

BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

WUTC v. Avista Corporation, d/b/a Avista Utilities

DOCKET NOS. UE-070804, UG-070805

DIRECT TESTIMONY OF WILLIAM B. MARCUS (WBM-1TC)

ON BEHALF OF

PUBLIC COUNSEL

REVISED (RED-LINED)

NOVEMBER 15, 2007

**REDACTED VERSION**

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DIRECT TESTIMONY OF WILLIAM B. MARCUS (WBM-1TC)  
DOCKET NOS. UE-070804, UG-070805

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**WITNESS'S EXHIBIT LIST**

- |                      |  |
|----------------------|--|
| Exhibit No._(WBM-2)  | Qualifications of William B. Marcus.   |
| Exhibit No._(WBM-3)  | Avista Energy Pension Fund Return Expectations from 2006 10-K.   |
| Exhibit No._(WBM-4)  | Response of Pacific Gas and Electric Company to Data Request 3-4 of The Utility Reform Network in California PUC Application 05-12-002 (pension fund returns).                               |
| Exhibit No._(WBM-5)  | Excerpt from Entergy Arkansas Workpapers in Docket 87-166-TF (Nuclear Decommissioning).  |
| Exhibit No._(WBM-6)  | Excerpt from Testimony and Workpapers of Southern California Edison Company in CPUC Application 05-11-008 (Nuclear Decommissioning Funding).   |
| Exhibit No._(WBM-7)  | Russell's ERISA-qualified Fund Offerings.  |
| Exhibit No._(WBM-8)  | Russell Investment Group, "Setting Long-Run Forecasts for Client (Provided by Pacific Gas and Electric in Response to TURN/Aglet/UCAN DR 41 in California PUC Application 07-05-003 et al.). |
| Exhibit No._(WBM-9)  | "Get Real About Your Future," <u>Fortune</u> , July 11, 2005.  |
| Exhibit No._(WBM-10) | Keith Wibel, "Preparing for Low Returns," <u>Barrons</u> , August 29, 2005.  |
| Exhibit No._(WBM-11) | Robert D. Arnott and Peter L. Bernstein, "What Risk Premium Is 'Normal'?" <u>Financial Analysts Journal</u> , Vol. 58, No. 2 64-85. (March-April 2002).                                      |

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**WITNESS'S EXHIBIT LIST (CONTINUED)**

- Exhibit No. \_(WBM-12) Roger G. Clarke and Harindra de Silva, "Reasonable Expectations for the Long-Run U.S. Equity Risk Premium," Analytic Investors, Risk Management Perspectives (April 2003).
- Exhibit No. \_(WBM-13) John R. Graham and Campbell R. Harvey, "The Equity Risk Premium in January 2007: Evidence from the Global CFO Outlook Survey" Social Science Research Network.
- Exhibit No. \_(WBM-14) Donaldson, Glen, Kamstra, Mark J. and Kramer, Lisa A., "Estimating the *Ex Ante* Equity Premium" (November 2006). Rotman School of Management Working Paper Available at Social Science Research Network. (Excerpt).
- Exhibit No. \_(WBM-15) Abstract of Ivo Welch's, "The Equity Premium Consensus Forecast Revisited," 2001.
- Exhibit No. \_(WBM-16) Alberta Energy and Utilities Board released Order U2006-292; 2007, Generic Return on Equity Formula Result.
- Exhibit No. \_(WBM-17) Avista Corp.'s Response to Request for Information, PC-144 in Case Number UE-070804/UG-070805, Prepared August 8, 2007. (Not including Attachment A)

## I. INTRODUCTION/SUMMARY

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

3     **A:**     My name is William B. Marcus. My business address is 311 D. Street, West Sacramento,  
4             California.

5     **Q:     By whom are you employed and in what capacity?**

6     **A:**     Since 1984, I have been the Principal Economist for JBS Energy, Inc., a consulting firm  
7             specializing in regulatory economics for energy consumers and producers, providing  
8             economic studies and testimony on current energy issues. I am the company's lead  
9             economist for utility issues.

10    **Q:     On whose behalf are you testifying?**

11    **A:**     I am testifying on behalf of the Public Counsel Section of the Washington Attorney  
12             General's Office (Public Counsel). My testimony addresses rate of return, executive  
13             compensation, and a number of additional adjustments relating to advertising, dues,  
14             Board of Directors compensation, and Directors' and Officers' liability insurance  
15             expense. I also address Avista's proposed late payment charge.

16    **Q:     Please describe your professional qualifications.**

17    **A:**     I hold an A.B. *magna cum laude* in economics from Harvard (1974) and received an  
18             M.A. in economics from the University of Toronto. Prior to joining JBS Energy I served  
19             as a senior economist with in the Executive Office of the California Energy Commission  
20             (CEC). While with JBS Energy I have prepared and submitted testimony before many  
21             federal, state, and provincial bodies in the United States and Canada. My full statement  
22             of qualifications is set out in Exhibit No. \_\_\_\_ (WBM-2).

