

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-08 _____

DOCKET NO. UG-08 _____

DIRECT TESTIMONY OF

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

DIRECT TESTIMONY OF WILLIAM E. AVERA

TABLE OF CONTENTS

I. INTRODUCTION..... 1
A. OVERVIEW 1
B. SUMMARY OF CONCLUSIONS..... 3

II. RISKS OF AVISTA..... 6
A. OPERATIONS & FINANCES 6
B. CAPITAL STRUCTURE 18

III. CAPITAL MARKET ESTIMATES 25
A. OVERVIEW 25
B. RESULTS OF QUANTITATIVE ANALYSES 27

IV. RETURN ON EQUITY FOR AVISTA CORP. 34
A. IMPLICATIONS FOR FINANCIAL INTEGRITY..... 35
B. FLOTATION COSTS 39
C. RETURN ON EQUITY RECOMMENDATION 41

EXHIBIT NO.__(WEA-2) – Qualifications of William E. Avera

EXHIBIT NO.__(WEA-3) – Quantitative Analyses

Schedule WEA-1 – Capital Structure

Schedule WEA-2 – Constant Growth DCF Model – Utility Proxy Group

Schedule WEA-3 – Sustainable Growth Rate – Utility Proxy Group

Schedule WEA-4 – Constant Growth DCF Model – Non-Utility Proxy Group

Schedule WEA-5 – Sustainable Growth Rate – Non-Utility Proxy Group

Schedule WEA-6 – Forward-looking CAPM – Electric Utility Proxy Group

Schedule WEA-7 – Forward-looking CAPM – Non-Utility Proxy Group

Schedule WEA-8 – Historical CAPM – Electric Utility Proxy Group

Schedule WEA-9 – Historical CAPM – Non-Utility Proxy Group

Schedule WEA-10 – Expected Earnings Approach

1 **I. INTRODUCTION**

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

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

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

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

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

9 A. A description of my background and qualifications, including a resume
10 containing the details of my experience, is attached as Exhibit No.__(WEA-2).

11 **A. Overview**

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

13 A. The purpose of my testimony is to present to the Washington Utilities and
14 Transportation Commission (the “Commission” or “WUTC”) my independent evaluation of
15 the fair rate of return on equity (“ROE”) for the jurisdictional electric and gas utility
16 operations of Avista Corp. (“Avista” or “the Company”). In addition, I also examined the
17 reasonableness of Avista’s capital structure, considering both the specific risks faced by the
18 Company and other industry guidelines.

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

21 A. To prepare my testimony, I used information from a variety of sources that
22 would normally be relied upon by a person in my capacity. I am familiar with the
23 organization, finances, and operations of Avista from my participation in prior proceedings

1 before the WUTC, the Idaho Public Utilities Commission (“IPUC”), and the Oregon Public
2 Utility Commission (“OPUC”). In connection with the present filing, I considered and relied
3 upon corporate disclosures, publicly available financial reports and filings, and other
4 published information relating to Avista. I also reviewed information relating generally to
5 current capital market conditions and specifically to current investor perceptions,
6 requirements, and expectations for Avista’s utility operations. These sources, coupled with
7 my experience in the fields of finance and utility regulation, have given me a working
8 knowledge of this issues relevant to investors’ required return for Avista, and they form the
9 basis of my analyses and conclusions.

10 **Q. What is the role of the rate of return on common equity in setting a**
11 **utility's rates?**

12 A. The ROE serves to compensate common equity investors for the use of their
13 capital to finance the plant and equipment necessary to provide utility service. Investors
14 commit capital only if they expect to earn a return on their investment commensurate with
15 returns available from alternative investments with comparable risks. To be consistent with
16 sound regulatory economics and the standards set forth by the Supreme Court in the
17 *Bluefield*¹ and *Hope*² cases, a utility’s allowed ROE should be sufficient to: 1) fairly
18 compensate the utility’s investors, 2) enable the utility to offer a return adequate to attract
19 new capital on reasonable terms, and 3) maintain the utility’s financial integrity.

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

² *Fed. Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

1 Q. How did you go about developing your conclusions regarding a fair rate
2 of return for Avista?

3 A. I first reviewed the operations and finances of Avista and the general
4 conditions in the utility industry. With this as a background, I conducted various well-
5 accepted quantitative analyses to estimate the current cost of equity, including alternative
6 applications of the discounted cash flow (“DCF”) model and the Capital Asset Pricing Model
7 (“CAPM”), as well as reference to expected earned rates of return for utilities. Based on the
8 cost of equity estimates indicated by my analyses, the Company’s ROE was evaluated taking
9 into account the specific risks and potential challenges for Avista’s utility operations in
10 Washington.

11 B. Summary of Conclusions

12 Q. What are your findings regarding the fair rate of return on equity for
13 Avista?

14 A. Based on the results of my analyses and the economic requirements necessary
15 to support continuous access to capital under reasonable terms, I determined that a fair ROE
16 for Avista falls in the range of 10.7 percent to 12.2 percent. The bases for my conclusion are
17 summarized below:

- 18 • In order to reflect the risks and prospects associated with Avista’s jurisdictional
19 utility operations, my analyses focused on a proxy group of twenty other utilities
20 with comparable investment risks. Consistent with the fact that utilities must
21 compete for capital with firms outside their own industry, I also referenced a
22 proxy group of comparable risk companies in the non-utility sector of the
23 economy;
- 24 • Because investors’ required return on equity is unobservable and no single method
25 should be viewed in isolation, I applied both the discounted cash flow (“DCF”) and
26 capital asset pricing model (“CAPM”) methods, as well as the expected
27 earnings approach, to estimate a fair ROE for Avista:

- 1 ○ My application of the constant growth DCF model considered four
2 alternative growth measures based on projected earnings growth, as well as
3 the sustainable, “br+sv” growth rate for each firm in the respective proxy
4 groups;
- 5 ○ After eliminating low- and high-end outliers, my DCF analyses implied a
6 cost of equity of 10.7 percent for the proxy group of utilities and 12.6
7 percent for the group of non-utility companies;
- 8 ○ Application of the CAPM approach using forward-looking data that best
9 reflects the underlying assumptions of this approach implied a cost of equity
10 of 12.2 percent for the utility proxy group and 11.4 percent for the firms in
11 the non-utility proxy group;
- 12 ○ Applying the CAPM method using historical realized rates of return resulted
13 in a cost of equity of 10.7 percent for the utility proxy group and 10.0
14 percent for the non-utility proxy group;
- 15 ○ My evaluation of earned rates of return expected for utilities suggested a cost
16 of equity on the order of 11.0 percent;
- 17 ○ Based on these results, I concluded that the cost of equity for the proxy
18 groups of electric utilities and non-utility companies is in the 10.7 percent to
19 12.2 percent range.

20 Considering investors’ expectations for capital markets and the need to support
21 financial integrity and fund crucial capital investment even under adverse circumstances, I
22 concluded that Avista’s requested ROE of 10.8 percent is reasonable. Based on my
23 evaluation, I determined that:

- 24 • Because Avista’s requested ROE of 10.8 percent barely exceeds the lower bound
25 of my recommended range, it represents a conservative estimate of investors’
26 required rate of return;
- 27 • The reasonableness of a 10.8 percent minimum ROE for Avista is also supported
28 by the need to consider the Company’s credit standing, which remains relatively
29 weak:
 - 30 ○ The pressures of funding significant capital expenditures and increased
31 operating risks heighten the uncertainties associated with Avista;
 - 32 ○ Because of Avista’s reliance on hydroelectric generation, the Company is
33 exposed to relatively greater risks of power cost volatility;
 - 34 ○ Investors view the Energy Recovery Mechanism (“ERM”) as supportive of
35 the Company’s financial integrity, but they understand that the ERM does
36 not apply to 100 percent of power costs; nor does it insulate Avista from the

1 need to finance accrued power production and supply costs or shield the
2 Company from potential regulatory disallowances;

- 3 ○ Given Avista's present ratings, an inadequate rate of return imposed in this
4 proceeding would further pressure the Company's financial flexibility and
5 credit standing;
- 6 ○ My conclusion that a 10.8 percent ROE for Avista is a conservative estimate
7 of investors' required return is also reinforced by the Company's relatively
8 greater risks as compared with the proxy groups, the greater uncertainties
9 associated with Avista's relatively small size, and the fact that my
10 recommended ROE range does not consider flotation costs.

