
2 costs for Avista's 2006 rate year.

3 **2. Risks of Avista:**

- 4 • Avista is one of a small minority of utilities with a below investment  
5 grade credit rating and this implies significantly higher risks and a  
6 higher required return on equity;
- 7 ○ An analysis of published yield spreads for speculative grade debt  
8 implies an additional risk premium in the range of approximately 74  
9 to 300 basis points;
- 10 ○ Avista's "BB+" rating restricts the Company's financial flexibility and  
11 access to capital relative to other utilities, especially when capital  
12 market conditions are unfavorable.
- 13 • Because close to one-half of Avista's energy requirements are provided  
14 by hydroelectric generation, the Company is exposed to additional risks  
15 that other utilities do not face;
- 16 ○ During times of reduced stream flows, Avista is forced to rely more  
17 heavily on purchased power or more costly thermal generation;
- 18 ○ In the aftermath of the crisis in western wholesale power markets,  
19 investors equate this exposure to potential volatility in wholesale  
20 energy markets with higher investment risk;
- 21 • Investors view the Company's Energy Recovery Mechanism ("ERM") as  
22 supportive of the Company's financial integrity, but they understand  
23 that the ERM does not apply to 100 percent of power costs; nor does it  
24 insulate Avista from the need to finance accrued power production and  
25 supply costs or shield the Company from potential regulatory  
26 disallowances.

27 **Q. Why is it so critical to consider these risks in establishing a fair rate**  
28 **of return for Avista in this case?**

29 **A. Providing Avista with the opportunity to earn a return that reflects**  
30 **these realities is an essential ingredient to strengthen the Company's financial**  
31 **position, which ultimately benefits customers by ensuring reliable service at lower**

1 long-run costs. Avista has taken great strides towards restoring its financial health,  
2 and there are compelling reasons why the WUTC should support continued  
3 progress by authorizing an adequate ROE:

- 4 • The financial impact of an inadequate ROE would almost certainly  
5 forestall Avista's ability to achieve an investment grade credit rating,  
6 which implies higher capital costs and reduced financial flexibility;
- 7 • Avista must access the capital markets to fund significant capital  
8 expenditures to maintain and enhance its utility system;
- 9 • Avista is faced with the near-term prospect of refinancing over 50  
10 percent of its total debt outstanding, with improved financial strength  
11 translating into lower borrowing rates and lower long-run financing  
12 costs;
- 13 • The challenges that have recently characterized the utility industry  
14 illustrate the need to ensure that Avista has the ability to respond  
15 effectively to unforeseen events.

16 Ultimately, it is customers and the service area economy that enjoy the rewards that  
17 come from ensuring that the utility has the financial wherewithal to take whatever  
18 actions are necessary to provide a reliable energy supply.

19 **Q. In summary, why is it so important for the Commission to establish a**  
20 **sufficient return on equity, along with an appropriate capital structure?**

21 **A.** In order for the Company to return to investment grade in the near-  
22 term, a sufficient return on equity must be approved, together with an appropriate  
23 capital structure. As discussed later in my testimony, in addition to its longer-term  
24 financing needs, the Company has projected capital expenditures of approximately  
25 \$275 million in 2005/06, and will have refinanced over 50% of its debt by 2007/08.



1 Accordingly, it is important to bolster Avista's financial standing in order to attract  
2 capital to fund the Company's commitments at the lowest cost.

3 **Q. After considering these factors, what were your conclusions**  
4 **regarding the ROE and capital structure requested by Avista?**

5 A. In light of these considerations, the 11.5 percent ROE requested by  
6 Avista is a conservative estimate of investors' required rate of return for the 2006 rate  
7 year. I based this conclusion on the results of quantitative analyses of the cost of  
8 equity for a proxy group of other western utilities, and in light of Avista's higher  
9 relative risks:

- 10 • My analyses weighed the results of alternative methods, as well as  
11 expectations for higher interest rates;
- 12 • After incorporating a 30 basis point allowance for flotation costs, the  
13 results of my analyses for the reference group of western utilities  
14 implied a cost of equity range of 11.1 to 12.1 percent, with a midpoint of  
15 11.6 percent;

16 I concluded that the 11.5 percent ROE requested by Avista falls at the low end  
17 of a reasonable range for investors' required rate of return because:

- 18 • Avista's request falls slightly below the 11.6 percent midpoint of the  
19 range for the proxy group;
- 20 • Adjusting for Avista's greater investment risk implies an ROE range  
21 significantly higher than the proxy group results;
- 22 • After considering the impact of flotation costs and Avista's higher  
23 investment risks, even the low-end result of my quantitative analyses for  
24 the proxy group would imply a rate of return roughly equivalent to  
25 Avista's request in this case.

1 Similarly, I strongly endorse Avista's requested capital structure, which  
2 contains less equity (44.0%) than the average for the proxy group used to estimate  
3 the cost of equity (48.5%), and contains more debt than the threshold specified for  
4 the lowest investment grade bond rating.

5 **II. FUNDAMENTAL ANALYSES**

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

7 **A. As a predicate to my economic and capital market analyses, this**  
8 **section examines conditions in the utility industry generally, and for Avista**  
9 **specifically, that investors consider in evaluating their required rate of return. An**  
10 **understanding of these fundamental factors, which drive the risks and prospects for**  
11 **Avista, is essential to develop an informed opinion about investor expectations and**  
12 **requirements that form the basis of a fair rate of return on equity.**

13 **A. Operations & Finances**

14 **Q. Briefly describe Avista.**

15 **A. Avista is engaged primarily in the procurement, transmission, and**  
16 **distribution of natural gas and electric energy, as well as other energy-related**  
17 **businesses. The Avista Utilities operating division is comprised of state-regulated**  
18 **utility activities, including retail natural gas and electric distribution and**  
19 **transmission services and energy generation. In addition to providing natural gas**  
20 **and electric utility service within a 26,000 square mile area of eastern Washington**

1 and northern Idaho, Avista's utility segment also provides gas distribution service in  
2 4,000 square miles of northeast and southwest Oregon and in the South Lake Tahoe  
3 region of California.<sup>3</sup>

4 Avista's generating facilities include 8 hydroelectric generating stations  
5 located in Idaho, Montana, and Washington with a combined capacity of  
6 approximately 960 megawatts ("MW"). The electrical output of Avista's  
7 hydroelectric plants, which has a significant impact on total energy costs, is  
8 dependent on stream flows, which have fallen significantly below normal levels in  
9 recent years. Although Avista estimates that hydroelectric generation is capable of  
10 supplying 50 percent of total system requirements under normal conditions, the  
11 Company has experienced persistent below-normal water conditions. Fluctuations  
12 in the output of the Company's hydroelectric generating facilities due to variable  
13 water conditions force Avista to rely more heavily on more costly fossil fuels and  
14 wholesale power markets to meet its customers' energy needs.

15 Additionally, all but one of Avista's hydroelectric facilities are subject to  
16 licensing under the Federal Power Act, which is administered by FERC. After  
17 agreeing to institute various protections, mitigation, and enhancement measures in  
18 order to address environmental concerns, Avista received new operating licenses

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<sup>3</sup> In March 2005 the California Public Utilities Commission approved the sale of Avista's South Lake Tahoe properties to Southwest Gas. The transaction is expected to close near the end of April 2005.

1 covering its two largest hydroelectric facilities – Cabinet Gorge and Noxon Rapids –  
2 in 2001. The license covering five hydroelectric plants on the Spokane River expires  
3 in August 2007. Relicensing is not automatic under federal law, and Avista must  
4 demonstrate that it has operated its facilities in the public interest, which includes  
5 adequately addressing environmental concerns.

6 **Q. How are fluctuations in Avista’s operating expenses caused by**  
7 **varying hydro and power market conditions accommodated in its rates?**

8 A. Beginning in July 2002, Avista implemented the ERM, under which  
9 Washington jurisdictional rates are adjusted periodically to reflect changes in  
10 variable power production and supply costs. When hydroelectric generation is  
11 reduced and power supply costs rise above those included in base rates, the ERM  
12 allows Avista to set aside a portion of these additional costs for the opportunity for  
13 future recovery. Conversely, if increased hydroelectric generation were to lead to  
14 lower power supply costs, the change in costs would reduce the existing deferral  
15 balance or lead to a reduction in rates. Although the ERM provides for rates to be  
16 adjusted periodically, it applies to 90 percent of the deviation between actual power  
17 supply costs and normalized rates. The ERM also provides for Avista to incur the  
18 cost of, or receive the benefit from, the first \$9.0 million in annual power supply  
19 costs above or below the amount included in base retail rates.

