

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND)	
TRANSPORTATION COMMISSION,)	
)	Docket No. UE-050482
Complainant,)	
)	Docket No. UG-050483
vs.)	
)	<i>(consolidated)</i>
AVISTA CORPORATION,)	
)	
Respondent.)	
_____)	

DIRECT TESTIMONY OF MICHAEL GORMAN
ON BEHALF OF
THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

August 26, 2005

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** My name is Michael Gorman and my business address is 1215 Fern Ridge
3 Parkway, Suite 208, St. Louis, MO 63141-2000.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 **A.** I am a consultant in the field of public utility regulation and a principal in the firm
6 of Brubaker & Associates, Inc., energy, economic, and regulatory consultants.

7 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
8 **EXPERIENCE.**

9 **A.** These are set forth in Exhibit No.____(MPG-2).

10 **Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

11 **A.** I am appearing on behalf of the Industrial Customers of Northwest Utilities
12 (“ICNU”).

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 **A.** I will make comments related to the proposed settlement (“Settlement
15 Agreement”) filed by Avista Corp. (“Avista” or the “Company”), the Staff of the
16 Washington Utilities and Transportation Commission (“WUTC” or the
17 “Commission”), the Northwest Industrial Gas Users, and the Energy Project,
18 which are jointly referred to as the “Signing Parties.”

19 **1. THE SETTLEMENT AGREEMENT**

20 **Q. WHAT ASPECTS OF THE SETTLEMENT AGREEMENT ENTERED**
21 **INTO BY THE SIGNING PARTIES WILL YOU ADDRESS IN THIS**
22 **TESTIMONY?**

23 **A.** I will respond to the overall rate of return included in the Settlement Agreement
24 and the Equity Building Mechanism provision.

1 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS CONCERNING**
2 **THE PROPOSED SETTLEMENT AGREEMENT.**

3 **A.** If the Commission elects to approve the Settlement Agreement, it should
4 condition approval on the Signing Parties accepting a more reasonable common
5 equity return. I recommend a return on common equity of 9.8%. This common
6 equity return is reflective of the current low cost capital market for utilities with
7 minimum investment grade senior corporate credit ratings.

8 I also find it is not in the public interest to enhance Avista's earnings
9 above current market levels to increase its ability to accelerate the pay down of
10 debt and increase its common equity ratio. Based on its public statements, it
11 appears that Avista is attempting to increase its equity ratio by paying down debt
12 from internal funds, but it has not attempted to maximize its retained earnings.
13 Indeed, Avista informed investors that it has increased its dividend payments
14 three times in the last 18 months.^{1/} These dividend increases reduced the amount
15 of earnings retained in the Company, reduced its internal funds available to pay
16 down debt, and lowered Avista's common equity ratio.

17 Significantly a portion of Avista's internal funds are derived from the
18 amortization of purchased power costs incurred but not recovered during the
19 wholesale market activities in calendar years 2000 and 2001. Avista maintains
20 that the build up of its debt balance and reduction of its common equity ratio is
21 primarily a result of the extraordinary purchased power cost that has not yet been
22 recovered.^{2/} Avista Utilities has been permitted to defer these costs and amortize

^{1/} Avista's 2004 Annual Report at 13.

^{2/} Exhibit No. ____ (MKM-1T) at 4.

1 them to customers.^{3/} Cash flow produced through this amortization of costs is
2 helping to fund debt reduction and increase Avista’s common equity ratio.
3 Hence, regulatory mechanisms are already in place to provide ratepayer assistance
4 to pay down the debt that has caused an erosion to Avista’s common equity ratio.
5 It is unreasonable to provide Avista an above-average market return on common
6 equity in order to enhance its earnings entitlement as an additional means to fund
7 debt reduction, especially since it is very likely these excess earnings will be used
8 to support dividend payments and possibly dividend increases, but not debt
9 reduction.

10 **Q. PLEASE BRIEFLY DESCRIBE THE SETTLEMENT AGREEMENT.**

11 **A.** The Signing Parties have agreed to an electric rate increase of \$22.1 million, and a
12 gas increase of \$968,000. This revenue deficiency is based on an overall ROR of
13 9.11%, and a return on common equity (“ROE”) of 10.4%.

14 **Q. HAVE THE SIGNING PARTIES FULLY SUPPORTED THE REVENUE**
15 **REQUIREMENT INCLUDED IN THE SETTLEMENT AGREEMENT?**

16 **A.** No. The Settlement Agreement provides no details that demonstrate whether the
17 overall rate of return, or the return on common equity, are just and reasonable.
18 Indeed, a review of various aspects of the Settlement Agreement clearly indicates
19 that the true return on common equity opportunity for Avista is over 11.14%,
20 which is excessive. Hence, the rates produced under the Settlement Agreement
21 have not been shown to be fair, just, reasonable, and in the public interest.

^{3/} Avista 2004 SEC 10K at 77.

1 **Q. DO YOU BELIEVE THE SETTLEMENT AGREEMENT'S PROPOSED**
2 **OVERALL RATE OF RETURN OF 9.11% IS REASONABLE?**

3 **A.** No. This return is overstated for at least two reasons. First, the Settlement
4 Agreement's authorized ROE of 10.4% is excessive in today's low cost capital
5 market environment. I have estimated that Avista's current cost of common
6 equity in today's capital market is 9.8%, as described below. Hence, the
7 Commission should not approve the stipulated revenue requirement without full
8 evidence on a fair cost of equity.

9 Second, the Settlement Agreement sets rates to actually provide Avista an
10 opportunity to earn a true return on equity of at least 11.14%. This additional
11 equity return opportunity is created because the stipulated capital structure is
12 based on an artificially inflated ratio of common equity and an artificially reduced
13 debt ratio. Inflating the amount of common equity in the capital structure
14 increases the true equity return opportunity reflected in the Settlement Agreement,
15 because Avista is permitted to earn an equity return on equity capital that has not
16 been invested in the utility operations. Stated differently, under the Settlement
17 Agreement, Avista will be permitted to earn an equity return on some portion of
18 debt capital. Since, the equity return is higher than Avista's cost of debt, the
19 amount of return above its debt cost will increase its return on the actual equity
20 invested in utility operations.

21 **Q. WHY HAVE YOU CONCLUDED THAT THE SETTLEMENT CAPITAL**
22 **STRUCTURE IS BASED ON A COMMON EQUITY RATIO THAT**
23 **EXCEEDS AVISTA'S ACTUAL COMMON EQUITY INVESTED IN**
24 **UTILITY PLANT?**

25 **A.** This is apparent from the Settlement Agreement. Specifically, the stipulated
26 revenue requirement and rates are developed using a capital structure that is

1 composed of a percentage of common equity to total capital of 40%. Settlement
2 Agreement at 3 (Aug. 12, 2005). However, in Section 8 of the Settlement
3 Agreement, the “Equity Building Mechanism,” the Signing Parties have agreed
4 that the Company will increase its actual common equity ratio to total capital to
5 35% by year-end 2007, and to 38% by year-end 2008. Id. Hence, this clearly
6 indicates that the Signing Parties have agreed that the Company’s actual capital
7 structure today supporting utility operations contains a common equity ratio to
8 total capital that is less than the 40% ratio used to develop the stipulated revenue
9 requirement.