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

13 A. Based on my evaluation, I concluded that a common equity ratio of
14 approximately 46.3 percent represents a reasonable basis from which to calculate Avista's
15 overall rate of return. This conclusion was based on the following findings:

- 16 • Avista's requested capitalization is consistent with the Company's need to
17 strengthen its credit standing and financial flexibility as it seeks to raise additional
18 capital to fund significant system investments and meet the requirements of its
19 service territory;
- 20 • Avista's proposed common equity ratio is entirely consistent with the 46.0 percent
21 and 47.3 percent average equity ratio maintained by the firms in my utility proxy
22 group, based on year-end 2006 data and near-term expectations, respectively.
- 23 • My conclusion is reinforced by the investment community's focus on the need for
24 a greater equity cushion to accommodate higher operating risks and the pressures
25 of funding significant capital investments, as well as the impact of off-balance
26 sheet commitments such as purchased power agreements.

27 **Q. What other evidence did you consider in evaluating your**
28 **recommendation in this case?**

29 A. My recommendation was reinforced by the following findings:

- 30 • Sensitivity to regulatory uncertainties has increased dramatically and investors
31 recognize that constructive regulation is a key ingredient in supporting utility
32 credit standing and financial integrity;

- 1 • Providing Avista with the opportunity to earn a return that reflects these realities
2 is an essential ingredient to strengthen the Company’s financial position, which
3 ultimately benefits customers by ensuring reliable service at lower long-run
4 costs;
- 5 • My conclusion is reinforced by the economic reality that Avista’s actual returns
6 have fallen systematically short of the allowed ROE; and the financial impact of
7 an ROE below the minimum level requested by Avista would threaten the
8 Company’s ability to maintain an investment grade credit rating;
- 9 • Investors are aware of the near-term challenges posed by upward pressure on
10 costs and rising capital expenditures. For Avista, these concerns are magnified
11 by the fact that financial metrics continue to be anemic and its credit standing,
12 accordingly, remains relatively weak;
- 13 • Regulatory support, including a reasonable ROE, will be a key driver in securing
14 additional progress towards restoring the Company’s financial health. Further
15 strengthening Avista’s financial integrity is imperative to ensure that the
16 Company has the capability to maintain an investment grade rating while
17 confronting potential challenges associated with funding infrastructure
18 development necessary to meet the needs of its customers.

19 **II. RISKS OF AVISTA**

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

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

24 **A. Operations & Finances**

25 **Q. Briefly describe Avista.**

26 A. Avista is engaged primarily in the procurement, transmission, and distribution
27 of natural gas and electric energy. Avista’s generating facilities include 8 hydroelectric
28 generating stations with a combined capacity of approximately 980 megawatts (“MW”) and
29 the electrical output of these plants, which has a significant impact on total energy costs, is
30 dependent on streamflows. Although Avista estimates that hydroelectric generation is

1 capable of supplying approximately 50 percent of total system requirements under normal
2 conditions, the Company has experienced prolonged periods of persistent below-normal
3 water conditions in the past.

4 Because close to one-half of Avista's total energy requirements are provided by
5 hydroelectric facilities, the Company is exposed to a level of uncertainty not faced by most
6 utilities. While hydropower confers advantages in terms of fuel cost savings and diversity,
7 reduced hydroelectric generation due to below-average water conditions forces Avista to rely
8 more heavily on wholesale power markets or more costly thermal generating capacity to meet
9 its resource needs. As S&P recently observed:

10 A reduction in hydro generation typically increases an electric utility's costs by
11 requiring it to buy replacement power or run more expensive generation to
12 serve customer loads. Low hydro generation can also reduce utilities'
13 opportunity to make off-system sales. At the same time, low hydro years
14 increase regional wholesale power prices, creating potentially a double impact
15 – companies have to buy more power than under normal conditions, paying
16 higher prices.³

17 Additionally, all but one of Avista's hydroelectric facilities are subject to licensing
18 under the Federal Power Act, which is administered by FERC. After agreeing to institute
19 various protections, mitigation, and enhancement measures in order to address environmental
20 concerns, Avista received new 45-year operating licenses covering its two largest
21 hydroelectric facilities – Cabinet Gorge and Noxon Rapids – in 2001. The license covering
22 five hydroelectric plants on the Spokane River expired in August 2007, with an annual permit
23 being issued to temporarily extend the current license. Relicensing is not automatic under

³ Standard & Poor's Corporation, "Pacific Northwest Hydrology And Its Impact On Investor-Owned Utilities' Credit Quality," *RatingsDirect* (Jan. 28, 2008).

1 federal law, and Avista must demonstrate that it has operated its facilities in the public
2 interest, which includes adequately addressing environmental concerns.

3 **Q. How are fluctuations in Avista's operating expenses caused by varying**
4 **hydro and power market conditions accommodated in its rates?**

5 A. The ERM allows Avista the opportunity to adjust Washington jurisdictional
6 rates for electric utility service to reflect changes in variable power production and supply
7 costs. When hydroelectric generation is reduced and power supply costs rise above those
8 included in base rates, the ERM allows Avista to set aside a portion of these additional costs
9 for the opportunity for future recovery. Conversely, when increased hydroelectric generation
10 leads to lower power supply costs, the change in costs reduces the existing deferral balance or
11 leads to a reduction in rates.

12 Under the terms of the ERM, Avista incurs the cost of, or receives the benefit from,
13 the first \$4.0 million in annual power supply costs above or below the amount included in
14 base retail rates. For supply cost variances between \$4.0 million and \$10.0 million, Avista
15 absorbs 50 percent, with the remaining 50 percent being deferred for future surcharge or
16 credit to customers. Finally, if the annual power cost variance exceeds \$10 million, 90
17 percent of the deviation will be deferred and Avista will incur the cost of, or receive the
18 benefit from, the remaining 10 percent.

19 **Q. Does the ERM completely eliminate the risk associated with fluctuations**
20 **in power supply costs?**

21 A. No. The current ERM is viewed as supportive of the Company's financial
22 integrity and an example of constructive regulation, but it does not apply to 100 percent of
23 Avista's power costs. Moreover, even for utilities with permanent energy cost adjustment

1 mechanisms in place, there can be a significant lag between the time the utility actually incurs
2 the expenditure and when it is recovered from ratepayers. The ERM does not insulate Avista
3 from the need to finance deferred power production and supply costs, with Moody's
4 observing, "The historical financial metrics for Avista have been pressured by debt added to
5 fund energy cost deferrals during times when drought conditions prevailed and this has
6 caused us to consider the metrics in line with the Ba rating category."⁴

7 Even with an ERM, investors recognize the ongoing potential for regulatory
8 disallowances. The ERM includes a provision for the review of fuel and power purchases,
9 which are subject to disallowance if the Commission later determines that the amounts were
10 not prudently incurred.

11 **Q. Are there other mechanisms that affect Avista's rates for utility service?**

12 A. Yes. With respect to its Washington gas utility operations, Avista is allowed to
13 adjust natural gas rates annually for: 1) estimated commodity and pipeline transportation
14 costs to serve natural gas customers for the coming year, and 2) the difference between actual
15 and estimated commodity and transportation costs for the prior year. These annual Purchased
16 Gas Adjustment ("PGA") filings provide for the deferral, and recovery or refund, of 100
17 percent of the difference between actual and estimated commodity and pipeline transportation
18 costs for the prior year, subject to applicable regulatory review. In addition, the WUTC has
19 approved a pilot decoupling mechanism.⁵ The decoupling program separates the recovery of
20 fixed costs from gas sales volumes by allowing deferred recovery of fixed costs due to

⁴ Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Opinion* (Dec. 21, 2007).

⁵ *Final Order Approving Decoupling Pilot Program*, Docket No. UG-060518 (Feb. 1, 2007).

1 changes in residential and commercial customers' usage attributable to natural gas
2 conservation, energy efficiency, and price elasticity.