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

2           A.    Like many other utilities in the region, Avista was adversely affected  
3           by volatile and unprecedented energy prices in the western U.S. in 2000 and 2001.  
4           Unprecedented increases in wholesale prices, coupled with rate structures that did  
5           not capture full costs of acquiring fuel and purchased power, led to severe liquidity  
6           problems, depressed earnings, and debt ratings downgrades. Avista is currently  
7           assigned a corporate credit rating of "BB+" by Standard & Poor's Corporation (S&P),  
8           with Avista's senior secured debt being rated "BBB-". Similarly, Moody's Investors  
9           Service ("Moody's) has assigned an issuer credit rating of "Ba1" to Avista, while  
10          rating the Company's first mortgage bonds "Baa3". These corporate credit ratings  
11          place Avista in the same category as speculative, or "junk," bond companies, with its  
12          senior debt ratings occupying the bottom rung on the ladder of the investment grade  
13          scale.

14          **Q.    Does Avista anticipate the need to access the capital markets going**  
15          **forward?**

16          A.    Most definitely. Avista will require capital investment to meet  
17          customer growth, provide for necessary maintenance and replacements of its natural  
18          gas utility systems, as well as fund new investment in electric generation,  
19          transmission and distribution facilities. As discussed by Mr. Malquist, planned

1 capital expenditures for 2005 alone total \$145 million, with approximately \$275  
2 million anticipated over the 2005-2006 period.

3 Over the longer-term, Avista's Integrated Resource Plan has identified the  
4 potential need for the Company to finance total expenditures for electric facilities of  
5 approximately \$725 million over the next ten years.<sup>4</sup> The preferred strategy outlined  
6 in Avista's 2003 Integrated Resource Plan contemplates total expenditures of \$2.4  
7 billion over the plan's 20-year horizon, including additional investment in  
8 transmission infrastructure and upgrades at five hydroelectric stations.

9 In addition to funding investment in utility infrastructure, Avista will also be  
10 required to refinance a significant portion of its long-term debt outstanding. The  
11 Company has securities of \$71 million that mature in 2005-2006, with over 50 percent  
12 of Avista's total debt – approximately \$500 million worth – maturing in 2007 and  
13 2008.

14 Considering the Company's weakened credit standing, enhancing Avista's  
15 financial integrity and flexibility will be instrumental in attracting the capital  
16 necessary to fund these projects in an effective manner. Similarly, bolstering Avista's  
17 financial position will also support the Company's efforts to refinance its debt at  
18 favorable interest rates, thereby lowering costs for customers in the future.

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<sup>4</sup> Avista Corp., 2003 Integrated Resource Plan at 48.

1 **B. Utility Industry**

2 **Q. What general conditions have recently characterized the utility**  
3 **industry?**

4 **A. Over the past decade, the industry has experienced significant**  
5 **structural change resulting from market forces and decontrol initiatives. At least**  
6 **initially, this process was largely driven by regulatory reforms at the federal level.**  
7 **The National Energy Policy Act of 1992 greatly increased prospective competition**  
8 **for the production and sale of power at the wholesale level, with FERC being an**  
9 **aggressive proponent for actions designed to foster greater competition in markets**  
10 **for wholesale power supply. Similarly, FERC aspired to make the natural gas**  
11 **industry more competitive and broaden the market for gas supplies through its**  
12 **Order Nos. 436, 500, and 636. The dramatic structural changes within the natural**  
13 **gas industry have exposed gas utilities to the risk of "bypass", as large customers**  
14 **seek out lower-cost supplies, while they simultaneously confront new complexities**  
15 **and risks entailed in actively contracting for an economical, secure gas supply.**

16 **Most market observers agree that, while "open access" to FERC-jurisdictional**  
17 **transmission facilities has resulted in more competition in wholesale energy**  
18 **markets, it has also introduced substantial risks – particularly for utilities (like**  
19 **Avista) that depend on wholesale markets for a portion of their resource**  
20 **requirements.**

1           **Q.     What impact has the western power crisis had on investors' risk**  
2 **perceptions for firms involved in the electric power industry?**

3           A.     Events of last several years caused investors to rethink their assessment  
4 of the relative risks associated with the electric power industry. A well-publicized  
5 energy crisis throughout the west wreaked havoc on the customers, utilities, and  
6 policymakers. It also had dramatic repercussions for western wholesale power  
7 markets and investors and utilities nationwide. State regulators and legislators have  
8 re-evaluated restructuring initiatives for the retail sector of the electric industry and  
9 the financial implications of the western power crisis brought the uncertainties  
10 associated with today's power markets into sharp focus for the investment  
11 community. While the case of California represents an extreme example, there is  
12 every indication that investors' risk perceptions for utilities shifted sharply upward  
13 in response to these events.

14           **Q.     Was there a corresponding impact on the industry's credit standing?**

15           A.     Yes. The last several years witnessed steady erosion in credit quality  
16 throughout the utility industry, both as a result of revised perceptions of the risks in  
17 the industry and the weakened finances of the utilities themselves. For example,  
18 during 2002, S&P recorded 182 downgrades in the utility industry, versus only 15



1 upgrades,<sup>5</sup> while Moody's downgraded 109 utility issuers and upgraded 3.<sup>6</sup> Credit  
2 quality continued to decline during 2003, with S&P reporting that downgrades  
3 outpaced upgrades by more than 15 to one in the fourth quarter of 2003.<sup>7</sup> While the  
4 pace and scale of negative ratings actions has since diminished, S&P reported that  
5 the majority of the companies in the utility sector now fall in the triple-B rating  
6 category and noted little likelihood for any significant upturn in credit outlook.<sup>8</sup>

7 **Q. What other developments have contributed to investors'**  
8 **reassessment of the risks associated with the electric utility industry?**

9 A. Policy evolution in the electric transmission area has been wide-  
10 reaching and investors have increasingly focused on uncertainty over operating  
11 rules and market development. Virtually all industry stakeholders have recognized  
12 that regulatory uncertainties increase the risks associated with the utility industry.  
13 For example, the Department of Energy ("DOE") identified "reducing regulatory  
14 uncertainty" as critical in stimulating increased investment in the power industry  
15 and has noted that lack of clarity in the regulatory structure was inhibiting planning

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<sup>5</sup> Standard & Poor's Corporation, "U.S. Power Industry Experiences Precipitous Credit Decline In 2002; Negative Slope Likely to Continue," *RatingsDirect* (Jan. 15, 2003).

<sup>6</sup> Moody's Investors Service, *Credit Perspectives* (Jul. 14, 2003) at 33.

<sup>7</sup> Standard & Poor's Corporation, "U.S. Utilities' Ratings Decline Continued in 2003, But Pace Slows," *RatingsDirect* (Feb. 2, 2004).

<sup>8</sup> Standard & Poor's Corporation, *RatingsDirect* (Jul. 29, 2004).

1 and investment.<sup>9</sup> The DOE also recognized the impact that this regulatory  
2 uncertainty has on investors' required rates of return for electric utilities:

3 Because transmission assets are long lived, regulatory uncertainty  
4 increases the risks to investors and, therefore, increases the returns  
5 they need to justify transmission system investments.<sup>10</sup>

6 The 2003 blackout only served to reinforce the importance of regulatory risks for  
7 investors. The Wall Street Journal cited the debilitating impact of an "unsteady  
8 regulatory environment" and the "chaotic combination of regulated and  
9 deregulated markets" in explaining inhibitions to increased investment in the  
10 electric utility system.<sup>11</sup>

11 **Q. Are these uncertainties the only risks being faced by utilities?**

12 **A.** No. Apart from these factors, electric and gas companies continue to  
13 face the normal risks inherent in operating utility systems, including the potential  
14 adverse effects of inflation, interest rate changes, growth, the general economy, and  
15 regulatory uncertainty and lag. As Fitch Ratings, Ltd. ("Fitch") noted in a recent  
16 review of the utility industry:

17 Taking a longer view, over the coming five years through 2009, the  
18 sector will increasingly face some potentially negative factors. These

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<sup>9</sup> U.S. Department of Energy, *National Transmission Grid Study* (May 2002), at 24 and 31.