10 **Q. HAVE ALL THE SIGNING PARTIES CONSISTENTLY TAKEN THE**
11 **POSITION THAT IT IS APPROPRIATE TO SET RATES BASED ON**
12 **HYPOTHETICAL CAPITAL STRUCTURES**

13 **A.** No. In another recent proceeding, Staff opposed setting rates with imputed
14 common equity. WUTC v. Puget Sound Energy, Inc., (“PSE”) WUTC Docket
15 Nos. UG-040640, UE-040641, UE-031471, and UE-032043, Order No. 06 at ¶ 22
16 (Feb. 18, 2005). In the PSE case, the Order identified Staff’s position as:

17 [S]etting rates based on the basis of PSE’s proposed
18 45% equity ratio, rather than the Company’s actual
19 expected equity ratio over the course of the rate year,
20 would require ratepayers to pay for ‘phantom equity
21 costs’ amounting to millions of dollars per year.
22

23 Id. In that case, Staff recommended rates be set at the Company’s actual balance
24 of common equity capital. Staff does not appear to be providing the same
25 ratepayer protections to Avista’s customers that it extended to PSE’s customers.

1 **Q. DOES THE SETTLEMENT AGREEMENT PROVIDE ADEQUATE**
2 **INFORMATION THAT ALLOWS YOU TO DETERMINE WHAT**
3 **AVISTA’S ACTUAL EARNING ENTITLEMENT WILL BE UNDER THE**
4 **PROPOSED SETTLEMENT RATES?**

5 **A.** No. While the Settlement Agreement claims to have identified a revenue
6 deficiency, that revenue deficiency is not transparently developed in the
7 Settlement Agreement. Indeed, the Settlement Agreement does not clearly
8 identify the electric and gas rate base used by the Signing Parties to produce the
9 claimed stipulated revenue requirement, among other cost items. Hence, the
10 stipulated revenue deficiency calculations are not transparent, and it is not
11 possible to accurately validate the Signing Parties’ claimed revenue deficiency.

12 **Q. IS THERE ANY WAY TO APPROXIMATE THE POTENTIAL**
13 **EARNINGS ENTITLEMENT FOR AVISTA UNDER THE PROPOSED**
14 **SETTLEMENT AGREEMENT?**

15 **A.** Only loosely. If one relies on the electric and gas rate base from the Company’s
16 filing, and assumes that the actual capital structure supporting utility operations
17 has a common equity ratio of no higher than 35%, one can estimate the minimum
18 enhanced return on equity that the Settlement Agreement provides Avista during
19 the rate period.

20 As developed on my Exhibit No.__(MPG-3), under these parameters,
21 Avista will be provided an opportunity to earn an 11.14% return on common
22 equity, assuming a common equity ratio of no higher than 35% of total capital.
23 This minimum equity return enhancement is significantly higher than that
24 awarded to utilities in most recent rate cases based on today’s low cost capital
25 market. Hence, the revenue requirement increase provided for in the Settlement
26 Agreement is excessive and not just and reasonable.

1 **Q. ARE THERE OTHER ASPECTS OF THE SETTLEMENT AGREEMENT**
2 **THAT ARE TROUBLING?**

3 **A.** Yes. While the Settlement Agreement is clearly based on a hypothetical capital
4 structure with imputed (i.e., phantom) common equity, the Settlement Agreement
5 appears to ignore the significant above-market cost of debt Avista is currently
6 carrying on its books and records. At a minimum, the Settlement Agreement, if it
7 is to impute common equity, should reduce the embedded debt cost down to
8 assume that near-term embedded debt retirement of Avista will be refinanced at
9 today's lower capital market costs. Indeed, approximately \$300 million of high
10 cost debt will be retired in calendar years 2007 and 2008. Avista witness Malyn
11 Malquist testified that Avista has already purchased financial swap positions to
12 lock in interest rate reductions amounting to over \$900,000 per year in interest
13 savings. Exhibit No.__(MKM-1T) at 21. Hence, the embedded debt used in the
14 overall rate of return in the Settlement Agreement should be reduced to reflect the
15 expected debt cost reduction when the imputed higher equity ratio is expected to
16 be achieved.

17 **Q. ARE THERE ANY ASPECTS OF THE PROPOSED SETTLEMENT**
18 **AGREEMENT THAT WOULD REDUCE AVISTA'S OPERATING RISK**
19 **AND THUS JUSTIFY A REDUCED RETURN ON EQUITY?**

20 **A.** Yes. In Paragraph 13 of the proposed Settlement Agreement, the Energy
21 Recovery Mechanism ("ERM") would be modified to provide greater assurance
22 that Avista will fully recover its fuel and purchased power costs. The Settlement
23 Agreement provides for a change to the ERM to reduce the deadband to \$3
24 million, from \$9 million, after calendar year 2005. Reducing the deadband will

1 provide Avista greater flexibility to increase deferrals and/or charges to recover
2 volatile fuel and purchased power energy charges.

3 Importantly, while this proposed modification to the ERM reduces
4 Avista's risk, it doesn't eliminate the risk. Rather, it simply transfers the volatile
5 fuel and purchased power costs to customers and away from Avista. ICNU does
6 not support reducing the deadband; however, if the Commission approves this
7 approach it is appropriate to compensate customers for assuming a larger amount
8 of the risk associated with fuel and purchased power cost recovery. This
9 customer compensation should come in the form of reduced rates via a reduced
10 ROE.

11 **2. THE EQUITY BUILDING MECHANISM**

12 **Q. DOES THE EQUITY BUILDING MECHANISM BENEFIT CUSTOMERS**
13 **AS OUTLINED IN THE SETTLEMENT AGREEMENT?**

14 **A.** Not as structured. The Equity Building Mechanism appears to be designed to
15 encourage Avista to increase its common equity ratio of total utility capital.
16 Presumably the objective appears to be to incent Avista to improve its credit
17 rating and financial integrity, thus enhancing its ability to attract capital at a more
18 reasonable cost. Unfortunately, the Equity Building Mechanism is structured too
19 loosely to provide real ratepayer assurances that Avista will use the excessive
20 earnings provided in the Settlement Agreement to improve its financial condition
21 rather than simply enhance its return to shareholders.

22 **Q. PLEASE DESCRIBE THE DEFICIENCIES IN THE EQUITY BUILDING**
23 **MECHANISM.**

24 **A.** Simply stated, there is no true commitment by Avista to retain the excessive
25 earnings produced via the Settlement Agreement to increase its common equity

1 capital and/or accelerate the pay down of debt during the rate period.
2 Importantly, building up the equity capital in Avista should be an obligation and
3 burden of its common shareholders, not ratepayers. Hence, the concept of setting
4 rates to produce excessive earnings to build up utility equity capital places the
5 considerable burden of making Avista utility equity investments on ratepayers
6 rather than on investors. This concept is patently unjust to customers.