3 **Q. Does Avista anticipate the need to access the capital markets going**
4 **forward?**

5 A. Most definitely. Avista will require capital investment to meet customer
6 growth, provide for necessary maintenance and replacements of its natural gas utility systems,
7 as well as fund new investment in electric generation, transmission and distribution facilities.
8 As discussed by Company witness Mr. Malquist, planned capital expenditures for 2008 total
9 approximately \$195 million, and approximately \$200 million annually going forward. In
10 addition to funding investment in utility infrastructure, Avista will also be required to
11 refinance \$318 million of its long-term debt outstanding in 2008 and will need to issue new
12 securities to fund a significant portion of these requirements.

13 Continued support for Avista's financial integrity and flexibility will be instrumental
14 in attracting the capital necessary to fund these projects in an effective manner. Similarly,
15 bolstering Avista's financial position will also support the Company's efforts to refinance
16 securities at favorable terms, thereby lowering costs for customers in the future. Avista's
17 reliance on purchased power to meet shortfalls in hydroelectric generation magnifies the
18 importance of strengthening financial flexibility, which is essential to guarantee access to the
19 cash resources and interim financing required to cover inadequate operating cash flows, as
20 well as fund required investments in the utility system.

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

2 A. Standard & Poor's Corporation ("S&P") recently raised the Company's
3 corporate credit rating from "BB+" to "BBB-", in large part due to improved financial
4 metrics resulting from the settlement of Avista's last general rate case in Washington.⁶
5 Similarly, Moody's Investors Service ("Moody's") upgraded Avista's issuer credit rating from
6 "Ba1" to "Baa3" in December 2007.⁷ Fitch Ratings, Ltd. ("Fitch") upgraded its issuer default
7 rating for Avista one notch to "BB+", and has assigned the Company a "Positive Outlook",
8 indicating the potential for higher ratings going forward.⁸ The ratings assigned by S&P and
9 Moody's represent the lowest rung on the ladder of the investment grade scale.

10 **Q. How have investors' risk perceptions for firms involved in the utility**
11 **industry evolved?**

12 A. Implementation of structural change and related events caused investors to
13 rethink their assessment of the relative risks associated with the utility industry. The past
14 decade witnessed steady erosion in credit quality throughout the utility industry, both as a
15 result of revised perceptions of the risks in the industry and the weakened finances of the
16 utilities themselves. S&P recently reported that the majority of the companies in the utility
17 sector now fall in the triple-B rating category,⁹ with Fitch recently concluding that "the long-

⁶ Standard & Poor's Corporation, "Avista Corp.'s Corporate Credit Rating Raised One Notch To 'BBB-', " *RatingsDirect* (Feb. 7, 2008).

⁷ Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Research* (Dec. 21, 2007).

⁸ Fitch Ratings, Ltd, "Fitch Upgrades Avista Corp.'s IDR to 'BB+' from 'BB'; Outlook Positive," *Press Release* (Aug. 9, 2007).

⁹Standard & Poor's Corporation, "Upgrades Lead In U.S. Electric Utility Industry In 2007," *RatingsDirect* (Jan. 17, 2008).

1 term outlook is negative” for investor-owned electric utilities.¹⁰ Similarly, Moody’s
2 observed, “Material negative bias appears to be developing over the intermediate and longer
3 term due to rapidly rising business and operating risks.”¹¹

4 **Q. Is the potential for energy market volatility an ongoing concern for**
5 **investors?**

6 A. Most definitely. Investors recognize the ongoing prospect for further turmoil
7 in energy markets. S&P has reported continued spikes in wholesale market prices,¹² with
8 Fitch noting that “elevated energy commodity prices” contribute to a “challenging
9 environment” for electric utilities.¹³ Similarly, the FERC Commission Staff has continued to
10 recognize the ongoing potential for market disruption in the West, as a 2007 market
11 assessment report concluded:

12 Prices are likely to remain a concern. Last year we monitored transactions
13 above the \$400 per megawatt hour Western soft cap due to scarcity at peak.
14 Given the likelihood of higher-priced natural gas in the West this year, extreme
15 weather could easily raise prices to the peak level again in summer 2007.¹⁴

16 The report noted that other regional electricity markets were experiencing double-
17 digit price increases and expressed ongoing concern regarding tight supply and congestion.¹⁵

¹⁰ Fitch Ratings, Ltd., “U.S. Utilities, Power and Gas 2008 Outlook,” *Global Power North America Special Report* (Dec. 11, 2007).

¹¹ Moody’s Investors Service, “U.S. Electric Utility Sector,” *Industry Outlook* (Jan. 2008).

¹² Standard & Poor’s Corporation, “Fuel and Purchased Power Cost Recovery In The Wake Of Volatile Gas And Power Markets – U.S. Electric Utilities To Watch,” (Mar. 22, 2006).

¹³ Fitch Ratings, Ltd., “U.S. Power and Gas 2007 Outlook,” *Global Power North American Special Report* (Dec. 15, 2006) at 1.

¹⁴ Federal Energy Regulatory Commission, Office of Market Oversight and Investigations, “Summer Energy Market Assessment 2007,” (May 17, 2007) at 14.

¹⁵ *Id.* at 4 and 15.

1 In recent years utilities and their customers have also had to contend with dramatic
2 fluctuations in gas costs due to ongoing price volatility in the spot markets.¹⁶ S&P concluded
3 that “natural gas prices have proven to be very volatile” and warned of a “turbulent journey”
4 due to the uncertainty associated with future fluctuations in energy costs.¹⁷ Fitch also
5 highlighted the challenges that fluctuations in commodity prices can have for utilities and
6 their investors, concluding that gas prices are subject to near-term and longer-term
7 fluctuations that contribute to an “adverse environment” for electric utilities.¹⁸

8 In addition, while coal-fired generation has historically provided relative stability with
9 respect to fuel costs, rising prices for this energy source has raised investors’ concerns. In a
10 2004 article entitled “Rising Coal Prices May Threaten U.S. Utility Credit Profiles,” S&P
11 noted that:

12 [S]everal current and structural developments for the coal mining industry
13 have resulted in a dramatic increase in spot coal prices.¹⁹

14 More recently, the Energy Information Administration (“EIA”), a statistical agency of the
15 U.S. Department of Energy, reported that average delivered coal prices for electric utilities
16 increased 9.7 percent in 2006, the sixth consecutive annual rise.²⁰

¹⁶ For example, the Energy Information Administration reported that the average price of gas used by electricity generators (regulated utilities and non-regulated power producers) spiked from an average price of \$7.18 per Mcf for the first eight months of 2005 to over \$11.00 per Mcf in September and October (http://tonto.eia.doe.gov/dnav/ng/ng_pri_sum_dcu_nus_m.htm).

¹⁷ Standard & Poor’s Corporation, “Top Ten Credit Issues Facing U.S. Utilities,” *RatingsDirect* (Jan. 29, 2007).

¹⁸ Fitch Ratings, Ltd., “U.S. Power and Gas 2008 Outlook,” *Global Power North American Special Report*, at 3 (Dec. 11, 2007).

¹⁹ Standard & Poor’s Corporation, “Rising Coal Prices May Threaten U.S. Utility Credit Profiles,” *RatingsDirect* (Aug. 12, 2004).

²⁰ Energy Information Administration, *Annual Coal Report 2006* at 9 (Nov. 2007).

1 **Q. What are the key uncertainties considered by investors in assessing their**
2 **required rate of return for Avista?**

3 A. Because close to one-half of Avista’s total energy requirements are provided
4 by hydroelectric facilities, the Company is exposed to a level of uncertainty not faced by most
5 utilities. Investors recognize that volatile energy markets, unpredictable stream flows, and
6 Avista’s reliance on wholesale purchases to meet a significant portion of its resource needs
7 can expose the Company to the risk of reduced cash flows and unrecovered power supply
8 costs. S&P cited this exposure as the “key utility risk” confronting the Company,²¹ and
9 concluded that Avista, along with Idaho Power Company, “face the most substantial risks
10 despite their PCAs and cost-update mechanisms.”²² Similarly, Fitch concluded, “The
11 potential negative cash flow impact from a prolonged period of below normal hydro
12 conditions and high natural gas prices are primary sources of concern” for Avista’s
13 investors.²³

14 In addition, investors are aware of the financial and regulatory pressures faced by
15 utilities associated with rising costs and the need to undertake significant capital investments.