<sup>10</sup> *Id.* at 31.

<sup>11</sup> Smith, Rebecca, "Overloaded Circuits Blackout Signals Major Weakness in U.S. Power Grid," *The Wall Street Journal* (Aug. 18, 2003).

1 include rising interest rates, higher capital expenditures and volatile  
2 commodity prices.<sup>12</sup>

3 Electric utilities are confronting increased environmental pressures that leave them  
4 exposed to uncertainties regarding emissions and potential contamination. S&P  
5 recognized the potential financial challenges posed by such uncertainties:

6 Pension obligations, environmental liabilities, and serious legal  
7 problems restrict flexibility, apart from the obligations' direct financial  
8 implications.<sup>13</sup>

9 **C. Relative Risks of Avista**

10 **Q. How was Avista impacted by the turmoil in the electric power**  
11 **industry?**

12 **A. Like others, Avista was swept up in the maelstrom of the western**  
13 **energy crisis. Because of Avista's dependence on hydroelectric generation, it has**  
14 **always been exposed to the uncertainties associated with year-to-year fluctuations in**  
15 **water conditions. Nevertheless, the degree of price volatility that Avista was forced**  
16 **to assume was unprecedented and variability in short-term market prices bore no**  
17 **resemblance to fluctuations experienced in the past.**

18 Increased wholesale prices and rate structures that did not capture the full  
19 costs of acquiring fuel and purchased power led to depressed earnings, while cash

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<sup>12</sup> Fitch Ratings, Ltd., "Outlook 2005: U.S. Power & Gas," *Global Power North American Special Report* (Jan. 6, 2005) at 2.

<sup>13</sup> Standard & Poor's Corporation, *Corporate Ratings Criteria* at 29, available at [www.standardandpoors.com/ratings](http://www.standardandpoors.com/ratings).

1 flow shortfalls burdened the Company with increased financing requirements.  
2 Avista was forced to use cash flows from operations, various bank borrowings, and  
3 short- and long-term debt to fund unrecovered energy supply costs. This led to a  
4 sharp deterioration in Avista's financial condition, a severe liquidity crunch, and a  
5 dramatic increase in credit risk. As a result, commercial banks were reticent to  
6 extend financing for ongoing operations or new construction, and the Company's  
7 power and natural gas suppliers were unwilling to transact business absent special  
8 credit terms. Because of record low stream flows available to Avista's hydroelectric  
9 facilities in 2001 and the resulting dependence on wholesale power markets in the  
10 west, the chaotic market conditions were felt directly.

11 **Q. Are investors likely to consider the impact of industry uncertainty in**  
12 **assessing their required rate of return for Avista?**

13 **A.** Absolutely. While utility restructuring has not been actively pursued  
14 in Washington, Avista continues to face the prospect of FERC driven changes in the  
15 electric transmission function of their business, as well as other fundamental  
16 industry reforms. Moreover, because close to one-half of Avista's total energy  
17 requirements are provided by hydroelectric facilities, the Company is exposed to a  
18 level of uncertainty not faced by most utilities. While hydropower confers  
19 advantages in terms of fuel cost savings and diversity, reduced hydroelectric  
20 generation due to below-average water conditions forces Avista to rely more heavily

1 on purchased power or more costly thermal generating capacity to meet its resource  
2 needs. Additionally, in recent years utilities and their customers have also had to  
3 contend with dramatic fluctuations in gas costs due to ongoing price volatility in the  
4 spot markets.<sup>14</sup> In the minds of investors, this dependence on wholesale markets  
5 entails significant risk, especially for a utility located in the west.

6 Investors recognize that volatile energy markets, unpredictable stream flows,  
7 and Avista's reliance on wholesale purchases to meet a portion of its resource needs  
8 can create a "perfect storm," exposing the Company to the risk of reduced cash  
9 flows and unrecovered power supply costs. Avista's reliance on purchased power to  
10 meet shortfalls in hydroelectric generation magnifies the importance of  
11 strengthening financial flexibility, which is essential to guarantee access to the cash  
12 resources and interim financing required to cover inadequate operating cash flows,  
13 as well as fund required investments in the utility system.

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<sup>14</sup> For example, the Energy Information Administration (Mar. 27, 2003) reported that the average spot gas price at the Henry Hub spiked to \$18.85 per MMBtu in February 2003, before declining to approximately \$5.00.

1           **Q.     Have the risks of market volatility dissipated since the crisis in 2000-**  
2           **2001?**

3           **A.     No. Investors recognize that the continuing prospect of further**  
4           **turmoil in western energy markets cannot be discounted, with S&P reporting**  
5           **continued spikes in wholesale market prices in the aftermath of the crisis:**

6           For 2003, record-high wholesale power prices were the defining feature  
7           of the U.S. merchant power markets. ...Power prices across the U.S.  
8           continent generally rose on the order of 50% or more in 2003. ...Prices  
9           in the western regions were also the highest on record outside of the  
10          2000-2001 California energy crisis.<sup>15</sup>

11          More recently, S&P noted that, while the severe distortions that characterized the  
12          energy crisis of 2000-2001 have faded, “[n]atural gas volatility, poor hydro  
13          conditions in the Northwest, the Southwest’s sustained drought, and uncertainty  
14          over future generation development” are “daily reminders” of the challenges to the  
15          financial health of western utilities.<sup>16</sup> S&P noted the danger posed by “high and  
16          volatile natural gas prices,” which increase the uncertainties associated with power  
17          supply costs and “further heightens ... concerns on the potential impact for [gas  
18          distribution utilities].”<sup>17</sup>

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<sup>15</sup> Standard & Poor’s Corporation, “Energy Commodity Report: U.S. Power Prices Record High in 2003,” *RatingsDirect* (Jan. 15, 2004).

<sup>16</sup> Standard & Poor’s Corporation, *Utilities & Perspectives* (Oct. 18, 2004).

<sup>17</sup> Standard & Poor’s Corporation, “Prolonged High Natural Gas Prices May Increase Credit Risk for U.S. Gas Distributors,” *RatingsDirect* (Jan. 19, 2005)

1           Meanwhile, a California stakeholders group concluded that the state “is in  
2 serious trouble of repeating its 2000-2001 power crisis,”<sup>18</sup> with S&P observing that:

3           Utilities in the Pacific Northwest continue to face a host of challenges.  
4           If the western power crisis left a large number of them, investor-owned  
5           as well as publicly-owned, in dire financial straits, weak economic  
6           conditions and the uncertain hydro situation have hampered recovery  
7           prospects.<sup>19</sup>

8           S&P went on to note the significant potential costs and risks imposed by uncertainty  
9           over fish-conservation measures that might be required to meet federal law and  
10          continued volatility in wholesale power markets, concluding that “managing hydro  
11          risk has assumed a critical importance to credit quality.”<sup>20</sup>

12          **Q.     Do recent weather conditions ameliorate investors’ concerns?**

13          A.     No. Lack of snow and warmer than normal temperatures this winter  
14          season have only deepened concerns over power prices for the coming year. The  
15          Wall Street Journal observed that:

16          Regional weather watchers say conditions are starting to resemble  
17          those of 2001, when dry weather and a low snowpack brought drought  
18          conditions to the Pacific Northwest.<sup>21</sup>

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<sup>18</sup> “Group urges state to seek generation investment now to avoid future crisis,” *Electric Utility Week* (Aug. 9, 2004) at 20.

<sup>19</sup> Standard & Poor’s Corporation, “Legal Developments Add to Utilities’ Disquiet in U.S. Northwest,” *Utilities & Perspectives* (July 21, 2003) at 2-3.

<sup>20</sup> *Id.*

<sup>21</sup> Stepankowsky, Paula L., “Lack of Snow in Pacific Northwest Heightens Worry About Power,” *The Wall Street Journal* (Feb. 16, 2005).

1 On March 10, 2005, Washington's Governor issued a drought emergency, citing  
2 record low snow pack, record high temperatures and record low stream flows  
3 throughout the state.