## II. RATE OF RETURN

### A. *Capital Structure*

**Q: What capital structure has Avista Proposed?**

A: Avista has proposed a capitalization (before deposits and zero-cost items) of 47.5 percent long-term debt, 4.7 percent trust preferred stock, and 47.8 percent common equity.

**Q: Have you reviewed the capital structure of comparison companies?**

A. Yes. I reviewed Mr. William Avera's Schedule WEA-1, which purports to show an average common equity percentage of 45.7 percent, and updated it. I also included short-term debt in that capital structure because many utilities carry a significant amount of short-term debt.<sup>1</sup> Including short-term debt, I found that Mr. Avera's average utility is capitalized with only 42.5 percent equity, as shown in Table 1.

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<sup>1</sup> I also made an adjustment to remove off-balance-sheet securitized debt for Pacific Gas and Electric Company and Northeast Utilities, which clearly identified it in their financial reports.

**Table 1: Debt-Equity Ratios of Comparison Group**

Proxy Company		STD **	LTD	Preferred	Common
American Elec Pwr	AEP	6.1%	52.2%	0.3%	41.4%
Black Hills Corp	BKH	2.3%	42.6%	0.0%	55.2%
Cleco Corp.	CNL	4.9%	41.1%	0.0%	53.9%
Dominion Resources	D	20.3%	43.8%	0.2%	35.7%
DPL, Inc.	DPL	6.3%	63.1%	0.5%	30.1%
DTE Energy	DTE	8.6%	51.4%	0.0%	40.0%
Edison International	EIX	3.5%	50.8%	5.1%	40.7%
Empire District Elec	EDE	5.0%	48.4%	0.0%	46.6%
NiSource Inc.	NI	9.4%	46.2%	0.0%	44.4%
Northeast Utilities	NU	4.1%	53.4%	0.0%	42.5%
Pepco Holdings	POM	13.0%	47.9%	0.1%	39.1%
PG&E Corp	PCG	4.2%	47.2%	0.0%	48.6%
PNM Resources	PNM	8.6%	52.6%	0.3%	38.4%
PPL Corp	PPL	8.7%	50.6%	0.6%	40.2%
Progress Energy	PGN	2.8%	51.9%	0.3%	45.1%
P S Enterprise Group	PEG	7.7%	55.9%	0.4%	36.1%
Puget Energy	PSD	7.3%	50.3%	0.0%	42.4%
Westar Energy, Inc	WR	14.7%	43.8%	0.4%	41.0%
Xcel Energy, Inc	XEL	6.7%	51.5%	0.8%	41.0%
Average		7.59%	49.72%	0.47%	42.22%
Adjusted avg. *		7.59%	49.95%	0.0%	42.46%

\* Assigning 50% of preferred stock to debt and 50% to equity.

\*\* Includes current maturity of long-term debt

Source: Data taken from Yahoo! Finance, Four Quarters prior to and including March 31, 2007.

Adjusted to remove securitized bonds for Pacific Gas and Electric and Northeast Utilities.

**Q: Have you reviewed Avista's actual capital structure?**

**A:** Yes. The corporate capital structure as of the end of the second quarter of 2007 from Avista's 10 Q-filing (subsequent to the sale of Avista Energy) is shown below. The actual equity capitalization is 45.6 percent, which is less than estimated by Mr. Malyn Malquist.



**Table 2: Capital Structure of Avista Corp. from 2007 Second Quarter 10-Q Filing**

	<u>Amount</u>	<u>%</u>
short-term debt	16,000	0.79%
long-term debt *	963,097	47.40%
preferred stock *	26,250	1.29%
trust preferred	100,000	4.92%
common equity	926,590	45.60%
	2,031,937	

\* includes current maturities

What is also noteworthy is that \$307 million of debt and \$26 million of preferred stock matures within the next year.

**Q: How would you adjust Avista's actual capital structure for ratemaking purposes before developing a final recommendation that considers both the evolution of its capital structure and the capital structure of its comparison companies?**

A: I recognized that Avista's capital structure was designed for the riskier, unregulated activities that it has since sold (Avista Energy). I would make two adjustments. The first is to develop a separate capital structure for the utilities and the remaining operations of Avista. With the sale of Avista Energy, its continuing non-utility operations make up 4.85 percent of its total assets as of the end of the second quarter (counting the remaining Avista Energy assets that are being liquidated as neither utility nor non-utility). Applying a 65 percent equity capital ratio to the remaining affiliates reduces the utility equity capitalization by about 100 basis points.