16 As Moody’s observed:

17 [T]here are concerns arising from the sector’s sizeable infrastructure
18 investment plans in the face of an environment of steadily rising operating
19 costs. Combined, these costs and investments can create a continuous need

²¹ Standard & Poor’s Corporation, “Avista Corp.’s Corporate Credit Rating Raised One Notch to ‘BBB-’,” *RatingsDirect* (Feb. 7, 2008).

²² Standard & Poor’s Corporation, “Pacific Northwest Hydrology And Its Impact On Investor-Owned Utilities’ Credit Quality,” *RatingsDirect* (Jan. 28, 2008).

²³ Fitch Ratings, Ltd., “Fitch Affirms Avista Corp.’s IDR at ‘BB+’; Outlook Positive,” *Press Release* (Feb. 6, 2008).

1 for regulatory rate relief, which in turn can increase the likelihood for political
2 and/or regulatory intervention.²⁴

3 Similarly, S&P noted that “onerous construction programs”, along with rising operating and
4 maintenance costs and volatile fuel costs, were a significant challenge to the utility industry.²⁵
5 Moody’s recently echoed this assessment, concluding, “There are significant negative trends
6 developing over the longer-term horizon.”²⁶

7 While providing the infrastructure necessary to meet the energy needs of customers is
8 certainly desirable, it imposes additional financial responsibilities on Avista. As noted earlier,
9 the Company’s plans include capital expenditures of approximately \$200 million annually,
10 including enhancements to its transmission and distribution system and investment in
11 generating resources. Investors are aware that the challenge of achieving timely regulatory
12 recovery associated with rising costs and burdensome capital expenditure requirements
13 impacts Avista’s ability to earn a fair rate of return.

14 **Q. What other considerations affect investors’ evaluation of Avista?**

15 A. Avista and other utilities are confronting increased environmental pressures
16 that could impose significant uncertainties and costs. In 2007 S&P cited environmental
17 mandates, including emissions, conservation, and renewable resources as one of the top ten
18 credit issues facing U.S. utilities.²⁷ More recently, S&P observed that:

²⁴ Moody’s Investors Service, “Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector,” *Special Comment* (Aug. 2007).

²⁵ Standard & Poor’s Corporation, “U.S. Electric Utilities Continued Their Long Shift To Stability In Third Quarter,” *RatingsDirect* (Oct. 23, 2007).

²⁶ Moody’s Investors Service, “U.S. Utility Sector,” *Industry Outlook* (Jan. 2008).

²⁷ Standard & Poor’s Corporation, “Top Ten Credit Issues Facing U.S. Utilities,” *RatingsDirect* (Jan. 29, 2007).

1 What the ultimate outcome will be is cloudy right now, but legislation
2 addressing carbon emissions and other greenhouse gases is extremely probable
3 in the near future. The credit implications of any policy will be vast due to the
4 compliance costs involved.²⁸

5 Similarly, Moody's noted that "increasingly stringent environmental compliance mandates
6 will elevate cash outflow recovery risk",²⁹ while Fitch noted that the electric utility industry
7 would be "a primary target" of new environmental legislation, and concluded, "The
8 murkiness of the future policies and regulations on carbon emissions is another factor
9 clouding Fitch's long-term view of electric utilities."³⁰

10 For example, the Washington Clean Energy Initiative (I-937), which came into effect
11 in 2006, mandates specified targets for renewable resources in Avista's resource mix and
12 imposes financial penalties if these goals are not met. Meanwhile, Washington Senate Bill
13 6001, which was passed in May 2007, places significant restrictions on greenhouse gas
14 emissions from any new generation plants built in the state of Washington and prevents
15 utilities from entering into contracts to purchase energy produced by plants in other states that
16 do not meet the same restrictions. Currently, the only type of thermal generating plants that
17 meet these restrictions are combined-cycle natural gas-fired generation turbines. This
18 greenhouse gas bill sets goals to reduce emissions in the state of Washington to 1990 levels
19 by 2020; to 25 percent below 1990 levels by 2035; and to 50 percent below 1990 levels by

²⁸ Standard & Poor's Corporation, "Upgrades Lead In U.S. Electric Utility Industry In 2007,"
RatingsDirect (Jan. 17, 2008).

²⁹ Moody's Investors Service, "U.S. Electric Utility Sector," *Industry Outlook* (Jan. 2008).

³⁰ Fitch Ratings, Ltd., "U.S. Utilities, Power and Gas 2008 Outlook," *Global Power North America Special Report* (Dec. 11, 2007).

1 2050. By effectively eliminating the potential to utilize coal-fired generation, SB 6001 may
2 increase Avista’s long-term exposure to potential volatility in the market for natural gas.

3 **Q. Does Avista also face additional risks because of the impact of industry**
4 **restructuring on transmission operations?**

5 A. Yes. Policy evolution in the transmission area has been wide reaching and
6 Avista must address changes in the electric transmission function of its business. S&P
7 confirmed a “continued lack of clarity from lawmakers and regulators on the regulatory
8 framework surrounding transmission projects.”³¹ Transmission operations have become
9 increasingly complex and investors have recognized that difficulties in obtaining permits and
10 uncertainty over the adequacy of allowed rates of return have contributed to heightened risk
11 and fueled concerns regarding the need for additional investment in the transmission sector of
12 the electric power industry.

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

15 A. Yes. A firm’s relative size has important implications for investors in their
16 evaluation of alternative investments, and it is well established that smaller firms are more
17 risky than larger firms. With a market capitalization of approximately \$1.1 billion, Avista is
18 one of the smallest publicly traded electric utilities followed by Value Line, which have an
19 average capitalization of approximately \$8.1 billion.³²

³¹ Standard & Poor’s Corporation, “Capital Spending On Electric Transmission Is On The Upswing Around The World,” *RatingsDirect* (Aug. 7, 2006).

³² www.valueline.com (Retrieved Feb. 13, 2008).

1 The magnitude of the size disparity between Avista and other firms in the utility
2 industry has important practical implications with respect to the risks faced by investors. All
3 else being equal, it is well accepted that smaller firms are more risky than their larger
4 counterparts, due in part to their relative lack of diversification and lower financial
5 resiliency.³³ These greater risks imply a higher required rate of return, and there is ample
6 empirical evidence that investors in smaller firms realize higher rates of return than in larger
7 firms.³⁴ Common sense and accepted financial doctrine hold that investors require higher
8 returns from smaller companies, and unless that compensation is provided in the rate of
9 return allowed for a utility, the legal tests embodied in the *Hope* and *Bluefield* cases cannot be
10 met..

11 **B. Capital Structure**

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

14 A. Yes. Other things equal, a higher debt ratio, or lower common equity ratio,
15 translates into increased financial risk for all investors. A greater amount of debt means more
16 investors have a senior claim on available cash flow, thereby reducing the certainty that each
17 will receive his contractual payments. This increases the risks to which lenders are exposed,
18 and they require correspondingly higher rates of interest. From common shareholders'

³³ It is well established in the financial literature that smaller firms are more risky than larger firms. See, e.g., Eugene F. Fama and Kenneth R. French, "The Cross-Section of Expected Stock Returns", *The Journal of Finance* (June 1992); George E. Pinches, J. Clay Singleton, and Ali Jahankhani, "Fixed Coverage as a Determinant of Electric Utility Bond Ratings", *Financial Management* (Summer 1978).

³⁴ See for example Rolf W. Banz, "The Relationship Between Return and Market Value of Common Stocks", *Journal of Financial Economics* (September 1981) at 16.

1 standpoint, a higher debt ratio means that there are proportionately more investors ahead of
 2 them, thereby increasing the uncertainty as to the amount of cash flow, if any, that will
 3 remain.

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

6 A. Avista’s capital structure is presented in the testimony of Mr. Malquist. As
 7 summarized in his testimony, the pro-forma common equity ratio used to compute Avista’s
 8 overall rate of return was 46.3 percent in this filing.