7 Setting this important principle aside, the Equity Building Mechanism
8 should require Avista to agree to suspend dividend payments until the 40% utility
9 equity ratio target is met. At a minimum, the Settlement Agreement should
10 require Avista to agree not to increase dividends during the term of this rate
11 settlement, and the suspension on dividend increases should remain in effect until
12 Avista achieves the 40% common equity ratio of total utility capital.

13 In addition, the Company should be required to disclose to the
14 Commission, Staff, and all interested stakeholders its plan to increase its common
15 equity utility capital. Some options available include the public issuance of
16 common equity stock where the proceeds will be used to reduce debt, or to fund
17 utility cash requirements, excluding dividend payments. Avista should make a
18 firm commitment to execute the plan to enhance its common equity, strengthen its
19 balance sheet, and attempt to improve its credit rating.

20 The Settlement Agreement simply does not provide any assurance from
21 Avista that it is committed to achieve the equity ratio targets reflected in the
22 Settlement Agreement.

1 **Q. BUT DOESN'T THE EQUITY BUILDING MECHANISM INCLUDE**
2 **REFUND PENALTIES IN THE EVENT AVISTA FAILS TO MEET THE**
3 **EQUITY RATIO TARGETS?**

4 **A.** Yes. However, these revenue adjustments simply do not provide adequate
5 penalties for failing to meet these equity ratio improvements. The Settlement
6 Agreement provides for prospective rate adjustment and Avista will be permitted
7 to keep all excessive earnings from prior periods. Hence, the Settlement
8 Agreement does not provide assurance that the excessive earnings provided in the
9 Settlement Agreement will be used by Avista to strengthen its utility balance
10 sheet rather than be used to enhance its return to investors.

11 **Q. WHY SHOULD AVISTA BE REQUIRED TO PROVIDE CUSTOMERS**
12 **WITH A PLAN TO IMPROVE ITS EQUITY RATIO UNDER THE**
13 **SETTLEMENT AGREEMENT?**

14 **A.** Customers are, in effect, making equity investments in Avista by being required
15 to pay rates that are equivalent to well-above-market required returns on low risk
16 utility investments. If the Commission agrees that customers should be a source
17 of Avista equity capital, then Avista should be obligated to make a firm
18 commitment to build up its common equity by eliminating its dividend or, at a
19 minimum, suspending growth to its dividend until the equity ratio targets are met,
20 and until its target credit rating is achieved.

21 **3. MARKET COST OF EQUITY**

22 **Q. PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A**
23 **REGULATED COMPANY'S COST OF COMMON EQUITY.**

24 **A.** In general, determining a fair cost of common equity for a regulated utility has
25 been framed by two decisions of the U.S. Supreme Court. Bluefield Water Works

1 & Improvement Co. v. Pub. Serv. Comm'n of West Virginia, 262 U.S. 679 (1923)
2 and Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

3 These decisions identify the general standards to be considered in
4 establishing the cost of common equity for a public utility. Those general
5 standards are that the authorized return should: 1) be sufficient to maintain
6 financial integrity; 2) attract capital under reasonable terms; and 3) be
7 commensurate with returns investors could earn by investing in other enterprises
8 of comparable risk.

9 **Q. PLEASE DESCRIBE WHAT IS MEANT BY THE “UTILITY'S COST OF**
10 **COMMON EQUITY.”**

11 **A.** The utility's cost of common equity is the return investors expect, or require, in
12 order to make an investment. Investors expect to achieve their return requirement
13 by receiving dividends and experiencing stock price appreciation.

14 **Q. PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE**
15 **THE COST OF COMMON EQUITY FOR AVISTA.**

16 **A.** I have used several models derived from financial theory to estimate Avista's cost
17 of common equity. These models are: 1) the constant growth discounted cash
18 flow (“DCF”) model; 2) the bond yield plus equity risk premium model; and 3) a
19 capital asset pricing model (“CAPM”). I have applied these models to a proxy
20 risk group of publicly traded utilities that I have determined to be reasonably
21 comparable to Avista in terms of investment risk.

22 **Q. HOW DID YOU SELECT YOUR PROXY RISK GROUP OF PUBLICLY**
23 **TRADED UTILITIES IN ESTIMATING A FAIR RETURN FOR AVISTA?**

24 **A.** I selected a group of electric utility companies followed by The Value Line
25 Investment Survey that met the following selection criteria:

- 1 1. A minimum investment grade bond rating from S&P and Moody's of
2 BBB or Baa;
- 3 2. Common equity ratios no greater than 60%;
- 4 3. Have paid dividends consecutively over the last two years; and
- 5 4. Have published consensus analysts' growth rate estimates.

6 Based on these selection criteria, the companies included in my
7 comparable group are shown on my Exhibit No. ____ (MPG-4).

8 **Q. IS YOUR PROXY GROUP REASONABLY RISK COMPARABLE TO**
9 **AVISTA?**

10 **A.** Yes. The proxy group's senior secured corporate credit rating from Standard &
11 Poor's is BBB and from Moody's is Baa2. These ratings are only slightly higher
12 than Avista's senior secured credit rating from Standard & Poor's of BBB- and
13 from Moody's of Baa3. The group has a comparable business profile score from
14 Standard & Poor's indicating comparable business risk.^{4/}

15 Finally, Avista's Settlement Agreement common equity ratio of 40% is
16 somewhat lower than the average equity ratio of 43%, when short-term debt is
17 included in the calculation (Column 5). This group is a reasonable risk proxy for
18 Avista.

19 **4. THE DISCOUNTED CASH FLOW MODEL**

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

21 **A.** The DCF model posits that a stock price is valued by summing the present value
22 of expected future cash flows discounted at the investor's required rate of return
23 ("ROR") or cost of capital. This model is expressed mathematically as follows:

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

2
3 P_0 = Current stock price
4 D = Dividends in periods 1 - ∞
5 K = Investor's required return

6 This model can be rearranged in order to estimate the discount rate or
7 investor required return, "K." If it is reasonable to assume that earnings and
8 dividends will grow at a constant rate, then Equation 1 can be rearranged as
9 follows:

10
$$K = D_1/P_0 + G$$
 (Equation 2)

11 K = Investor's required return
12 D_1 = Dividend in first year
13 P_0 = Current stock price
14 G = Expected constant dividend growth rate

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

16 **Q. PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH**
17 **DCF MODEL.**

18 **A.** As shown under Equation 2 above, the DCF model requires a current stock price,
19 expected dividend, and expected growth rate in dividends.

20 **Q. WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN**
21 **YOUR CONSTANT GROWTH DCF MODEL?**

22 **A.** I relied on the average of the weekly high and low stock prices over a 13-week
23 period ending August 5, 2005. An average stock price is less susceptible to
24 market price variations than a spot price. Therefore, an average stock price is less
25 susceptible to aberrant market price movements, which may not be reflective of
26 the stock's long-term value.