4 Similarly, Avista's current forecasts contemplate runoff levels below 50  
5 percent of normal in the Spokane and Clark Fork river drainages for April through  
6 September 2005.<sup>22</sup> Coupled with relatively high gas prices, the Wall Street Journal  
7 article noted that such shortfalls in hydro generation would translate into higher  
8 energy prices. From the standpoint of the capital markets, the west is risky – and  
9 Avista's weakened financial profile and continued exposure to wholesale electric and  
10 natural gas markets in meeting shortfalls in hydroelectric generation and other  
11 variations in resources and loads compound these uncertainties.

12 **Q. Does the ERM remove the risk associated with fluctuations in power**  
13 **supply costs?**

14 **A. No.** While approval of the ERM was a positive step and supportive of  
15 Avista's financial integrity, it does not apply to 100 percent of power costs.  
16 Moreover, even for utilities with permanent energy cost adjustment mechanisms in  
17 place, there can be a significant lag between the time the utility actually incurs the

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<sup>22</sup> Avista Corp., "Avista to Adjust Hydro Operations in Response to Dry Winter," *News Release* (Mar. 10, 2005).



1 expenditure and when it is recovered from ratepayers. Citing the example of a gas  
2 utility, S&P observed that:

3 Slow recovery could impinge on the firm's liquidity as short-term  
4 funds are consumed to finance high-cost gas purchases. In turn, this  
5 may necessitate a large bank line that increases borrowing costs.<sup>23</sup>

6 In the case of Avista's electric operations, after absorbing the first \$9 million of  
7 annual energy cost increases above base rates, costs are deferred and a surcharge is  
8 implemented when accumulated deferrals exceed 10 percent of base retail revenues.  
9 Thus, in addition to absorbing the first \$9 million of cost increases, the ERM does not  
10 insulate Avista from the need to finance accrued power production and supply costs  
11 and investors recognize the ongoing potential for regulatory disallowances. As S&P  
12 observed:

13 [Fuel and purchased power adjustment mechanisms (FPPA)] vary  
14 substantially in their ability to protect utilities daily and under  
15 catastrophic market movements. Moreover, it is critical to note that  
16 FPPAs are not a substitute for supportive regulation; the regulator's  
17 ability to disallow costs through ex-post prudence review, regardless  
18 of the existence of a FPPA, is a fact of life for utilities.<sup>24</sup>

19 Similarly, Fitch noted that "because of the lag between when the excess costs are  
20 incurred and when they are recovered and the potential disallowances of such  
21 costs," significant uncertainties remain even for utilities with fuel and purchased

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<sup>23</sup> Standard & Poor's Corporation, "Prolonged High Natural Gas Prices May Increase Credit Risk for U.S. Gas Distributors," *RatingsDirect* (Jan. 19, 2005).

<sup>24</sup> Standard & Poor's Corporation, *Utilities & Perspectives* (Oct. 18, 2004).

1 power cost adjustment mechanisms.<sup>25</sup> Significantly, Fitch specifically highlighted  
2 Avista as one of 29 utilities having “relatively greater fuel or purchased power  
3 exposure within the sector.”<sup>26</sup>

4 **Q. How does Avista’s credit rating compare to those of the proxy group**  
5 **used to estimate the cost of equity?**

6 A. The average corporate credit rating for the proxy group of western  
7 utilities used to estimate the cost of equity is “BBB”. As noted earlier, Avista’s  
8 corporate rating is currently “BB+”.

9 **Q. What does Avista’s credit rating imply with respect to the rate of**  
10 **return required by investors?**

11 A. Cost of equity estimates developed for the benchmark group of utilities  
12 are predicated on the investment risks associated with the proxy firms, which have  
13 corporate credit ratings of triple-B or higher. Meanwhile, Avista’s below investment  
14 grade rating is indicative of an entirely different risk class. Because investors require  
15 a higher rate of return to compensate them for bearing more risk, the greater  
16 investment risk implied by Avista’s credit ratings suggests that the cost of equity is  
17 correspondingly higher than for the proxy group.

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<sup>25</sup> FitchRatings, “Outlook 2005: U.S. Power & Gas,” *Global Power/North America Special Report* (Jan. 6, 2005) at 26.

<sup>26</sup> *Id.* at 27.

1           **Q.     What is the significance of “investment grade” versus “below**  
2 **investment grade”?**

3           **A.     The term “investment grade” refers to a security having sufficient**  
4 **quality, or relatively low risk, to be suitable for certain investment purposes. In**  
5 **discussing this distinction, S&P noted that:**

6           The term “investment grade” was originally used by various  
7 regulatory bodies to connote obligations eligible for investment by  
8 institutions such as banks, insurance companies, and savings and loan  
9 associations. Over time, this term gained widespread usage  
10 throughout the investment community. Issues rated in the four highest  
11 categories, ‘AAA’, ‘AA’, ‘A’, ‘BBB’, are recognized as being investment  
12 grade. Debt rated ‘BB’ or below generally is referred to as speculative  
13 grade. The term “junk bond” is merely a more irreverent expression  
14 for this category of more risky debt.<sup>27</sup>

15           There is a precipitous increase in risk associated with moving from  
16 investment grade to below investment grade securities. S&P documented this in its  
17 description of the risks associated with triple-B rated bonds and below investment  
18 grade instruments:

19           An obligation rated ‘BBB’ exhibits adequate protection parameters.  
20 However, adverse economic conditions or changing circumstances are  
21 more likely to lead to a weakened capacity of the obligor to meet its  
22 financial commitment on the obligation. Obligations rated ‘BB’, ‘B’,  
23 ‘CCC’, and ‘C’ are regarded as having significant speculative  
24 characteristics. ... While such obligations will likely have some quality

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<sup>27</sup> Standard & Poor’s, *Corporate Ratings Criteria* at 9, available at [www.standardandpoors.com/ratings](http://www.standardandpoors.com/ratings).

1 and protective characteristics, these may be outweighed by large  
2 uncertainties or major exposures to adverse conditions.<sup>28</sup>

3 A study conducted by Moody's indicated that default rates on double-B rated bonds  
4 exceeded those for triple-B rated debt by a factor of 5.82 times over the period 1970  
5 through 2002.<sup>29</sup> Thus, bond ratings differences within the investment grade range  
6 tend to reflect relatively modest gradations among fairly secure investments.  
7 Meanwhile, moving to below investment grade implies an altogether different risk  
8 plateau – one where the firm is regarded as a speculative investment.

9 **Q. Is there any direct capital market evidence regarding the amount of**  
10 **the premium investors require from a firm that is rated double-B, such as Avista?**

11 **A.** Although rates of return on equity for below investment grade firms  
12 cannot be directly observed, the observed yields on long-term bonds provide direct  
13 evidence of the additional return that investors require to bear the risks associated  
14 with speculative grade credit ratings. While average yields on double-B public  
15 utility bonds are not routinely published, Moody's reported that the average yield  
16 on speculative-grade debt securities exceeded prevailing yields on long-term  
17 government bonds by 387 basis points during the period 1993 through 1997.<sup>30</sup>  
18 Subsequently, the speculative-grade yield spread widened sharply to an average of

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<sup>28</sup> *Id.* at 8.

<sup>29</sup> Moody's Investors Service, "Tracing the Origins of Investment Grade," *Special Comment* (Jan. 2004) at 6.

<sup>30</sup> Moody's Investors Service, *Credit Perspectives* (Jul. 14, 2003) at 35.

1 684 basis points from August 1998 through year-end 2003,<sup>31</sup> before narrowing to 280  
2 basis points in March 2005.<sup>32</sup>

3 As shown on Schedule WEA-1, after incorporating current bond yields, this  
4 data implies a speculative grade risk premium for industrial bonds in the range of  
5 1.33 percent to 5.37 percent. These results were then adjusted to recognize that yield  
6 spreads between ratings categories may be relatively narrower for public utility  
7 issues than for industrial bonds. After making this adjustment, this analysis implied  
8 that bondholders would require approximately 74 to 300 basis points in additional  
9 return in order to compensate for the greater risks associated with a utility's  
10 speculative grade debt rating. Investors would undoubtedly require a significantly  
11 greater premium for bearing the higher risk associated with the more junior  
12 common stock of a utility with Avista's below investment grade rating.