9 **Q. What was the average capitalization maintained by the utility proxy**
 10 **group?**

11 A. As shown on Schedule WEA-1, for the twenty firms in the utility proxy group,
 12 common equity ratios at December 31, 2006 ranged between 39.2 percent and 56.0 percent
 13 and averaged 47.8 percent. Adjusting these proxy group averages to incorporate the same
 14 short-term debt ratio reflected in Avista’s requested capitalization results in the average
 15 capital structure ratios summarized below:

16 **TABLE 1**
 17 **ADJUSTED UTILITY PROXY GROUP CAPITALIZATION**

| <u>Capital Component</u> | <u>% of Total</u> |
|--------------------------|-------------------|
| Debt | 52.8% |
| Preferred Securities | 1.2% |
| Common Equity | <u>46.0%</u> |
| Total | 100.0% |

23 **Q. What capitalization is representative for the proxy group of utilities going**
 24 **forward?**

25 A. As shown on Schedule WEA-1, The Value Line Investment Survey (“Value
 26 Line”) expects that the average common equity ratio for the proxy group of utilities will

1 increase to 49.1 percent over the next three to five years, with the individual common equity
2 ratios ranging from 42.5 percent to 60.5 percent. This equates to an average equity ratio of
3 47.3 percent after reflecting an adjustment for comparable short-term debt balances. The
4 WUTC has previously observed that “[i]t is appropriate ... to afford more weight to forward
5 considerations than to historic conditions as we determine the appropriate equity ratio to be
6 embedded in prospective rates.”³⁵

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

9 A. The 46.3 percent common equity ratio requested by Avista is entirely
10 consistent with the 46.0 percent and 47.3 percent average equity ratios for the firms in the
11 proxy group at year-end 2006 and based on Value Line’s near-term expectations, respectively.

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

14 A. As discussed earlier, the average credit rating associated with firms in the
15 electric industry has fallen to triple-B, with Avista’s “BBB-“ rating occupying the lowest rung
16 on the ladder of the investment grade scale. At the same time, electric utilities are facing
17 rising cost structures, the need to finance significant capital investment plans, uncertainties
18 over accommodating future environmental mandates, and ongoing regulatory risks. Coupled
19 with the decline in credit quality, these considerations warrant a stronger balance sheet to deal
20 with an increasingly uncertain and competitive market. A more conservative financial
21 profile, in the form of a higher common equity ratio, is consistent with increasing

³⁵ *Order No. 06*, Docket Nos. UG-040640 and UE-040641 (consolidated) (Feb. 18, 2005) at P. 32.

1 uncertainties and the need to maintain the continuous access to capital that is required to fund
2 operations and necessary system investment, even during times of adverse capital market
3 conditions. This is especially the case if electric utilities are to be successful in raising the
4 substantial funds necessary to boost investments for network reliability.

5 Moody's has warned investors of the risks associated with debt leverage and fixed
6 obligations and advised utilities not to squander the opportunity to strengthen the balance
7 sheet as a buffer against future uncertainties.³⁶ Moody's recently noted that, absent a stronger
8 equity cushion, utilities would be faced with lower credit ratings in the face of rising business
9 and operating risks:

10 There are significant negative trends developing over the longer-term horizon.
11 This developing negative concern primarily relates to our view that the
12 sector's overall business and operating risks are rising – at an increasingly fast
13 pace – but that the overall financial profile remains relatively steady. A rising
14 risk profile accompanied by a relatively stable balance sheet profile would
15 ultimately result in credit quality deterioration.³⁷

16 This is especially the case for electric utilities that are exposed to the potential for significant
17 fluctuations in power supply costs, such as Avista.

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

20 A. Depending on their specific attributes, contractual agreements or other
21 obligations that require the utility to make specified payments may be treated as debt in
22 evaluating Avista's financial risk. Because power purchase agreements ("PPAs") and leases

³⁶ Moody's Investors Service, "Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector," *Special Comment* (Aug. 2007).

³⁷ Moody's Investors Service, "U.S. Electric Utility Sector," *Industry Outlook* (Jan. 2008).

1 typically obligate the utility to make specified minimum contractual payments akin to those
2 associated with traditional debt financing, investors consider a portion of these commitments
3 as debt in evaluating total financial risks. Because investors consider the debt impact of such
4 fixed obligations in assessing a utility's financial position, they imply greater risk and
5 reduced financial flexibility. In order to offset the debt equivalent associated with off-balance
6 sheet obligations, the utility must rebalance its capital structure by increasing its common
7 equity in order to restore its effective capitalization ratios to previous levels.³⁸

8 Reflecting the longstanding perception of investors that the fixed obligations
9 associated with PPAs, leases, and other off-balance sheet obligations diminish a utility's
10 creditworthiness and financial flexibility, the implications of these commitments have been
11 repeatedly cited by major bond rating agencies in connection with assessments of utility
12 financial risks. For example, in explaining its evaluation of the credit implications of PPAs,
13 S&P affirmed its position that such agreements give rise to "debt equivalents" and that the
14 increased financial risk must be considered in evaluating a utility's credit risks.³⁹ As the
15 rating agency explained:

16 For many years, Standard & Poor's Ratings Services has viewed power supply
17 agreements (PPA) in the U.S. utility sector as creating fixed, debt-like,
18 financial obligations that represent substitutes for debt-financed capital
19 investments in generation capacity. In a sense, a utility that has entered into a
20 PPA has contracted with a supplier to make the financial investment on its
21 behalf. Consequently, PPA fixed obligations, in the form of capacity
22 payments, merit inclusion in a utility's financial metrics as though they are

³⁸ The capital structure ratios presented earlier do not include imputed debt associated with power purchase agreements or the impact of other off-balance sheet obligations.

³⁹ Standard & Poor's Corporation, "Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements," *RatingsDirect* (May 7, 2007).

1 part of a utility's permanent capital structure and are incorporated in our
2 assessment of a utility's creditworthiness.⁴⁰

3 Apart from reaffirming the importance of imputed debt in its analysis of credit standing, S&P
4 also noted that it has refined its methodology to include imputed debt associated with shorter-
5 term PPAs.⁴¹ Similarly, S&P recently affirmed its policy of modifying a utility's balance
6 sheet to include the debt equivalents associated with operating leases.⁴²

7 As discussed earlier, a significant portion of the Company's power requirements are
8 currently obtained through purchased power contracts. These contractual payment
9 obligations, along with operating leases and obligations associated with postretirement
10 benefits, are fixed commitments with debt-like characteristics and are properly considered
11 when evaluating the financial risks implied by Avista's capital structure. S&P reported that it
12 adjusts Avista's capitalization to include approximately \$226 million in imputed debt from
13 off-balance sheet obligations.⁴³ Unless the Company takes action to offset this additional
14 financial risk by maintaining a higher equity ratio, the resulting leverage will weaken Avista's
15 creditworthiness, implying a higher required rate of return to compensate investors for the
16 greater risks.⁴⁴

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² Standard & Poor's Corporation, "Implications Of Operating Leases On Analysis Of U.S. Electric Utilities," *RatingsDirect* (Jan. 15, 2008).

⁴³ Standard & Poor's Corporation, "Avista Corp.," *RatingsDirect* (Aug. 1, 2007).

⁴⁴ Apart from the immediate impact that the fixed obligation of purchased power costs has on the utility's financial risk, higher fixed charges also reduce ongoing financial flexibility, and the utility may face other uncertainties, such as potential replacement power costs in the event of supply disruption.

1 **Q. What did you conclude with respect to the Company’s capital structure?**

2 A. Based on my evaluation, I concluded that Avista’s requested capital structure
3 represents a reasonable mix of capital sources from which to calculate the Company’s overall
4 rate of return. Avista’s requested common equity ratio is entirely consistent with the average
5 capital structure for the utility proxy group, based on year-end 2006 data and Value Line’s
6 near-term projections.

7 While industry averages provide one benchmark for comparison, each firm must
8 select its capitalization based on the risks and prospects it faces, as well its specific needs to
9 access the capital markets. A public utility with an obligation to serve must maintain ready
10 access to capital under reasonable terms so that it can meet the service requirements of its
11 customers. The need for access becomes even more important when the company has capital
12 requirements over a period of years, and financing must be continuously available, even
13 during unfavorable capital market conditions.