^{4/} Standard & Poor's rates utilities' business risk based on a profile scale ranging from 1 (lowest risk) to 10 (highest risk). Integrated utility companies normally have business profile scores in the range of 4 to 6. Hence, Avista's business risk is at the high end of this range.

1 A 13-week average stock price is short enough to contain data that
2 reasonably reflects current market expectations, but is not too short a period to be
3 susceptible to market price variations that may not be reflective of the security's
4 long-term value. Therefore, in my judgment, a 13-week average stock price is a
5 reasonable balance between the need to reflect current market expectations and to
6 capture sufficient data to smooth out aberrant market movements.

7 I used the most recently paid quarterly dividend, as reported in the Value
8 Line Investment Survey. This dividend was annualized (multiplied by 4) and
9 adjusted for next year's estimated growth to produce the D1 factor for use in
10 Equation 2 above.

11 **Q. WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR DCF**
12 **MODEL?**

13 **A.** There are several methods one can use in order to estimate the expected growth in
14 dividends. However, for purposes of determining the market required return on
15 common equity, one must attempt to estimate what the consensus of investors
16 believes the dividend or earnings growth rate will be, and not what an individual
17 investor or analyst may use to form individual investment decisions.

18 Security analysts' growth estimates have been shown to be more accurate
19 predictors of future returns than growth rates derived from historical data.^{5/}
20 Because they are more reliable estimates, and assuming the market generally
21 makes rational investment decisions, analysts' growth projections are the most
22 likely growth estimates that are built into stock prices.

^{5/} See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, Spring 1989.

1 For my constant growth DCF analysis, I have relied on a consensus, or
2 mean, of professional security analysts' earnings growth estimates as a proxy for
3 the investor consensus dividend growth rate expectations. I used the average of
4 three published sources of customer growth rate estimates, including Zack's
5 Detailed Analyst Estimates, Reuters, and Thomson Financial. All consensus
6 analyst projections used were available on August 19, 2005, as reported on-line.
7 Each consensus growth rate projection is based on a survey of security analysts.
8 The consensus estimate is a simple arithmetic average of surveyed analysts'
9 earnings growth forecasts. A simple average of the growth forecasts gives equal
10 weight to all surveyed analysts' projections. It is problematic as to whether any
11 particular analyst's forecast is most representative of general market expectations.
12 Therefore, a simple average, or arithmetic mean, of analysts' forecasts is a good
13 proxy for market consensus expectations. The growth rates I used in my DCF
14 analysis are shown on my Exhibit No. ____ (MPG-5).

15 **Q. WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF**
16 **MODEL?**

17 **A.** The result of my DCF analysis is shown on my Exhibit No. ____ (MPG-6). My
18 DCF cost of common equity estimates for the proxy utility group is 8.8%.

19 **Q. DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF**
20 **YOUR DCF ANALYSIS?**

21 **A.** Yes. I believe my DCF results exhibit sound investment and economic
22 fundamentals. Indeed, both the growth and yield components of my DCF return
23 reflect sound company financial fundamentals that support investment returns that
24 reasonably reflect prevailing low cost and low inflation capital markets.

1 Specifically, the consensus analysts' growth rate for my proxy utility
2 group is 4.57%. This growth rate is reasonable, if not highly conservative, for
3 several reasons. First, the growth rate is reasonably consistent with the consensus
4 of economists' five and ten-year projected GDP growth rate of 5.3%.^{6/} Growth
5 rates that approximate the long-term projected GDP growth rate represent the
6 maximum sustainable growth rate for electric utility companies. This is true
7 because electric utility companies cannot
8 grow indefinitely at a growth rate that is faster than the economy in which they
9 sell their services. A utility's earnings are tied to its investment in utility plant,
10 and utility plant is typically made to meet growing customer demands. Growing
11 customer demand is, in turn, a function of the growth in the service area economy.
12 Hence, growth in the service area economy represents the maximum sustainable
13 long-term growth for utility plant investment and earnings. I would note,
14 however, the Energy Information Administration has tracked historical GDP
15 growth in utility earnings and has noted that utility sales growth lags the overall
16 economy; EIA concludes that "demand for electricity has been related to
17 economic growth, that positive relationship is expected to continue."^{7/}

18 Accordingly, the nominal GDP growth rate is a conservative high end, i.e.,
19 should be considered the maximum, sustainable growth for electric utility
20 companies in the DCF model. Hence, the growth rates used in my DCF analysis
21 are conservatively high.

^{6/} Blue Chip Economic Forecast, March 10, 2005.
^{7/} EIA Annual Energy Outlook 2004 at 80.

1 Second, I conclude the growth rate is conservative in comparison to the
2 GDP growth rate because the growth rate in utility dividends historically has been
3 dramatically lower than the nominal GDP growth rate. See Exhibit No.
4 ____ (MPG-7). In fact, this exhibit shows that the proxy group's historical
5 dividend growth rate has been closer to the rate of inflation. Currently, inflation
6 projections over the next five and ten years by a consensus of economists, as
7 published in the Blue Chip Financial Forecast, is 2.5%. (August 1, 2005 at 2).

8 Third, the fundamental factors supporting growth for these companies
9 indicates that they are at payout ratios and dividend to book ratios that would
10 support the sustainable dividend growth as projected by security analysts. For
11 example, the payout ratio for the proxy utility group in 2004 is around 72%, and
12 is projected to be around 63% three to five years out. This percentage payout
13 allows the companies to retain adequate earnings to fund growth going forward.
14 Retaining approximately 35% of their earnings would support moderate growth,
15 again, growth that likely does not exceed the growth of the economy in which
16 they sell their services.

17 Also, the current and projected dividend to book ratios of my proxy utility
18 group is approximately 6.9% to 6.4%, respectively. Hence, a DCF return on
19 equity of 9.8% will support the current and projected dividend and allow earnings
20 retention to fund future growth.

21 Finally, the group yield of 4.24% is reflective of the market interest rates
22 of long-term investments, thus indicating it is reasonably reflective of today's low
23 cost capital market.

1 **5. THE RISK PREMIUM MODEL**

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

4 **A.** This model is based on the principle that investors require a higher ROR to
5 assume greater risk. Common equity investments have greater risk than bonds
6 because bonds have more security of payment in bankruptcy proceedings than
7 common equity, and the coupon payments on bonds represent contractual
8 obligations. In contrast, companies are not required to pay dividends on common
9 equity, or to guarantee returns on common equity investments. Therefore,
10 common equity securities are considered to be more risky than bond securities.

11 This risk premium model is based on two estimates of an equity risk
12 premium. The difference between the required return on common equity and the
13 yield on a bond is the risk premium. I estimated the risk premium on an annual
14 basis for each year over the period 1986 through 2004. The common equity
15 required returns were based on regulatory commission-authorized returns for
16 electric utility companies. These authorized returns are typically based on expert
17 witnesses' estimates of the contemporary investor required return.