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

15 **A. Yes. Other things equal, a higher debt ratio, or lower common equity**  
16 **ratio, translates into increased financial risk for all investors. A greater amount of**  
17 **debt means more investors have a senior claim on available cash flow, thereby**  
18 **reducing the certainty that each will receive his contractual payments. This**

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<sup>31</sup> Moody's Investors Service, *Credit Perspectives* (Jul. 26, 2004) at 42.

<sup>32</sup> Moody's Investors Service, *Credit Perspectives* (Mar. 14, 2005) at 55.

1 increases the risks to which lenders are exposed, and they require correspondingly  
2 higher rates of interest. From common shareholders' standpoint, a higher debt ratio  
3 means that there are proportionately more investors ahead of them, thereby  
4 increasing the uncertainty as to the amount of cash flow, if any, that will remain.

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

7 **A. Avista's capital structure is presented in the testimony of Mr. Malquist.**  
8 **As summarized in his testimony, the common equity ratio used to compute Avista's**  
9 **overall rate of return was 44.0 percent in this filing.**

10 **Q. What was the average capitalization maintained by the reference**  
11 **group of utilities?**

12 **A. As shown on Schedule WEA-2, for the nine firms in the proxy group,**  
13 **common equity ratios at December 31, 2004 ranged from 39.1 percent to 65.8 percent**  
14 **and averaged 51.1 percent. Adjusting these proxy group averages to incorporate the**  
15 **same short-term debt ratio reflected in Avista's requested capitalization of**  
16 **approximately 5.2 percent results in the average capital structure ratios summarized**  
17 **below:**

**Adjusted Proxy Group Capitalization**

<b><u>Capital Component</u></b>	<b><u>% of Total</u></b>
Short-term Debt	5.2%
Long-term Debt	45.2%
Preferred Securities	1.1%
Common Equity	<u>48.5%</u>
Total	100.0%

**Q. What implication does the increasing risk of the utility industry have for the capital structures maintained by utilities?**

**A.** The decline in credit quality in the electric industry is indicative of the need for utilities to strengthen financial profiles to deal with an increasingly uncertain and competitive market. S&P cited the inadequacy of current balance sheets in the electric industry as one of the key factors explaining this deterioration:

The downward slope in the power industry's credit picture can be traced to higher debt leverage and overall deterioration in financial profiles, constrained access to capital markets as a result of investor skepticism over accounting practices and disclosure, liquidity problems, financial insolvency, and investments outside the traditional regulated utility business, principally merchant generation facilities and related energy marketing and trading activities.<sup>33</sup>

A more conservative financial profile is consistent with increasing uncertainties and the imperative of maintaining continuous access to the capital required to fund operations and necessary system investment, even during times of adverse capital market conditions.

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<sup>33</sup> Standard & Poor's Corporation, *Credit Quality For U.S. Utilities Continues Negative Trend*, RatingsDirect, Jul. 24, 2003.

1 As shown on Schedule WEA-2, the Value Line Investment Survey ("Value  
2 Line") expects that the average common equity ratio for the proxy group of western  
3 utilities will increase to 56.3 percent over the next three to five years, or 53.4 percent  
4 after incorporating short-term debt comparable to Avista. As the WUTC observed in  
5 its February 18, 2005 order concerning Puget Sound Energy, Inc., "[i]t is appropriate  
6 ... to afford more weight to forward considerations than to historic conditions as we  
7 determine the appropriate equity ratio to be embedded in prospective rates."<sup>34</sup>

8 **Q. How does Avista's common equity ratio compare with those**  
9 **maintained by the reference group of utilities?**

10 A. Avista's 44.0 percent common equity ratio falls below the 48.5 percent  
11 average for the proxy group at year-end 2004, after adjusting for comparable short-  
12 term debt balances. Similarly, Avista's requested equity ratio is well short of the 53.4  
13 percent equity ratio based on Value Line's expectations for these western utilities  
14 over the near-term. Because a capitalization that contains relatively more debt  
15 leverage implies greater financial risk, it also implies a higher required rate of return  
16 to compensate investors for bearing additional uncertainty.

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<sup>34</sup> Order No. 06, Docket Nos. UG-040640 and UE-040641 (consolidated) at P. 32.



1           **Q.     How does Avista’s capital structure compare with other widely cited**  
2 **financial benchmarks for utilities?**

3           A.     The financial ratio guidelines published by S&P specify a range for a  
4 utility's total debt ratio that corresponds to each specific bond rating. Widely cited  
5 in the investment community, these ratios are viewed in conjunction with a utility’s  
6 *business profile* ranking, which ranges from 1 (strong) to 10 (weak) depending on a  
7 utility’s relative business risks. Thus, S&P’s guideline financial ratios for a given  
8 rating category (e.g., triple-B) vary with the business or operating risk of the utility.  
9 In other words, a firm with a *business profile* of “2” (*i.e.*, relatively lower business risk)  
10 could presumably employ more financial leverage than a utility with a business  
11 profile assessment of “9” while maintaining the same credit rating. S&P has assigned  
12 Avista a *business profile* ranking of “6”.<sup>35</sup>

13           As noted in the testimony of Mr. Malquist, consistent with an S&P *business*  
14 *profile* ranking of “6”, a ratio of total debt to total capital in the range of 48 to 58  
15 percent is specified for a triple-B bond rating, with Avista’s requested capital  
16 structure reflecting a total debt ratio of 49.4 percent.

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<sup>35</sup> Standard & Poor’s Corporation, “U.S. Utility and Power Ranking List,” *RatingsDirect* (Nov. 15, 2004).

1           **Q.     What other factors do the rating agencies consider in their**  
2           **assessment of a company’s capital structure?**

3           A.     Depending on the degree of permanence and other attributes, preferred  
4           securities may be considered more “debt-like” and only a portion of the outstanding  
5           balance will receive equity treatment in assessing the company’s capitalization. As a  
6           result, a portion of the preferred trust securities and preferred stock that Avista has  
7           in its capital structure may be treated more as debt than equity in evaluating the  
8           Company’s financial risk.

9           Additionally, because power purchase agreements typically obligate the  
10          utility to make specified minimum contractual payments akin to those associated  
11          with traditional debt financing, investors consider a portion of these commitments as  
12          debt in evaluating total financial risks. Further, changes in financial accounting  
13          standards also result in adjustments that have the effect of further increasing  
14          financial leverage. Because bond ratings agencies and investors adjust for these  
15          various commitments in assessing a utility’s financial position, they imply greater  
16          risk and reduced financial flexibility.

17          **Q.     What conclusions can you draw from Avista’s proposed capital**  
18          **structure as to how the rating agencies would view it?**

19          A.     While the rating agencies consider a plethora of factors besides a  
20          company’s capital structure when determining a credit rating, financial leverage is

1 an important component of the rating analysis. Considering the debt impact  
2 associated with the factors discussed above, the total debt ratio implied by Avista's  
3 proposed capital structure would exceed the target range that S&P expects for a  
4 "BBB"-rated utility.

5 **Q. What does this evidence suggest with respect to Avista's cost of**  
6 **equity relative to the proxy group of western utilities?**

7 **A. Because of the additional investment risks associated with Avista's**  
8 **speculative grade corporate ratings, the Company's weakened credit standing and**  
9 **financial flexibility, and the heightened uncertainty associated with Avista's reliance**  
10 **on hydroelectric generation, investors' required rate of return on equity for Avista**  
11 **exceeds that of the benchmark group of utilities. Competition for capital resources is**  
12 **intense and investors are free to invest their funds wherever they choose. Denying**  
13 **investors the opportunity to earn a return that is commensurate with Avista's**  
14 **investment risks would perpetuate the Company's anemic credit standing and**  
15 **hamper its future ability to attract capital, especially during periods of adverse**  
16 **capital market conditions..**

1                                   **III. CAPITAL MARKET ESTIMATES**

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

3           A. This section presents capital market estimates of the cost of equity for a  
4 benchmark group of utilities. The details of my quantitative analyses are contained  
5 in Appendix B, with the results being summarized below.