14 Avista’s capital structure reflects the Company’s ongoing efforts to strengthen its
15 credit standing and support access to capital on reasonable terms. As indicated earlier, the
16 challenges posed by significant capital requirements, volatile energy prices, and reliance on
17 hydro generation and wholesale markets magnifies the importance of preserving financial
18 flexibility. Moody’s observed that Avista’s financial metrics have been pressured by the need
19 to finance power cost deferrals during low-water years, and noted that its ratings anticipate
20 “conservative financing strategies.”⁴⁵ Financial flexibility plays a crucial role in ensuring the
21 wherewithal to meet the needs of customers, and utilities with higher leverage may be

⁴⁵ Moody’s Investors Service, “Credit Opinion: Avista Corp.,” *Global Credit Research* (Dec. 21, 2007).

1 foreclosed from additional borrowing, especially during times of stress. In this regard,
2 Avista's equity ratio reflects the challenges posed by its resource mix, as well as the burden of
3 significant capital spending requirements.

4 **III. CAPITAL MARKET ESTIMATES**

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

6 A. This section presents capital market estimates of the cost of equity. The
7 details of my quantitative analyses are contained in Exhibit No.__(WEA-3), with the results
8 being summarized below.

9 **A. Overview**

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

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

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

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

5 Equity prices are established in highly volatile and uncertain capital markets.
6 ... Different forecasting methodologies compete with each other for eminence,
7 only to be superseded by other methodologies as conditions change. ... In
8 these circumstances, we should not restrict ourselves to one methodology, or
9 even a series of methodologies, that would be applied mechanically. Instead,
10 we conclude that we should adopt a more accommodating and flexible
11 position.⁴⁶

12 Therefore, I used both the DCF and CAPM methods to estimate the cost of equity. In
13 addition, I also evaluated a fair ROE return using an earnings approach based on investors'
14 current expectations in the capital markets. In my opinion, comparing estimates produced by
15 one method with those produced by other approaches ensures that the estimates of the cost of
16 equity pass fundamental tests of reasonableness and economic logic.

17 **Q. What was your conclusion regarding a fair rate of return on equity for**
18 **the proxy companies?**

19 A. Based on the results of my quantitative analyses, and my assessment of the
20 relative strengths and weaknesses inherent in each method, I concluded that the cost of equity
21 for the proxy companies is in the 10.7 percent 12.2 percent range.

⁴⁶ Federal Communications Commission, Report and Order 42-43, CC Docket No. 92-133 (1995).

B. Results of Quantitative Analyses

1
2 **Q. How did you define the proxy groups you used to implement the DCF**
3 **model?**

4 A. In estimating the cost of equity, the DCF model is typically applied to publicly
5 traded firms engaged in similar business activities or with comparable investment risks. As
6 described in detail in Exhibit No.__(WEA-3), I applied the DCF model to a utility proxy
7 group composed of those dividend-paying companies included by Value Line in its Electric
8 Utilities Industry groups with: (1) S&P corporate credit ratings between “BBB-” and
9 “BBB+,” (2) a Value Line Safety Rank of “2” or “3”, (3) a Value Line Financial Strength
10 Rating of “B+” to “B++”, and (4) published growth estimates from IBES,⁴⁷ Value Line,
11 Reuters, Inc. (“Reuters”), and Zacks Investment Research (“Zacks”). I excluded two
12 companies that otherwise would have been in the proxy group because they are in the process
13 of being acquired.

14 Under the regulatory standards established by *Hope* and *Bluefield*, the salient criteria
15 in establishing a meaningful benchmark to evaluate a fair rate of return is relative risk, not the
16 particular business activity or degree of regulation. Consistent with this accepted regulatory
17 standard, I also applied the DCF model to a reference group of comparable risk companies in
18 the non-utility sector of the economy. My assessment of comparable risk relied on three
19 objective benchmarks for the risks associated with common stocks -- Value Line’s Safety
20 Rank, Financial Strength rating, and beta. My non-utility proxy group was composed of

⁴⁷ IBES growth rates are compiled and reported by Thompson Financial, an arm of The Thompson Corporation, which also publishes consensus securities analyst growth rates under the First Call brand.

1 those U.S. companies followed by Value Line that 1) pay common dividends, 2) have a
 2 Safety Rank of “1”, 3) have a Financial Strength Rating of “A” or above, 4) have beta values
 3 of 0.90 or less,⁴⁸ and 5) have published data from IBES, Value Line, Reuters, and Zacks.
 4 Consistent with the development of my utility proxy group, I also eliminated firms with
 5 below-investment grade credit ratings.

6 **Q. How do the overall risks of your proxy groups compare with Avista?**

7 A. As shown below, Table 2 compares the non-utility proxy group with the utility
 8 proxy group and Avista across four key indicators of investment risk:

9 **TABLE 2**
 10 **COMPARISON OF RISK INDICATORS**

| | S&P Credit Rating | Value Line | | |
|---------------------|-------------------------|----------------|-----------------------|------|
| | | Safety Rank | Financial Strength | Beta |
| Non-Utility Group | A+ | 1 | A+ | 0.80 |
| Utility Proxy Group | BBB | 3 | B++ | 0.89 |
| Avista Corp. | BBB- | 3 | B+ | 0.95 |

11 Considered together, a comparison of these objective measures indicates that the risks
 12 investors associate with Avista generally exceed those of the proxy groups. As a result, the
 13 cost of equity estimates indicated by my analyses provide a conservative estimate of
 14 investors’ required rate of return for Avista.

⁴⁸ This threshold corresponds to the average beta of 0.89 for the utility proxy group discussed earlier.

1 **Q. What cost of equity is implied by your DCF results for the utility proxy**
 2 **group?**

3 A. My application of the DCF model, which is discussed in greater detail in
 4 Exhibit No.__(WEA-3), considered four alternative measures of expected earnings growth,
 5 as well as the sustainable growth rate based on the relationship between expected retained
 6 earnings and earned rates of return (“br + sv”). As shown on Schedule WEA-2 and
 7 summarized below in Table 3, after eliminating illogical low- and high-end values,
 8 application of the constant growth DCF model resulted in the following cost of equity
 9 estimates:

10
 11

TABLE 3
DCF RESULTS – UTILITY PROXY GROUP

| <u>Growth Rate</u> | <u>Average Cost of Equity</u> |
|--------------------|-------------------------------|
| IBES | 11.3% |
| Value Line | 10.4% |
| Reuters | 10.6% |
| Zacks | 10.9% |
| br+sv | 9.2% |

12 Taken together, and considering the relative strengths and weaknesses associated with the
 13 alternative growth measures, I concluded that the constant growth DCF results for the utility
 14 proxy group implied a cost of equity of 10.8 percent.

15 **Q. What were the results of your DCF analysis for the non-utility reference**
 16 **group?**

17 A. As shown on Schedule WEA-4, I applied the DCF model to the non-utility
 18 companies in exactly the same manner described earlier for the utility proxy group. As
 19 summarized below in Table 4, after eliminating illogical low- and high-end values,

1 application of the constant growth DCF model resulted in the following cost of equity
2 estimates:

3 **TABLE 4**
4 **DCF RESULTS – NON-UTILITY GROUP**

| <u>Growth Rate</u> | <u>Average Cost of Equity</u> |
|--------------------|-------------------------------|
| IBES | 12.9% |
| Value Line | 12.2% |
| Reuters | 12.5% |
| Zacks | 12.7% |
| br+sv | 13.0% |

5 Based on my assessment of these results, I concluded that the constant growth DCF results
6 for the non-utility proxy group implied a cost of equity of 12.6 percent.

7 **Q. Do you believe the constant growth DCF model should be relied on**
8 **exclusively to evaluate a reasonable ROE for Avista?**

9 A. No. Because the cost of equity is unobservable, no single method should be
10 viewed in isolation. While the DCF model has been routinely relied on in regulatory
11 proceedings as one guide to investors' required return, it is a blunt tool that should not be
12 used exclusively. Regulators have customarily considered the results of alternative
13 approaches in determining allowed returns.⁴⁹ It is widely recognized that no single method
14 can be regarded as a panacea; all approaches having their own advantages and shortcomings.
15 For example, a publication of the Society of Utility and Financial Analysts (formerly the
16 National Society of Rate of Return Analysts), concluded that:

⁴⁹ For example, a NARUC survey reported that 26 regulatory jurisdictions ascribe to no specific method for setting allowed ROEs, with the results of all approaches being considered. "Utility Regulatory Policy in the U.S. and Canada, 1995-1996," National Association of Regulatory Utility Commissioners (December 1996).