18 The 1986-2004 time period was selected because over this period public
19 utility equities have consistently traded at a premium to book value. This is
20 illustrated on my Exhibit No. ____ (MPG-8), where the market to book ratio
21 since 1986 for the electric utility industry was consistently above 1.0. Therefore,
22 over this time period, authorized returns were sufficient to support market prices
23 that exceeded book value. This is an indication that authorized returns on
24 common equity supported a utility's ability to issue additional common stock,

1 without diluting existing shares and having a detrimental impact on current
2 shareholders.

3 The first estimate uses the difference between the required return on utility
4 common equity investments and Treasury bond yields. Based on this analysis, as
5 shown on my Exhibit No. ____ (MPG-9), the average indicated equity risk
6 premium of authorized electric utility common equity returns over U.S. Treasury
7 bond yields was 4.96%. Of the 19 observations, 12 indicated risk premiums fall
8 in the range of 4.4% to 5.7%. Since the risk premium can vary depending upon
9 market conditions and changing investor risk perceptions, I believe using an
10 estimated range of risk premiums is the best method to measure the current
11 required return on common equity under this methodology.

12 The second equity risk premium method is based on the difference
13 between regulatory commission authorized returns on common equity and
14 contemporary A-rated utility bond yields. As shown on my Exhibit No.
15 ____ (MPG-10), the average indicated equity risk premium of authorized electric
16 utility common equity returns over contemporary Moody's utility bond yields was
17 3.54% over the period 1986-2004. The equity risk premium estimates based on
18 this analysis primarily fall in the range of 3.0% to 4.0% over this time period.

19 **Q. HOW DID YOU ESTIMATE AVISTA'S COST OF COMMON EQUITY**
20 **WITH THIS MODEL?**

21 **A.** I added my estimated equity risk premium over Treasury yields to a projected
22 long-term Treasury bond yield. Blue Chip Financial Forecasts projects the 20-
23 year Treasury bond yield to be 5.2%, and the 10-year Treasury bond yield to be
24 5.1%. Blue Chip Financial Forecast, Aug. 1, 2005 at 2. Using the projected 20-

1 year bond yield of 5.2% and an equity risk premium of 4.4% to 5.7% produces an
2 estimated common equity return in the range of 9.6% to 10.9%, with a mid-point
3 estimate at 10.3%.

4 I next added my equity risk premium over utility bond yields to the current
5 13-week average yield on “Baa” rated utility bonds for the period ending July 1,
6 2005 of 5.79%. This current “Baa” utility bond yield is developed on my Exhibit
7 No.____(MPG-11). Adding the utility bond equity premium of 3.0% to 4.0% to
8 the “A” rated bond yield of 5.8% produces a cost of equity in the range of 8.8% to
9 9.8%, with a mid-point of 9.3%. Using the Baa yield would produce an average
10 return of 9.3%.

11 My risk premium analyses therefore produce a common equity return
12 estimate in the range of 9.3% to 10.3%, with a mid-point of 9.8%.

13 **6. THE CAPITAL ASSET PRICING MODEL**

14 **Q. PLEASE DESCRIBE THE CAPM.**

15 **A.** The CAPM method of analysis is based upon the theory that the market required
16 ROR for a security is equal to the risk-free ROR, plus a risk premium associated
17 with the specific security. This relationship between risk and return can be
18 expressed mathematically as follows:

19
$$R_i = R_f + B_i \times (R_m - R_f) \text{ where:}$$

20 $R_i =$ Required return for stock i

21 $R_f =$ Risk-free rate

22 $R_m =$ Expected return for the market portfolio

23 $B_i =$ Beta - Measure of the risk for stock

24 The stock specific risk term in the above equation is beta. Beta represents the
25 investment risk that cannot be diversified away when the security is held in a

1 diversified portfolio. When stocks are held in a diversified portfolio, firm-
2 specific risks can be eliminated by balancing the portfolio with securities that
3 react in the opposite direction to firm-specific risk factors (e.g., business cycle,
4 competition, product mix, and production limitations).

5 The risks that cannot be eliminated when held in a diversified portfolio are
6 nondiversifiable risks. Nondiversifiable risks are related to the market in general
7 and are referred to as systematic risks. Risks that can be eliminated by
8 diversification are regarded as nonsystematic risks. In a broad sense, systematic
9 risks are market risks, and nonsystematic risks are business risks. The CAPM
10 theory suggests that the market will not compensate investors for assuming risks
11 that can be diversified away. Therefore, the only risks that investors will be
12 compensated for are systematic or nondiversifiable risks. The beta is a measure
13 of the systematic or nondiversifiable risks.

14 **Q. PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**

15 **A.** The CAPM requires an estimate of the market risk-free rate, the company's beta,
16 and the market risk premium.

17 **Q. WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-
18 FREE RATE?**

19 **A.** I used Blue Chip Financial Forecast's projected 20-year Treasury bond yield of
20 5.2%. Blue Chip Financial Forecast, Aug. 1, 2005 at 2.

21 **Q. WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN
22 ESTIMATE OF THE RISK-FREE RATE?**

23 **A.** Treasury securities are backed by the full faith and credit of the United States
24 government. Therefore, long-term Treasury bonds are considered to have
25 negligible credit risk. Also, long-term Treasury bonds have an investment

1 horizon similar to that of common stock. As a result, investor-anticipated long-
2 run inflation expectations are reflected in both common stock required returns and
3 long-term bond yields. Therefore, the nominal risk-free rate (or expected
4 inflation rate and real risk-free rate) included in a long-term bond yield is a
5 reasonable estimate of the nominal risk-free rate included in common stock
6 returns.

7 Treasury bond yields, however, do include risk premiums related to
8 unanticipated future inflation and interest rates. Therefore, a Treasury bond yield
9 is not a risk-free rate. Risk premiums related to unanticipated inflation and
10 interest rates are systematic or market risks. Consequently, for companies with
11 betas less than one, using the Treasury bond yield as a proxy for the risk-free rate
12 in the CAPM analysis can produce an overstated estimate of the CAPM return.

13 **Q. WHAT BETA DID YOU USE IN YOUR ANALYSIS?**

14 **A.** I relied on the group average beta estimate for the comparable group. Group
15 average beta is more reliable than a single company beta. A group average beta
16 has stronger statistical parameters that better describe the systematic risk of the
17 group than an individual company beta. For this reason, a group average beta will
18 produce a more reliable return estimate.

19 I relied on The Value Line Investment Survey published beta for each of
20 the companies in my comparable group. The average beta for my proxy utility
21 group is 0.86 as shown on my Exhibit No. ____ (MPG-12).

22 **Q. HOW DID YOU DERIVE YOUR MARKET PREMIUM ESTIMATE?**

23 **A.** I derived two market premium estimates, a forward-looking estimate and one
24 based on a long-term historical average.

1 The forward-looking estimate was derived by estimating the expected
2 return on the market (S&P 500) and subtracting the risk-free rate from this
3 estimate. I estimated the expected return on the S&P 500 by adding an expected
4 inflation rate to the long-term historical arithmetic average real return on the
5 market. The real return on the market represents the achieved return above the
6 rate of inflation.