The second adjustment is to reflect the upcoming retirement of the preferred stock, which has aspects of both debt and equity, and replace it with 50 percent equity and 50 percent debt. The net result is a common equity capitalization of the utility of

45.27 percent, trust preferred of 5.01 percent, and debt of 49.72 percent. Figures are shown below.

**Table 3: Capital Structure of Avista Utility Operations, as Adjusted**

	Amount			
	total	affiliate (65% equity)	utility	utility %
short-term debt	16,000	499	15,501	0.80%
long-term debt	976,222	30,470	945,752	48.92%
preferred stock	-	-	-	0.00%
trust preferred	100,000	3,121	96,879	5.01%
common equity	939,715	64,481	875,234	45.27%
	2,031,937	98,572	1,933,365	

**Q: What capital structure do you recommend for Avista given all of this information?**

A: In this case, I recommend that the Commission adopt a capital structure of 44 percent equity and 56 percent debt and trust-preferred stock – the average of Avista’s adjusted equity (45.3 percent) and the comparison group (42.5 percent), rounded to the nearest whole percentage point. I added the amount that I took away from equity to the long-term debt column. I make this proposal to balance four separate items: (1) the need to recognize that Avista’s existing capital structure was designed to include a very risky subsidiary that has since been sold, reducing its risk; (2) Avista’s recent efforts to increase its equity capital by selling stock; (3) Avista’s non-investment-grade rating for unsecured debt; and (4) the proxy group capital structure with less equity and considerably more short-term debt than Avista.

***B. Cost of Debt***

**Q: Do you propose to make any changes to the cost of debt for ratemaking purposes?**

A: Yes. The capital structure proposed by Avista, which reduces its financial risk, is inconsistent with the cost of debt the Company proposes and clearly overstates the cost of debt after the 2008 debt retirement and refinancing. Avista is in the unusual situation of having 32 percent of its debt mature within 12 months of June 30, 2007 (as well as having a maturing preferred stock issuance). Debt that is maturing can be refinanced at a lower interest rate than is included in the embedded cost of debt presented by Mr. Malquist. The reason is that \$273 million of Avista's debt that comes due on June 1, 2008 is very high cost debt – with an interest rate of 9.75 percent, issued during the energy crisis. To the extent that this debt is refinanced, it will be replaced with much cheaper debt.<sup>2</sup>

Avista will be able to refinance debt at lower interest rates even if Avista remains a “BB+” credit because the cost of this debt is so high. Based on current (September 26, 2007) bond prices, BB-rated debt with about five years to maturity (excluding General Motors Acceptance Corp. (GMAC) debt, which has a higher yield) has a yield to maturity of 7.05 percent (based on the average of all bonds maturing from October 1, 2011, to October 1, 2013), while BB-rated debt with a ten-year maturity (excluding GMAC) has an average yield of 7.49 percent (based on the average of all bonds maturing between eight and 12 years from October 1, 2007).<sup>3</sup>

Debt with a BBB rating (like Avista's first mortgage debt with a BBB-rating) has even lower interest rates – an average 6.01 percent yield to maturity for all debt maturing

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<sup>2</sup> The remaining debt is secured debt, which is already investment grade. Refinancing savings would be relatively small.

<sup>3</sup> Data from Yahoo Finance bond screener. <http://bonds.yahoo.com/search.html>

1 in eight to 12 years. I have assumed that one-third of any refinancing could be done with  
2 first mortgage bonds, and two-thirds with unsecured debt.

3           Given the long-term trend toward an improving financial condition at Avista, it  
4 would be reasonable to assume that any financing done below investment grade will be  
5 the shortest possible term, so that Avista could take advantage of a possible future  
6 upgrade. Therefore, I have assumed that the secured debt is ten-year debt and that  
7 unsecured bonds are refinanced 50 percent with five-year debt and 50 percent with ten-  
8 year debt. I have also assumed a one percent cost of financing amortized over the life of  
9 the bonds, and developed an average debt-coupon rate of 6.84 percent and an overall rate  
10 (including finance cost) of 7.05 percent.

11           I therefore replace the unsecured debt at 9.75 percent with new debt at 7.05  
12 percent for ratemaking purposes. I also replace the 50 percent of the maturing preferred  
13 stock that is assumed to be financed with debt at that rate. This change reduces the cost  
14 of debt from 7.70 percent as estimated by Avista to 6.97 percent.

15 **C.     Return on Equity**

16 **Q:   Do you have any comments on the analysis of the return on equity (ROE) that Mr.**  
17 **Avera conducted?**

18 **A:**   Yes. I have two general comments. First, the Commission should reject Avista's  
19 inflated estimates of investors' alleged expectations and unjustified methodologies that  
20 inflate the rate of return.

21           Second, the Commission must not forget that the purpose of this case is to set a  
22 return on equity for the regulated operations of an electric and gas utility, and must  
23 prevent higher returns from unregulated activities from influencing its decisions.