1 Each model requires the exercise of judgment as to the reasonableness of the
 2 underlying assumptions of the methodology and on the reasonableness of the
 3 proxies used to validate the theory. Each model has its own way of examining
 4 investor behavior, its own premises, and its own set of simplifications of
 5 reality. Each method proceeds from different fundamental premises, most of
 6 which cannot be validated empirically. Investors clearly do not subscribe to
 7 any singular method, nor does the stock price reflect the application of any one
 8 single method by investors.⁵⁰

9 Moreover, evidence suggests that reliance on the DCF model as a tool for estimating
 10 investors’ required rate of return has declined outside the regulatory sphere, with the CAPM
 11 being “the dominant model for estimating the cost of equity.”⁵¹ *Regulatory Finance: Utilities*
 12 *Cost of Capital* noted the inherent difficulties of the DCF approach:

13 [C]aution and judgment are required in interpreting the results of DCF models
 14 because of (1) the questionable applicability of the DCF model to utility
 15 stocks in certain market environments, (2) the effect of declining earnings and
 16 dividends on financial inputs to the DCF model and biases caused by the
 17 effect of changes in risk and growth, and (3) the conceptual and practical
 18 difficulties associated with the growth component of the DCF model.⁵²

19 The publication concluded, “If the cost of equity estimation process is limited to one
 20 methodology, such as DCF, it may severely bias the results.”⁵³

21 **Q. How did you apply the CAPM to estimate the cost of equity?**

22 A. Like the DCF model, the CAPM is an *ex-ante*, or forward-looking model
 23 based on expectations of the future. As a result, in order to produce a meaningful estimate of

⁵⁰ Parcell, David C., “The Cost of Capital – A Practitioner’s Guide,” *Society of Utility and Regulatory Financial Analysts* (1997) at Part 2, p. 4.

⁵¹See, e.g., Bruner, R.F., Eades, K.M., Harris, R.S., and Higgins, R.C., “Best Practices in Estimating Cost of Capital: Survey and Synthesis,” *Financial Practice and Education* (1998).

⁵² Morin, Roger A., “Regulatory Finance: Utilities’ Cost of Capital,” *Public Utilities Reports, Inc.* (1994) at 238.

⁵³ *Id.*

1 investors' required rate of return, the CAPM is best applied using estimates that reflect the
2 expectations of actual investors in the market, not with backward-looking, historical data.

3 I applied the CAPM to the utility proxy group based on a forward-looking estimate
4 for investors' required rate of return from common stocks. In addition, because it is
5 frequently referenced in regulatory proceedings, I also applied the CAPM using risk
6 premiums based on historical realized rates of return published by Ibbotson Associates (now
7 Morningstar). Reference to historical data represents one way to apply the CAPM, but these
8 realized rates of return reflect, at best, an indirect estimate of investors' current requirements.
9 As a result, forward-looking applications of the CAPM that look directly at investors'
10 expectations in the capital markets are apt to provide a more meaningful guide to investors'
11 required rate of return.

12 **Q. What cost of equity was indicated by the CAPM approach?**

13 A. As shown on Schedule WEA-6, my forward-looking application of the CAPM
14 model indicated an ROE of approximately 12.2 percent for the utility proxy group. Applying
15 the forward-looking CAPM approach to the firms in the non-utility proxy group (Schedule
16 WEA-7) implied a cost of equity of 11.4 percent.

17 Application of the CAPM to the firms in the utility and non-utility proxy groups using
18 risk premiums based on historical realized rates of return published by Ibbotson Associates is
19 presented on Schedules WEA-8 and WEA-9, respectively. As shown there, this historical
20 CAPM approach implied a cost of equity of 10.7 percent for the utility proxy group and 10.0
21 percent for the firms in the non-utility proxy group.

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

2 A. As I noted earlier, I also evaluated the cost of equity using the expected
3 earnings method. Reference to rates of return available from alternative investments of
4 comparable risk can provide an important benchmark in assessing the return necessary to
5 assure confidence in the financial integrity of a firm and its ability to attract capital. This
6 expected earnings approach is consistent with the economic underpinnings for a fair rate of
7 return established by the Supreme Court. Moreover, it avoids the complexities and
8 limitations of capital market methods and instead focuses on the returns earned on book
9 equity, which are readily available to investors.

10 **Q. What rates of return on equity are indicated for utilities based on the**
11 **expected earnings approach?**

12 A. Value Line reports that its analysts anticipate an average rate of return on
13 common equity for the electric utility industry of 11.5 percent over its forecast horizon,⁵⁴
14 with natural gas distribution utilities expected to earn an average rate of return on common
15 equity of 11.5 percent to 12.0 percent.⁵⁵ As shown on Schedule WEA-10, Value Line's
16 projections for the utility proxy group suggested an average ROE of 10.5 percent after
17 eliminating potential outliers.⁵⁶ Based on the results discussed above, I concluded that the
18 expected earnings approach implies a fair rate of return on equity of 11.0 percent.

⁵⁴ The Value Line Investment Survey at 1776 (Feb. 8, 2008).

⁵⁵ The Value Line Investment Survey 445 (Dec. 14, 2007).

⁵⁶ As highlighted on Schedule WEA-10, I eliminated two low-end estimates of 7.1 percent, as well as an extreme high-end outlier of 24.4%. While these three Value Line projections may accurately reflect expectations for actual earned rates of return on common equity over the forecast horizon, they are unlikely to be representative of investors' required rate of return.

A. Implications for Financial Integrity

Q. Why is it important to allow Avista an adequate return on equity?

A. Given the importance of the utility industry to the economy and society, it is essential to maintain reliable and economical service to all consumers. While Avista remains committed to provide reliable utility service, a utility's ability to fulfill its mandate can be compromised if it lacks the necessary financial wherewithal or is unable to earn a return sufficient to attract capital. Coupled with the ongoing potential for energy market volatility, Avista's plans for infrastructure investment and ongoing exposure to regulatory uncertainty pose a number of potential challenges that might require the relatively swift commitment of significant capital resources in order to maintain the high level of service that customers have come to expect.

As documented earlier, the major rating agencies have warned of exposure to uncertainties associated with political and regulatory developments, especially in view of the pressures associated with large capital expenditure programs and the potential for high and volatile commodity costs in wholesale energy markets. Investors understand just how swiftly unforeseen circumstances can lead to deterioration in a utility's financial condition, and stakeholders have discovered first hand how difficult and complex it can be to remedy the situation after the fact. While providing the infrastructure necessary to enhance the power system and meet the energy needs of customers is certainly desirable, it imposes additional financial responsibilities on Avista. For a utility with an obligation to provide reliable service, investors' increased reticence to supply additional capital during times of crisis highlights the necessity of preserving the flexibility necessary to overcome periods of adverse

1 capital market conditions. These considerations heighten the importance of allowing Avista
2 an adequate return on the fair value of its investment.

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

5 A. Considering investors' heightened awareness of the risks associated with the
6 utility industry and the damage that results when a utility's financial flexibility is
7 compromised, supportive regulation remains crucial to Avista's access to capital. Investors
8 recognize that regulation has its own risks, and that constructive regulation is a key ingredient
9 in supporting utility credit ratings and financial integrity, particularly during times of adverse
10 conditions. S&P noted that:

11 Regulatory rulings have returned to center stage as a dominant factor in
12 assessing companies' credit quality. These decisions will be critical for an
13 industry that in many jurisdictions is nearing the end of extended transition
14 periods and will be making significant capital investment in infrastructure
15 during the next several years.⁵⁷

16 With respect to Avista specifically, the major bond rating agencies have noted the
17 near-term challenges posed by upward pressure on costs and rising capital expenditures,
18 while explicitly citing the potential that adverse regulatory rulings could compromise the
19 Company's credit standing.⁵⁸ Of particular concern to investors is the impact of regulatory
20 lag and cost-recovery on Avista's ability to earn its authorized ROE and maintain its financial

⁵⁷ Standard & Poor's Corporation, "Industry Report Card: U.S. Electric/Gas/Water," *RatingsDirect* (May 3, 2005).