7 The Ibbotson and Associates' Stocks, Bonds, Bills and Inflation 2005
8 Year Book publication estimates the historical arithmetic average real market
9 return over the period 1926-2004 as 9.2%. A current five-year consensus analyst
10 inflation projection, as measured by the Consumer Price Index, is 2.5%. Blue
11 Chip Financial Forecasts, Mar. 10, 2005 at 15. Using these estimates, the
12 expected market return is 11.9%. The market premium then is the difference
13 between the 11.9% expected market return and my 5.2% risk-free rate estimate, or
14 6.7%.

15 The historical estimate of the market risk premium was also estimated by
16 Ibbotson and Associates in the Stock, Bonds, Bills and Inflation, 2005 Year Book.
17 Over the period 1926 through 2004, Ibbotson's study estimated that the arithmetic
18 average of the achieved total return on the S&P 500 was 12.4%, and the total
19 return on long-term Treasury bonds was 5.8%, producing an indicated equity risk
20 premium of 6.6% (12.4% - 5.8% = 6.6%).

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

22 **A.** As shown on my Exhibit No.____(MPG-13), my CAPM estimate is 10.9%.

1 7. **RETURN ON EQUITY SUMMARY**

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

5 **A.** Based on my analyses, I estimate an appropriate return on equity for Avista to be
6 9.8%.

<u>Description</u>	<u>Percent</u>
Constant Growth DCF	8.8%
Risk Premium	9.8%
CAPM	10.9%

7

8 My recommended return on equity of 9.8% is at the mid-point of my
9 estimated return on equity range for Avista of 9.0% to 10.3%. The high end of
10 my estimated range is based on the average of my risk premium and CAPM
11 analyses, and the low end of my estimated range is based on my DCF analysis,
12 rounded up to 9.0%.

13 **Q. WHY IS IT IMPORTANT TO ADOPT AN OVERALL ROE BASED ON**
14 **THE MIDPOINT OF THE THREE MODELS?**

15

16 **A.** Avista’s ROE should not be established based on only one of the models because
17 using a complete ROE analysis provides the most reliable estimate of a utility’s
18 current cost of common equity. The most accurate estimate of a utility’s ROE
19 will balance the competing interest of investors and customers, and is thus the
20 most fair to both stakeholders. Indeed, arbitrarily selecting one model’s results or

1 another's will tilt the regulatory balance in favor of investors at the expense of
2 customers or vice versa. Hence, a balanced approach to developing the ROE
3 should be followed in setting just and reasonable utility prices.

4 In addition, it is particularly inappropriate to set a utility's ROE on only
5 the CAPM analysis. Specifically, the CAPM return is depended on the estimated
6 utility beta. Utility betas over the last few years have been extremely volatile
7 ranging from as low as 0.5 to as high recently as 0.9. Hence, current CAPM
8 returns are at unusually high levels. Further, since the utility betas are calculated
9 from five years of historical data, they are heavily impacted by the utility industry
10 risk over the last five years. The utility industry risk during this time period was
11 plagued by extremely volatile and uncertain wholesale markets, bankruptcies, and
12 accounting irregularities and other factors that eroded investor's confidence in
13 utility management and increased the market volatility of energy company stocks

14 These risk factors are no longer a significant concern, because the utility
15 industry has reverted to a "back to basics" business model that concentrates on
16 low risk regulated utility operations. Hence, the CAPM return in particular is not
17 an appropriate method to develop a stand alone ROE estimate.

18 **8. RESPONSE TO AVISTA WITNESS DR. WILLIAM AVERA**

19 **Q. DOES AVISTA WITNESS DR. AVERA'S RETURN ON EQUITY STUDY**
20 **AND RECOMMENDATIONS SUPPORT THE 10.4% RETURN ON**
21 **EQUITY INCLUDED IN THE STIPULATION?**

22 **A.** No. Dr. Avera proposes an 11.5% equity return. His return on equity is
23 supported by analyses that contain significant deficiencies and overstate a fair
24 return on equity for Avista. By removing overstated cost estimates and adjusting

1 his assumptions to reflect current market costs, Dr. Avera's own studies support a
2 return on equity for Avista of 9.8%.

3 **Q. HOW DID DR. AVERA DEVELOP HIS 11.5% RETURN ON EQUITY?**

4 **A.** Dr. Avera estimated a return for his comparable utility group of 11.2% and then
5 added 30 basis points for common stock flotation expense. Hence, Dr. Avera is
6 proposing an authorized return on equity for Avista of 11.5%.

7 **Q. DO YOU BELIEVE THAT DR. AVERA'S 30 BASIS POINT FLOTATION**
8 **COST ADDER TO AVISTA'S RETURN ON EQUITY IS REASONABLE?**

9 **A.** No. Dr. Avera's 30 basis point return on equity adder is based on issuance
10 expense studies performed on other utility companies. Common stock issuance
11 expense is an item that can be properly accounted for and tracked by utility
12 companies. If it is properly accounted for, the expense can be audited and
13 confirmed, and the amount of the expense can be shown to be just and reasonable.
14 Since Dr. Avera's flotation cost adjustment is not based on Avista-specific costs,
15 it is not a known and measurable expense and should not be reflected in Avista's
16 cost of service.

17 **Q. PLEASE SUMMARIZE DR. AVERA'S PROPOSED RETURN ON**
18 **EQUITY FOR AVISTA.**

19 **A.** Dr. Avera estimated Avista's cost of equity using DCF and risk premium
20 analyses. As shown below in Table 2, Dr. Avera's analyses produced returns on
21 equity in the range of 10.0% to 11.9%.

22 However, as I will discuss in more detail below, making reasonable
23 adjustments to Dr. Avera's DCF and risk premium studies indicate that a return
24 on equity of 9.8% is fair for Avista based on today's marketplace.

TABLE 2		
<u>Avista's ROE Analysis</u>		
<u>Model</u>	<u>Avera Proposed</u>	<u>Adjusted</u>
DCF	9.8%	9.0%
RP: Authorized Return	10.8%-11.5%	9.8%
RP: Realized Return	9.8%-11.1%	Reject
CAPM: Forward	12.5%-12.6%	10.6%
CAPM: Historical	10.6%-11.8%	10.4%
Range		9.0%-10.6%
Midpoint		9.8%

1 **Q. PLEASE SUMMARIZE DR. AVERA'S ARGUMENT THAT THE DCF**
2 **RESULT IS CURRENTLY UNRELIABLE.**

3 **A.** Dr. Avera argues that the DCF model should be used in conjunction with other
4 models to estimate a fair return. He believes that the DCF model results may
5 reflect a hangover associated with lingering economic and industry uncertainties.
6 Consequently, he appears to assert that the DCF analysis does not produce
7 reasonable results.