6   **A. Overview**

7           **Q. What role does the rate of return on common equity play in a utility's**  
8 **rates?**

9           A. The return on common equity is the cost of inducing and retaining  
10 investment in the utility's physical plant and assets. This investment is necessary to  
11 finance the asset base needed to provide utility service. Investors will commit  
12 money to a particular investment only if they expect it to produce a return  
13 commensurate with those from other investments with comparable risks. Moreover,  
14 the return on common equity is integral in achieving the sound regulatory objectives  
15 of rates that are sufficient to: 1) fairly compensate capital investment in the utility, 2)  
16 enable the utility to offer a return adequate to attract new capital on reasonable  
17 terms, and 3) maintain the utility's financial integrity. Meeting these objectives  
18 allows the utility to fulfill its obligation to provide reliable service while meeting the  
19 needs of customers through necessary system expansion.

1           **Q.     What fundamental economic principle underlies any evaluation of**  
2 **investors' required return on equity?**

3           A.     Underlying the concept of the cost of equity is the fundamental notion  
4 that investors are risk averse, and will willingly bear additional risk only if they  
5 expect compensation for doing so. As explained in greater detail in Appendix B, the  
6 required rate of return for a particular asset at any point in time is a function of: 1)  
7 the yield on risk-free assets, and 2) its relative risk, with investors demanding  
8 correspondingly larger risk premiums for assets bearing greater risk. Because  
9 common shareholders have the lowest priority claim on a firm's cash flows, they  
10 receive only the residual that remains after all other claimants – employees,  
11 suppliers, governments, lenders, have been paid. As a result, the rate of return that  
12 investors require from a utility's common stock, the most junior and riskiest of its  
13 securities, is considerably higher than the yield on the utility's long-term debt.

14           **Q.     Is the cost of equity observable in the capital markets?**

15           A.     No. Unlike debt capital, there is no contractually guaranteed return on  
16 common equity capital since shareholders are the residual owners of the utility.  
17 Because it is unobservable, the cost of equity for a particular utility must be  
18 estimated by analyzing information about capital market conditions generally,  
19 assessing the relative risks of the company specifically, and employing various  
20 quantitative methods that focus on investors' current required rates of return. These

1 various quantitative methods typically attempt to infer investors' required rates of  
2 return from stock prices, interest rates, or other capital market data.

3 **Q. Did you rely on a single method to estimate the cost of equity for**  
4 **Avista?**

5 **A. No.** In my opinion, no single method or model should be relied upon  
6 to determine a utility's cost of equity because no single approach can be regarded as  
7 wholly reliable. As the Federal Communications Commission recognized:

8 Equity prices are established in highly volatile and uncertain capital  
9 markets... Different forecasting methodologies compete with each  
10 other for eminence, only to be superceded by other methodologies as  
11 conditions change... In these circumstances, we should not restrict  
12 ourselves to one methodology, or even a series of methodologies, that  
13 would be applied mechanically. Instead, we conclude that we should  
14 adopt a more accommodating and flexible position.<sup>36</sup>

15 Therefore, I used both the DCF model and risk premium methods to estimate the  
16 cost of equity. In addition, I also evaluated my results using a comparable earnings  
17 approach based on investors' current expectations in the capital markets. In my  
18 opinion, comparing estimates produced by one method with those produced by  
19 other approaches ensures that the estimates of the cost of equity pass fundamental  
20 tests of reasonableness and economic logic.

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<sup>36</sup> Federal Communications Commission, Report and Order 42-43, CC Docket No. 92-133 (1995).

1           **Q. Which companies did you reference in applying the DCF and risk**  
 2 **premium approaches to estimate the cost of equity?**

3           A. As explained in Appendix B, my quantitative analyses of investors'  
 4 required rate of return focused on a group of nine publicly traded utilities included  
 5 by Value Line in their Electric Utilities (West) Industry group, all of which pay  
 6 common dividends and have investment grade credit ratings. This group of western  
 7 utilities is shown below, along with a comparison of credit ratings and four principal  
 8 risk indicators published by Value Line:

<u>Company</u>	<b>S&amp;P Credit Rating</b>	<b>Value Line</b>			
		<b>Safety Rank</b>	<b>Financial Strength</b>	<b>Price Stability</b>	<b>Beta</b>
Black Hills Corp.	BBB-	3	B+	60	1.00
Hawaiian Electric	BBB	2	A	100	0.65
IDACORP	BBB+	3	B+	80	0.90
MDU Resources	A-	1	A+	90	0.85
PNM Resources	BBB	2	B++	85	0.85
Pinnacle West Capital	BBB	1	A	80	0.85
Puget Energy	BBB-	3	B+	95	0.75
Sempra Energy	BBB+	2	A	80	0.95
Xcel Energy	<u>BBB</u>	<u>2</u>	<u>B++</u>	<u>45</u>	<u>0.80</u>
<b>Proxy Group Average</b>	<b>BBB</b>	<b>2</b>	<b>B++</b>	<b>79</b>	<b>0.84</b>
<b>Avista</b>	<b>BB+</b>	<b>3</b>	<b>B</b>	<b>40</b>	<b>0.90</b>

9           **Q. What does this table indicate with respect to Avista's relative risks?**

10          A. While credit ratings provide the most widely referenced benchmark  
 11 for investment risks, other quality rankings published by investment advisory  
 12 services also provide relative assessments of risk that are considered by investors in  
 13 forming their expectations. Value Line's Safety Rank, which ranges from "1" (Safest)

1 to "5" (Riskiest), is intended to capture the total risk of a stock, and incorporates  
2 elements of stock price stability and financial strength. The Financial Strength  
3 Rating is designed as a guide to overall financial strength and creditworthiness, with  
4 the key inputs including financial leverage, business volatility measures, and  
5 company size. Value Line's Financial Strength Ratings range from "A++" (strongest)  
6 down to "C" (weakest) in nine steps. The Earnings Predictability Index, meanwhile,  
7 provides a measure of the reliability of earnings forecasts and is based on the  
8 stability of year-to-year earnings and ranges from "100" (most reliable) to "5" (least  
9 reliable). Finally, Value Line's beta value provides a measure of stock price  
10 variability, with a higher beta indicating that a stock tends to fluctuate more than one  
11 with a lower beta.

12 Considered along with Avista's below investment grade credit rating, a  
13 comparison of these Value Line indicators, which encompass a broad spectrum of  
14 risk measures, also demonstrates that Avista's investment risks exceed those of the  
15 proxy group. As discussed earlier, Avista's higher risks imply a corresponding  
16 increase in the cost of equity above what is indicated for the proxy group.





1 by other applications. Indeed, as discussed subsequently, the results of alternative  
2 risk premium methods suggest a cost of equity far in excess of this single DCF value.

3 Moreover, as discussed in Appendix B, the short-term projected growth rates  
4 typically used to apply the DCF model may be colored by lingering uncertainties  
5 regarding the near-term direction of the economy in general and the spate of  
6 challenges recently faced in the electric power industry specifically. This short-term  
7 “hangover” is exemplified by Value Line, which has assigned its Utilities sector the  
8 lowest ranking of all 10 sectors it covers for year-ahead stock price performance,<sup>37</sup>  
9 while noting that “[t]he electric utility industry carries one of our lowest industry  
10 Timeliness ranks.”<sup>38</sup> As a result of this cautious near-term outlook, DCF growth  
11 rates do not necessarily capture investors’ long-term expectations for the industry,  
12 and the resulting cost of equity estimates will be downward biased.

13 Accordingly, it would be unreasonable to establish an ROE based on this  
14 single DCF result, especially considering my earlier conclusion that Avista’s  
15 investment risks are significantly higher than those of the proxy group of utilities.

16 **Q. What other analyses did you conduct to estimate the cost of equity?**

17 A. As I just noted, because no single method should be considered a  
18 solely reliable guide to investors’ required rate of return, I also evaluated the cost of

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<sup>37</sup> The Value Line Investment Survey, *Selection 7 Opinion* (Feb. 11, 2005) at 1878.

<sup>38</sup> The Value Line Investment Survey (Dec. 31, 2004) at 695.

1 equity using risk premium methods. My applications of the risk premium method  
2 provide alternative approaches to measure equity risk premiums that focused  
3 specifically on data for electric utilities and employed alternative estimates of  
4 investors' required rates of return.