⁵⁸ See, e.g., Standard & Poor's Corporation, "Avista Corp.'s Corporate Credit Rating Raised One Notch To 'BBB-'," *RatingsDirect* (Feb 7, 2008); Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Research* (Dec. 21, 2007).

1 metrics, with Moody's noting an ongoing need for supportive regulation in light of a
2 significant capital investment program.⁵⁹ Moody's concluded:

3 Continuation of supportive treatment in future PGA and general rate cases
4 would be particularly important in helping Avista continue to make progress
5 towards consistently earning at the utility division's allowed level of return on
6 its investment.⁶⁰

7 S&P concluded that Avista's credit outlook could be revised to "negative" if the Company's
8 financial profile is weakened due to an inability to obtain timely rate relief.⁶¹

9 Moreover, the negative impact of declining credit quality on a utility's capital costs
10 and financial flexibility becomes more pronounced as debt ratings move down the scale from
11 investment to non-investment grade. In light of Avista's present ratings, an inadequate rate of
12 return imposed in this proceeding would further pressure the Company's financial flexibility
13 and credit standing.

14 **Q. Do the potential exposures faced by Avista highlight the need for ongoing**
15 **support of the Company's financial strength and ability to attract capital?**

16 A. Most definitely. Avista must finance a major construction program and a
17 number of potential challenges might require the relatively swift commitment of capital
18 resources in order to maintain the high level of service to which its customers have become
19 accustomed. Avista faces the potential for fluctuating stream flows and significant volatility
20 in wholesale fuel and energy markets. S&P concluded that Avista's "key utility risk going

⁵⁹ Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Research* (Dec. 21, 2007).

⁶⁰ *Id.*

⁶¹ Standard & Poor's Corporation, "Avista Corp.'s Corporate Credit Rating Raised One Notch To 'BBB-', " *RatingsDirect* (Feb. 7, 2008).

1 forward is its exposure to high-cost replacement power, particularly in low water years.”⁶²
2 Given utilities’ lack of control over the timing of such events, the Company must have the
3 wherewithal to meet these challenges even when capital and energy market conditions are
4 unfavorable.

5 For Avista, these concerns are magnified by the fact that its credit standing remains
6 relatively weak. While the Company’s efforts to regain an investment grade credit rating
7 have been successful, Avista’s financial metrics remain pressured. As Mr. Malquist confirms
8 in his testimony, regulatory support will be a key driver in securing additional progress
9 towards restoring the Company’s financial health. Further strengthening Avista’s financial
10 integrity is imperative to ensure that the Company has the capability to maintain an
11 investment grade rating while confronting potential challenges.

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

13 **A.** Yes. While providing an ROE that is sufficient to maintain Avista’s ability to
14 attract capital, even in times of financial and market stress, is consistent with the economic
15 requirements embodied in the Supreme Court’s *Hope* and *Bluefield* decisions, it is also in
16 customers’ best interests. Ultimately, it is customers and the service area economy that enjoy
17 the benefits that come from ensuring that the utility has the financial wherewithal to take
18 whatever actions are required to ensure reliable service. By the same token, customers also
19 bear a significant burden when the ability of the utility to attract necessary capital is impaired
20 and service quality is compromised.

⁶² Standard & Poor’s Corporation, “Avista Corp.’s Corporate Credit Rating Raised One Notch To ‘BBB-’,” *RatingsDirect* (Feb. 7, 2008).

1 **B. Flotation Costs**

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

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

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

14 A. No. While debt flotation costs are recorded on the books of the utility,
15 amortized over the life of the issue, and thus increase the effective cost of debt capital, there
16 is no similar accounting treatment to ensure that equity flotation costs are recorded and
17 ultimately recognized. Alternatively, no rate of return is authorized on flotation costs
18 necessarily incurred to obtain a portion of the equity capital used to finance plant. In other
19 words, equity flotation costs are not included in a utility’s rate base because neither that portion
20 of the gross proceeds from the sale of common stock used to pay flotation costs is available to
21 invest in plant and equipment, nor are flotation costs capitalized as an intangible asset. Unless
22 some provision is made to recognize these issuance costs, a utility’s revenue requirements will
23 not fully 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, they must
2 be accounted for indirectly, with an upward adjustment to the cost of equity being the most
3 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 be
7 calculated, and the adjustment can range from just a few basis points to more than a full
8 percent. One of the most common methods used to account for flotation costs in regulatory
9 proceedings is to apply an average flotation-cost percentage to a utility’s dividend yield.
10 Based on a review of the finance literature, *Regulatory Finance: Utilities’ Cost of Capital*
11 concluded:

12 The flotation cost allowance requires an estimated adjustment to the return on
13 equity of approximately 5% to 10%, depending on the size and risk of the
14 issue.⁶³

15 Alternatively, a study of data from Morgan Stanley regarding issuance costs associated with
16 utility common stock issuances suggests an average flotation cost percentage of 3.6%.⁶⁴
17 Applying these expense percentages to a representative dividend yield for a utility of 4.0
18 percent implies a flotation cost adjustment on the order of 14 to 40 basis points.

⁶³ Roger A. Morin, *Regulatory Finance: Utilities’ Cost of Capital*, 1994, at 166.

⁶⁴ *Application of Yankee Gas Services Company for a Rate Increase*, DPUC Docket No. 04-06-01, Direct Testimony of George J. Eckenroth (Jul. 2, 2004) at Exhibit GJE-11.1. Updating the results presented by Mr. Eckenroth through April 2005 also resulted in an average flotation cost percentage of 3.6%.

1 **Q. Has the WUTC previously recognized that flotation costs are properly**
2 **considered in setting the allowed ROE?**

3 A. Yes. For example, in Docket No. UE-991606 the WUTC concluded that a
4 flotation cost adjustment of 25 basis points should be included in the allowed return on
5 equity:

6 The Commission also agrees with both Dr. Avera and Dr. Lurito that a 25 basis
7 point markup for flotation costs should be made. This amount compensates
8 the Company for costs incurred from past issues of common stock. Flotation
9 costs incurred in connection with a sale of common stock are not included in a
10 utility's rate base because the portion of gross proceeds that is used to pay
11 these costs is not available to invest in plant and equipment.⁶⁵

12 While issuance costs are a legitimate consideration in setting the return on equity for a
13 utility, a specific adjustment for flotation costs was not included in defining my
14 recommended ROE range.

15 **C. Return on Equity Recommendation**

16 **Q. What then is your conclusion as to a fair rate of return on equity range**
17 **for Avista?**

18 A. As explained above, based on the capital market oriented analyses for the
19 utility and non-utility proxy groups described in my testimony, I concluded that the fair rate
20 of return on equity range was 10.7 percent to 12.2 percent. Considering capital market
21 expectations, the potential exposures faced by Avista, and the economic requirements
22 necessary to maintain financial integrity and support additional capital investment even under
23 adverse circumstances, it is my opinion that this represents a fair and reasonable ROE range
24 for Avista.

⁶⁵ *Third Supplemental Order, WUTC Docket No. UE-991606, et al., p. 95 (September 2000).*

1 **Q. Based on the results of your evaluation, what is your opinion regarding**
2 **the reasonableness of the ROE requested by Avista in this case?**

3 A. My evaluation indicates that Avista's requested ROE of 10.8 percent
4 represents a conservative estimate of investors' required rate of return. Given the fact that the
5 Company's requested ROE falls barely above the lower bound of my recommended range, it
6 should be viewed as an absolute floor in establishing rates for Avista. This conclusion is
7 reinforced by the need to buttress the Company's credit standing, which remains relatively
8 weak, as well as the pressures of funding significant capital expenditures and meeting
9 increased operating risks, including those associated with Avista's reliance on hydroelectric
10 generation and wholesale energy markets. The reasonableness of a minimum 10.8 percent
11 ROE for Avista is also supported by the Company's relatively greater risks as compared with
12 the proxy groups, the higher uncertainties associated with Avista's relatively small size, and
13 the fact that my recommended ROE range does not consider flotation costs.

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

15 A. Yes.