8 **Q. DO YOU AGREE WITH DR. AVERA'S CONCLUSION THAT THE DCF**
9 **ANALYSIS DOES NOT PRODUCE REASONABLE RESULTS AT THIS**
10 **TIME?**

11 **A.** Absolutely not. Indeed, as described in detail above, the fundamental
12 characteristics of the industry and proxy group support the DCF model premise.

13 As discussed earlier in my testimony, the DCF dividend yields right now
14 are consistent with low capital market interest rates. Also, the growth

1 components of the DCF analysis are at historically high levels approximating the
2 projected growth of the overall U.S. economy.

3 From a company fundamental standpoint, the dividends are affordable and
4 can permit reinvestment of adequate earnings to sustain targeted growth.

5 All of these factors demonstrate that the DCF results are logical in
6 relationship to today's very low capital market costs, and appear fundamentally
7 sound based on a review of the companies' ability to earn their dividends and
8 retain sufficient earnings after dividend payments to fund future growth.

9 **Q. PLEASE DESCRIBE DR. AVERA'S DCF ANALYSIS.**

10 **A.** Using the same comparable group that I used to estimate Avista's return on
11 equity, Dr. Avera estimated a current dividend yield of 4% and a growth rate
12 estimate of 5.8% to produce a DCF return estimate of 9.8%.

13 **Q. DO YOU TAKE ISSUE WITH DR. AVERA'S DCF ANALYSIS?**

14 **A.** Yes. Dr. Avera's DCF model is based on an unrealistically high growth rate of
15 5.8%. Dr. Avera estimates his proxy group's utility growth rates in the range of
16 4.3% to 5.7% with a midpoint of 5.0%. The 5.0% is based generally on analysts'
17 projected growth, and also is corroborated by Dr. Avera's results of the utilities'
18 own internal growth based on current utility fundamental data, which indicates a
19 growth rate of 5.1%.

20 Using a 5.0% growth rate instead of a 5.8% growth rate that Dr. Avera
21 used, would produce a DCF return of 9% (5% growth plus 4% yield).

1 **Q. PLEASE DESCRIBE DR. AVERA’S RISK PREMIUM ANALYSIS USING**
2 **COMMISSION AUTHORIZED RETURNS ON EQUITY.**

3 **A.** Dr. Avera compares the Commission authorized returns over the period 1980
4 through 2004 relative to contemporary average utility bond yields. For the time
5 period, he estimates an average risk premium of 3.17%. This states that over this
6 25-year time period, commission authorized returns have generally been 3.17
7 percentage points higher than the prevailing utility bond yield.

8 Dr. Avera then adjusted this historical equity risk premium for his belief
9 that there is an inverse relationship between interest rates and equity risk
10 premiums. Dr. Avera then increases the actual equity risk premium from 3.17%
11 over this historical time period up to 4.8%. He then added this equity risk
12 premium to the current “BBB” rated utility bond yield of 5.95% to produce a
13 return on equity of 10.8%.

14 Next, he adjusted the historical 3.12% equity risk premium, based on a
15 projected 2006 average utility bond yield of 7.0% to produce an adjusted equity
16 risk premium of 4.29%. He then added the estimated equity risk premium of
17 4.29% to his projected “Baa” bond yield of 7.2% to produce a return on equity for
18 Avista of 11.5%.

19 Dr. Avera’s methodologies produce a return on equity for Avista in the
20 range of 10.8% to 11.5%.

21 **Q. DOES DR. AVERA’S RISK PREMIUM, BASED ON COMMISSION**
22 **AUTHORIZED RETURNS, PRODUCE REASONABLE ESTIMATES?**

23 **A.** No. Dr. Avera’s proposal to increase the actual commission authorized equity
24 risk premium over prevailing utility bond yields is inappropriate. Indeed, Dr.
25 Avera has provided no credible support for the proposition that current equity risk

1 premiums will move inversely with interest rates. Equity risk premiums would
2 logically be expected to change with expected changes in relative risk
3 differentials between equity and bond investments. Equity risk premiums would
4 not simply change based on changes to interest rates. Hence, Dr. Avera's
5 proposed equity risk premium adjustment is based on a false financial premise.

6 Dr. Avera's schedule indicates the annual average equity risk premium
7 seldom exceeds 4.0%. Exhibit No.____(WEA-2) at 6-7. This equity risk premium
8 indicates a current return of approximately 9.8%, relative to current "Baa" yields
9 of 5.8%.

10 **Q. PLEASE DESCRIBE DR. AVERA'S REALIZED EQUITY RISK**
11 **PREMIUM ANALYSIS.**

12 **A.** Dr. Avera estimates the achieved return on the S&P electric stock index in
13 comparison to the achieved total return on S&P's "A" rated utility bonds over the
14 historical period of 1945 through end of calendar year 2003. Based on this review
15 of historical achieved returns, Dr. Avera estimates an achieved equity risk
16 premium on the S&P electric index relative to S&P's bond yields of 3.87%. Dr.
17 Avera then adds this equity risk premium to the current and projected "Baa"
18 utility bond yields of 5.95% and 7.2%, respectively. This produced an equity
19 return within the range of 9.8% to 11.1%.

20 **Q. DOES DR. AVERA'S HISTORICAL EQUITY RISK PREMIUM**
21 **PRODUCE REASONABLE RESULTS?**

22 **A.** No. There are several significant problems with Dr. Avera's historical equity risk
23 premium analysis. First, his achieved return on utility stocks is based on end of
24 year or December data. However, utility investments are traded throughout the
25 year, not only at year end. Using data from the first three quarters of the year to

1 calculate the annual return on utility stocks would produce a lower achieved
2 return on utility stocks than using the year-end data. Hence, he artificially
3 selected a time period that produces the highest common equity return and thus
4 inflates the equity risk premium estimate.

5 Second, the driving factor in this relatively short historical period
6 reviewed by Dr. Avera (1952-2004) is the substantial decline in interest rates
7 experienced over the last 25 years, and the dramatic changes in expectations of
8 energy stock returns experienced over the last ten years.

9 Indeed, current interest rates are less than one-half the rates that existed in
10 the early 1980s. This interest rate drop has dramatically impacted the achieved
11 returns on both utility stocks and utility bonds. This interest rate drop is not likely
12 to be repeated.

13 Further, the expected risk exposure of energy companies was impacted
14 dramatically as the move to competition started in the early 1990s, and
15 culminated in significant financial distress for many energy companies in the
16 2000-2002 time period. During that time period the market's expectation of
17 substantial growth in energy company stocks substantially deviated from the
18 relatively low risk nature of utility operations that currently exist, and have
19 existed prior to this historical time period.

20 The bottom line effect of relative risk differentials between equity
21 achieved returns and bond achieved returns is driven by factors that currently are
22 not reflective of today's low risk, low interest rate capital market.

23 Consequently, this method is not a reasonable method of estimating
24 Avista's equity risk premium required by investors today.