5 **Q. Briefly describe your risk premium methods.**

6 A. The details of my risk premium analyses are presented in Appendix B.  
7 As explained there, the risk premium method involves determining the additional  
8 return above the yield on bonds that investors require for bearing the higher risks of  
9 common stock. This equity risk premium is then added to the current yield on  
10 bonds to estimate the cost of equity. My risk premium analyses were based on three  
11 widely accepted and commonly applied approaches -- (1) surveys of previously  
12 authorized rates of return on common equity, (2) realized rates of return, and (3)  
13 alternative applications of the Capital Asset Pricing Model ("CAPM").

14 **Q. Is it appropriate to consider anticipated capital market changes in**  
15 **applying risk premium methods?**

16 A. Yes. As detailed in Appendix B, there is widespread consensus that  
17 interest rates will increase materially as the economy continues to strengthen, with  
18 the Federal Reserve's recent actions indicative of tighter credit conditions and higher  
19 interest rates in the years ahead. As a result, current bond yields are likely to  
20 understate capital market requirements at the time the outcome of this proceeding

1 becomes effective. The WUTC noted the upward pressure on the cost of equity  
2 related to rising interest rates in its February 18, 2005 order for Puget Sound Energy,  
3 Inc.,<sup>39</sup> and since that time the Federal Reserve moved again to further increase rates  
4 at its March 22, 2005 meeting.

5 Accordingly, in addition to the use of current bond yields, I also applied the  
6 alternative risk premium methods based on forecasted bond yields for Avista's 2006  
7 rate year developed based on an average of the projections published by the Energy  
8 Information Administration, GlobalInsight, and Blue Chip Financial Forecasts.<sup>40</sup>

9 **Q. What were the results of your risk premium analyses for the proxy**  
10 **group of utilities?**

11 A. As detailed in Appendix B, my risk premium analyses implied the  
12 following cost of equity estimates:

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<sup>39</sup> *Order No. 06*, Docket Nos. UG-040640 and UE-040641 (consolidated) at P. 80.

<sup>40</sup> An analogous approach was adopted by the staff of the Florida Public Service Commission in a May 20, 2004 *Memorandum* in Docket No. 040006-WS and in the testimony of staff witness Andrew L. Maurey in Docket No. 000824-EI (Jan. 2002).

<u>Risk Premium Approach</u>	<u>Cost of Equity Estimate</u>
<u>Authorized Returns</u>	
Current Estimate	10.8%
Rate Year Estimate	11.5%
<u>Realized Rates of Return</u>	
Current Estimate	9.8%
Rate Year Estimate	11.1%
<u>CAPM - Forward-looking</u>	
Current Estimate	12.5%
Rate Year Estimate	12.6%
<u>CAPM – Historical</u>	
Current Estimate	10.6%
Rate Year Estimate	11.8%

1           **Q.    What other factors are relevant in evaluating the CAPM results for**  
2 **Avista?**

3           **A.    It is well established in the financial literature that a company’s size**  
4 **affects its relative risks and that smaller firms are more risky than larger firms. For**  
5 **example, Eugene F. Fama and Kenneth R. French concluded in their widely cited**  
6 ***Journal of Finance* study that a firm’s relative size is a proxy for risk.<sup>41</sup> Similarly, based**  
7 **on their study of historical realized rates of return, Ibbotson Associates concluded**  
8 **that the beta values used to apply the CAPM do not fully account for the additional**  
9 **returns associated with decreasing firm size.<sup>42</sup>**

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<sup>41</sup> Eugene F. Fama and Kenneth R. French, “The Cross-Section of Expected Stock Returns”, *The Journal of Finance* (June 1992), p. 429.

<sup>42</sup> See, e.g., Ibbotson Associates, *2004 Yearbook, Valuation Edition* at 54.

1           **Q.     What is the magnitude of the adjustment required to account for this**  
2 **size premium?**

3           **A.     One estimate of the size premium in excess of the return implied by the**  
4 **CAPM is available from Ibbotson Associates, which reports data for “Mid-Cap” and**  
5 **“Low-Cap” stocks in addition to its more well known reports on the S&P 500. Mid-**  
6 **Cap companies comprise the 3rd through 5th size-deciles of those stocks listed on**  
7 **the New York Stock Exchange, American Stock Exchange, and NASDAQ, while**  
8 **Low-Cap stocks represent the 6th through 8th size-deciles.**

9           The individual firms in the Mid-Cap group have market capitalizations at or  
10 below about \$4.8 billion but greater than \$1.2 billion, with the market capitalization  
11 of Low-Cap stocks falling between approximately \$1.2 billion and \$331 million.  
12 These smaller companies have historically earned higher rates of return than the  
13 large companies comprising the S&P 500. For the 1926 to 2003 period, Ibbotson  
14 Associates reported a size premium in excess of the return implied by the CAPM of  
15 91 and 170 basis points, respectively.<sup>43</sup> Considering Avista’s market capitalization of  
16 approximately \$850 million,<sup>44</sup> this data implies that investors’ require a rate of return  
17 significantly in excess of the CAPM cost of equity estimates discussed above.

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<sup>43</sup> Ibbotson Associates, *2004 Yearbook, Valuation Edition* at 131.

<sup>44</sup> The Value Line Investment Survey (Feb. 11, 2005) at 1776.



1 earnings not paid out as dividends. When equity is raised through the sale of  
2 common stock, there are costs associated with “floating” the new equity securities.  
3 These flotation costs include services such as legal, accounting, and printing, as well  
4 as the fees and discounts paid to compensate brokers for selling the stock to the  
5 public. Also, some argue that the “market pressure” from the additional supply of  
6 common stock and other market factors may further reduce the amount of funds a  
7 utility nets when it issues common equity.

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

10 A. No. While debt flotation costs are recorded on the books of the utility,  
11 amortized over the life of the issue, and thus increase the effective cost of debt  
12 capital, there is no similar accounting treatment to ensure that equity flotation costs  
13 are recorded and ultimately recognized. Alternatively, no rate of return is  
14 authorized on flotation costs necessarily incurred to obtain a portion of the equity  
15 capital used to finance plant. In other words, equity flotation costs are not included in  
16 a utility’s rate base because neither that portion of the gross proceeds from the sale of  
17 common stock used to pay flotation costs is available to invest in plant and equipment,  
18 nor are flotation costs capitalized as an intangible asset. Unless some provision is  
19 made to recognize these issuance costs, a utility’s revenue requirements will not fully  
20 reflect all of the costs incurred for the use of investors’ funds. Because there is no



1 accounting convention to accumulate the flotation costs associated with equity issues,  
2 they must be accounted for indirectly, with an upward adjustment to the cost of  
3 equity being the most logical mechanism.

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

6 A. There are any number of ways in which a flotation cost adjustment can  
7 be calculated, and the adjustment can range from just a few basis points to more  
8 than a full percent. One of the most common methods used to account for flotation  
9 costs in regulatory proceedings is to apply an average flotation-cost percentage to a  
10 utility’s dividend yield. Based on a review of the finance literature, *Regulatory*

11 *Finance: Utilities’ Cost of Capital* concluded:

12 The flotation cost allowance requires an estimated adjustment to the  
13 return on equity of approximately 5% to 10%, depending on the size  
14 and risk of the issue.<sup>45</sup>

15 Applying these expense percentages to a representative dividend yield for a utility  
16 of 4.0 percent implies a flotation cost adjustment on the order of 20 to 40 basis  
17 points.

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<sup>45</sup> Roger A. Morin, *Regulatory Finance: Utilities’ Cost of Capital*, 1994, at 166.

1           **Q.    What then is your conclusion regarding a fair rate of return on equity**  
2 **for the companies in your proxy group of western utilities?**

3           A.    After incorporating an adjustment for flotation costs of 30 basis points  
4 to my “bare bones” cost of equity range, I concluded that a fair rate of return on  
5 equity for the proxy group of utilities is in the 11.1 to 12.1 percent range, with a  
6 midpoint of 11.6 percent.

7                           **IV.    RETURN ON EQUITY FOR AVISTA CORP.**

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

9           A.    In addition to presenting the conclusions of my evaluation of a fair rate  
10 of return on equity for Avista, this section also discusses the relationship between  
11 ROE and preservation of a utility’s financial integrity and the ability to attract capital  
12 under reasonable terms on a sustainable basis.

13                           **A.    Implications for Financial Integrity**

14           **Q.    Why is it important to allow Avista an adequate rate of return on**  
15 **equity?**

16           A.    Given the social and economic importance of the utility industry, it is  
17 essential to maintain reliable and economical service to all consumers. While Avista  
18 remains committed to deliver reliable service, a utility’s ability to fulfill its mandate  
19 can be compromised if it lacks the necessary financial wherewithal. Avista faces a  
20 number of potential challenges that might require the relatively swift commitment of

1 significant capital resources in order to maintain the high level of service that  
2 customers have come to expect.

3 Events in the western U.S. provide a dramatic illustration of just how swiftly  
4 unforeseen circumstances can lead to deterioration in a utility's financial condition,  
5 and stakeholders have discovered first hand how difficult and complex it can be to  
6 remedy the situation after the fact. For an utility with an obligation to provide  
7 reliable service, investors' increased reticence to supply additional capital during  
8 times of crisis highlights the necessity of preserving the flexibility necessary to  
9 overcome periods of adverse capital market conditions.

10 **Q. What danger does an inadequate rate of return pose to Avista?**

11 **A.** Given that Avista's corporate credit rating is already below investment  
12 grade, the perception of a lack of regulatory support could lead to further  
13 downgrades or, at a minimum, prolong Avista's efforts to achieve investment grade  
14 ratings. At the same time, Avista's plans include refinancing a major portion of its  
15 outstanding debt, as well as significant plant investment to ensure that the energy  
16 needs of its service territory are met. While providing the infrastructure necessary  
17 to meet the energy needs of customers is certainly desirable, it imposes additional  
18 financial responsibilities on Avista. To continue to meet these challenges successfully  
19 and economically, it is crucial that Avista receive adequate support to improve its  
20 credit standing.

1           **Q. Do customers also benefit by enhancing the utility's financial**  
2 **flexibility?**

3           A. Yes. While providing an ROE that is sufficient to maintain Avista's  
4 ability to attract capital, even under duress, is consistent with the economic  
5 requirements embodied in the Supreme Court's *Hope* and *Bluefield* decisions, it is also  
6 in ratepayers' best interests. Ultimately, it is customers and the service area economy  
7 that enjoy the benefits that come from ensuring that the utility has the financial  
8 wherewithal to take whatever actions are required to ensure a reliable energy  
9 supply. By the same token, ratepayers also bear a significant burden when the  
10 ability of the utility to attract necessary capital is impaired and service quality is  
11 compromised.

12           **Q. What role does regulation play in ensuring Avista's access to capital?**

13           A. Considering investors' heightened awareness of the risks associated  
14 with the utility industry and the damage that results when a utility's financial  
15 flexibility is compromised, supportive regulation remains crucial to Avista's access to  
16 capital. Investors recognize that constructive regulation is a key ingredient in  
17 supporting utility credit ratings and financial integrity, particularly during times of  
18 adverse conditions. S&P noted that:

1 When examining the quality of regulation, Standard & Poor's factors in  
2 what level of support the utility might get in times of distress, when its  
3 needs are most acute.<sup>46</sup>

4 S&P went on to note the importance of financial flexibility, especially considering the  
5 capital markets' ability to constrict access to capital when investors' confidence is  
6 compromised. As S&P concluded, "[a]ttributes of a successful firm will include the  
7 ability withstand volatility and access to multiple sources of capital."<sup>47</sup>

8 Investors recognize that regulation has its own risks. Considering the  
9 magnitude of the events that have transpired since the third quarter of 2000,  
10 investors' sensitivity to market and regulatory uncertainties has increased  
11 dramatically. S&P noted that the 2003 blackout is unlikely to ease investors'  
12 concerns:

13 Clearly, the blackout has highlighted the complexity of the system, the  
14 diversity of its many stakeholders and the susceptibility of the industry  
15 to political and regulatory risk.<sup>48</sup>

16 In some circumstances regulatory uncertainty can eclipse all of the other risk factors  
17 facing particular utilities. Indeed, the investment community has expressed concern  
18 that one outcome of the California crisis may be the perception that utility  
19 bankruptcy in times of distress is not an unreasonable outcome. But as S&P

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<sup>46</sup> Standard & Poor's Corporation, "Regulation and Credit Quality in the U.S. Utility Sector,"  
*RatingsDirect* (Jan. 30, 2003).

<sup>47</sup> *Id.*

<sup>48</sup> Standard & Poor's Corporation, "Electric Utility Blackout Puts Spotlight on Political and  
Regulatory Credit Risk," *RatingsDirect* (Aug. 21, 2003).

1 recognized, if such an attitude were to take hold, “the utility industry would be  
2 exposed to capital market pressures” and investors “would either flee the industry  
3 or demand steep returns,” which would ultimately drive up the cost of capital to  
4 ratepayers.<sup>49</sup>

5 **B. Conclusions**

6 **Q. What is your conclusion regarding the 11.5 percent ROE requested**  
7 **by Avista for the 2006 rate year?**

8 A. Considering Avista’s specific risks, coupled with expectations of higher  
9 bond yields going forward, I concluded that the 11.5 percent ROE requested by  
10 Avista is a conservative estimate of investors’ required rate of return for the  
11 Company in the 2006 rate year. Based on the capital market research presented  
12 earlier, I concluded that a fair rate of return on equity for the proxy group of utilities  
13 was in the 11.1 to 12.1 percent range, with Avista’s request falling slightly below the  
14 11.6 percent midpoint of this range.

15 In evaluating the rate of return for Avista, it is important to consider  
16 investors' continued focus on the unsettled conditions in restructured wholesale  
17 energy markets, the Company’s ongoing reliance on these markets to purchase a  
18 portion of its energy supply, as well as other risks associated with the utility

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<sup>49</sup> Standard & Poor’s Corporation, “Regulation and Credit Quality in the U.S. Utility Sector,”  
*RatingsDirect* (Jan. 30, 2003).

1 industry, such as heightened exposure to regulatory uncertainties. Combined with  
2 Avista's below-investment grade credit rating, these factors imply a level of  
3 investment risk and required return that exceeds that of the proxy group used to  
4 estimate the cost of equity. Indeed, after considering the impact of flotation costs  
5 and observable evidence regarding the premium associated with a speculative grade  
6 credit rating, even the low-end result of my quantitative analyses for the proxy  
7 group would imply a rate of return roughly equivalent to Avista's request in this  
8 case.

9 **Q. How does Avista's requested 11.5 percent return on equity compare**  
10 **with other benchmarks that investors would consider?**

11 A. Reference to rates of return available from alternative investments of  
12 comparable risk can also provide a useful guideline in assessing the return necessary  
13 to assure confidence in the financial integrity of a firm and its ability to attract  
14 capital. This comparable earnings approach is consistent with the economic  
15 underpinnings for a fair rate of return established by the Supreme Court. Moreover,  
16 it avoids the complexities and limitations of capital market methods and instead  
17 focuses on the returns earned on book equity, which are readily available to  
18 investors.

19 The average Value Line Safety Ranking for the firms in the proxy group is  
20 "2". Value Line's projections indicate that its analysts expect that rates of return on

1 shareholders' equity for the 283 firms in Value Line's universe assigned a Safety  
2 Rank of "1" or "2" will average 16.6 percent.<sup>50</sup> Thus, an 11.5 percent rate of return  
3 on equity is well below the earned returns that investors anticipate for other firms of  
4 comparable risk, as measured by Value Line's Safety Rank.

5 Moreover, an 11.5 percent rate of return on equity is reasonable at this critical  
6 juncture, given the importance of supporting the financial capability of Avista as it  
7 seeks to achieve an investment grade credit rating and attract the capital necessary  
8 to develop and enhance utility infrastructure. The cost of providing Avista an  
9 adequate return is small relative to the potential benefits that a strong utility can  
10 have in providing reliable service. Considering investors' heightened awareness of  
11 the risks associated with the utility industry and the damage that results when a  
12 utility's financial flexibility is compromised, supportive regulation is perhaps more  
13 crucial now than at any time in the past.

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

15 **A. Yes.**

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<sup>50</sup> www.valueline.com (Jan. 28, 2004). Value Line's Safety Rank, which ranges from "1" (Safest) to "5" (Riskiest), is intended to capture the total risk of a stock, and incorporates elements of stock price stability and financial strength.