1 **Q. PLEASE DESCRIBE DR. AVERA'S FORWARD-LOOKING RISK**
2 **PREMIUM CAPM ANALYSIS.**

3 **A.** Dr. Avera estimates a forward-looking return on the market of 13.9%. From this
4 market return estimate he then subtracts a long-term Treasury bond yield of 4.6%
5 to arrive at a market risk premium of 9.3%. He relies on the utility beta of 0.84 to
6 produce an implied cost of equity for his comparable group of 12.5%.

7 Dr. Avera then relies on a projected Treasury bond yield of 5.8% to
8 produce a market risk premium of 6.8%. Using the same utility beta of 0.84, and
9 this projected Treasury bond yield, produces a CAPM return of 12.6%.

10 As such, Dr. Avera's forward-looking application of the CAPM analysis
11 produced a return on equity within the range of 12.5% to 12.6%.

12 **Q. IS DR. AVERA'S FORWARD-LOOKING CAPM ANALYSIS**
13 **REASONABLE?**

14 **A.** No. Dr. Avera's 13.9% projected return on the market is highly inflated and
15 unreliable. This market return estimate is based on a DCF analysis that includes a
16 growth rate projection of 12.1% and a dividend yield of 1.8%. Dr. Avera's risk
17 premium is dramatically overstated because it is based on a DCF return on the
18 market that is untenable.

19 A market growth projection of 12.1% is untenable for the following
20 reasons. First, his method of estimating it is to take the average of IBES growth
21 rates for all the companies included in the S&P 500. It isn't clear whether he
22 made a market weighted average of these IBES growth rate projections, or if he
23 took the simple average of these companies. The footnote to his testimony

1 implies a simple average. Hence, he is over-weighting relatively small companies
2 that provide relatively small weight to the S&P 500 market index.

3 Second, his method of estimating a DCF return for the market is in itself
4 flawed. Specifically, many of the individual companies comprising the S&P 500
5 do not pay dividends. Hence, relying on a current earnings growth projection as a
6 DCF return estimate for those companies is erroneous. Specifically, a DCF model
7 estimates the future return based on projected dividends. The current dividend
8 yield would be zero, and to the extent they are not projected to pay dividends for a
9 number of years, would imply a DCF return of zero percent, or close to it. It is
10 wrong to set the DCF return equal to the growth rate estimate. Hence, Dr.
11 Avera's method of calculating a DCF return is flawed and overstates the market
12 required return.

13 **Q. WHAT HAS BEEN THE HISTORICAL GROWTH RATE TO THE S&P**
14 **500 AND HOW DOES THAT COMPARE TO DR. AVERA'S PROJECTED**
15 **GROWTH RATE OF 12.1%?**

16 **A.** Ibbotson & Associates' data estimates that over the period 1929 through 2004 the
17 arithmetic average growth rate of the S&P 500 has been 7.9%. SBBI 2005
18 Yearbook at 117. Using this historical growth projection of a long-term
19 sustainable growth rate that should be used in a DCF analysis, along with the
20 current S&P 500 dividend yield of 1.8%, implies a forward-looking return on the
21 S&P 500 of 9.7%.

22 **Q. HOW WOULD DR. AVERA'S FORWARD-LOOKING CAPM RETURN**
23 **ESTIMATE CHANGE IF A REASONABLE FORWARD-LOOKING**
24 **RETURN ON THE MARKET IS USED?**

25 **A.** It is difficult to establish what a reasonable expected return on the market is.
26 However, using an 11.8% expected return on the market, which is the midpoint

1 between Dr. Avera's 13.9% estimate and my 9.7% estimate, would produce a
2 more evenhanded market risk premium estimate. At a market risk premium of
3 11.8%,^{8/} Dr. Avera's forward-looking CAPM analysis would produce a return in
4 the range of 10.6% at current Treasury rates, and 10.7% using a more recent
5 Treasury yield projection of 5.2%.

6 **Q. PLEASE DESCRIBE DR. AVERA'S HISTORICAL RISK PREMIUM**
7 **ANALYSIS.**

8 **A.** Dr. Avera uses Ibbotson & Associates estimated historical market risk premium
9 of 7.2%. Ibbotson & Associates estimates this is based on the achieved return on
10 utility stocks relative to the prevailing income yield on Treasury bonds. For the
11 period 1926 though 2003, Ibbotson & Associates estimates this market risk
12 premium to be 7.2%.

13 Using this market risk premium, a utility beta of 0.76, and a current and
14 projected Treasury bond yield of 4.6% and 5.8%, respectively, Dr. Avera
15 estimates a CAPM return of 10.6% to 11.8%.

16 **Q. IS DR. AVERA'S ESTIMATED HISTORICAL DERIVED MARKET RISK**
17 **PREMIUM CAPM ANALYSIS REASONABLE?**

18 **A.** Ibbotson & Associates' historical market risk premium estimate of 7.2% is
19 overstated. Ibbotson & Associates estimates this by looking at the historical
20 achieved total return on stocks, relative to the yield on utility bonds. This is not a
21 proper application of historical data to estimate the actual return premium of
22 investing in stocks relative to Treasury bonds. Indeed, Ibbotson & Associates
23 looks at the actual achieved historical returns on stocks, relative to the forward-

^{8/} Note that this market return is similar to the arithmetic historical return on the S&P 500 of 12.5% (1929 to 2004).

1 looking expected return on utility bonds. This methodology is simply
2 inappropriate.

3 Using Ibbotson & Associates data, the historical achieved return on
4 common stocks is 12.4%, and the historical total achieved return on Treasury
5 bonds is 5.8%. This implies a historical achieved return premium on stocks,
6 relative to bonds, of 6.6%. This is an apples-to-apples use of historical data to
7 estimate the real achieved premium on equity investments relative to a nearly
8 riskless investment or Treasury bond yield.

9 **Q. HOW WOULD DR. AVERA'S HISTORICAL CAPM ANALYSIS**
10 **CHANGE IF A MORE REASONABLE MARKET RISK PREMIUM**
11 **ESTIMATE IS USED?**

12 **A.** Using a market risk premium of 6.6%, and a utility beta of 0.84, and a current
13 Treasury bond yield of 4.9% and current projected Treasury bond yield of 5.2%
14 would produce a return on equity of approximately 10.1% to 10.7%, with a mid-
15 point of 10.4%.

16 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING DR.**
17 **AVERA'S PROPOSALS IN THIS CASE.**

18 **A.** Dr. Avera's analysis, once properly adjusted, supports an overall midpoint ROE
19 of 9.8%. Adjusting Dr. Avera's DCF analysis to exclude an unreasonably high
20 growth rate would produce a DCF return of 9.0%. Correcting Dr. Avera's risk
21 premium analysis, including the exclusion of an inappropriate equity risk
22 premium adjustment, the utilization of data from the entire year rather than only
23 the end of the year, and reflecting the substantial decline in interest rates, would
24 produce a risk premium return of 9.8%. Adjusting Dr. Avera's highly inflated
25 CAPM analysis to remove unrealistic growth rates and flawed analysis produces a
26

1 10.6% forward CAPM. These three analysis produce a recommended midpoint
2 ROE of 9.8%.

3
4 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

5 **A. Yes.**