**Q: How have you organized the remainder of your ROE testimony?**

A: I first present information from utilities in their roles as investors in pension and decommissioning funds – when they are not asking the Commission to authorize a rate of return – and show how those returns are considerably less than the requests made here.

Second, I introduce information from both the popular investment press and academic literature on stock market returns and the “risk premium” (the amount by which stock market returns exceed bond market returns).

Third, I return to the issue of assuring that unregulated activities are not included in Avista’s requested return. I propose specific changes to remove five firms with over 50 percent unregulated income and assets from Mr. Avera’s proxy group, review how removing these firms affects his results, and critique other aspects of his Discounted Cash Flow (DCF) methodology.

Fourth, I provide information on historical returns of utility stocks, bonds, and the S&P 500, and use the Capital Asset Pricing Model (CAPM) to quantify the effects of the lower equity returns that I identified above from pension funds and the popular and financial literature.

Fifth, I analyze the impact of the Energy Recovery Mechanism (ERM) on the rate of return of Avista’s electric operations and the impact of decoupling on the rate of return of Avista’s gas operations.

I finally make a recommendation on the appropriate rate of return on equity and then calculate the return on a rate base using a methodology that is consistent with my earlier testimony on capital structure and cost of debt.

**1. Equity Returns from Pension and Decommission Funds**

**Q: Have you developed additional information to examine the requested return on equity?**

A: Yes. It is valuable for the Commission to look beyond the calculation of competing mathematical models and look at what utilities and analysts are saying about the stock market when they are not trying to convince regulatory commissions to give them a specific return on equity to support an increase in rates.

There are several sources of this kind of information, including data presented by utilities in their roles as multi-billion-dollar investors in nuclear decommissioning funds and as pension fund managers. In the context of investing in these funds, many utilities are in fact trying to convince regulatory commissions to give them more money by providing very low estimates of equity returns on their own investments.

**Q: Can you provide an example?**

A: Yes. Pacific Gas and Electric Company (PG&E) conducted a survey of 10 actuarial firms to inform the California PUC that its expectation of an 8.3 percent equity return and a 7.0 percent overall return was reasonable. The study showed expectations of average US stocks market equity returns of only 7.51 percent in early 2006. This is one of the lowest market return estimates in recent times. Exhibit No. \_\_\_\_ (WBM-3) contains this document. PG&E has since increased the figure to a still-low nine percent equity return.

**Q: Have you looked at equity return estimates in the pension field?**

A: Yes. I have analyzed the equity return estimates made by actuaries when setting parameters for the rate of return on assets used in calculating funding for pensions and other post retirement benefits. (OPEBs).

Utility annual reports now contain the data used to make these assumptions,  
including (1) the expected return on assets invested in the pension plan, and (2) the target  
and actual percentages of debt and equity investments. Even though many of the annual  
reports expected earnings by asset class, they do provide the overall fund earnings  
expectation in addition to the allocation the fund managers accord each of the fund's  
asset classes. Avista Energy's Securities and Exchange Commission Form 10-K for 2006  
provides an example.<sup>4</sup> Avista expects a pension return of 8.5 percent with an allocation  
of 72 percent equity and 28 percent debt. This is consistent with a return of 9.6 percent  
on equity with debt at the discount rate of 5.75 percent.<sup>5</sup> See Exhibit No. \_\_\_\_ (WBM-3)  
for a copy of this excerpt, showing an example of the data that are analyzed.

**Q: Does an examination of pension fund return for other utility companies have any  
applicability in this case in particular?**

**A:** Yes. I have calculated the implicit equity return on the pension funds of all of Mr.  
Avera's comparison companies. One can look at other companies by making the  
simplifying assumption that the returns on US stocks, international stocks, and real estate  
are similar over the long run (an assumption that will not have a large impact on the  
results because of relatively small quantities in international stocks and real estate).  
Based on this assumption, one can estimate the stock market return that would result with  
a bond return of, for example, five percent or six percent. In this analysis, for each utility  
I set the bond return equal to the discount rate, because the actuarial and accounting

<sup>4</sup> Avista Corporation. SEC Form 10-K Filing for year ending December 31, 2006, p.30, filed on 2/27/07. Available at: <http://investor.avistacorp.com/phoenix.zhtml?c=97267&p=irol-SECText&TEXT=aHR0cDovL2NjYm4uMTBrd2l6YXJkLmNvbS94bWwvZmlsaW5nLnhtbD9yZXBvPXRlbmsmaXBhZ2U9NDcwNTc4MCZhdHRhY2g9T04%3d>.

<sup>5</sup> These calculations assume that the limited amount of cash earns three percent.

standards require companies to set the discount rate based on a corporate bond rate. This method also calculates the equity premium (over corporate debt) for each company by using their own debt return estimates.

**Table 4: Pension Return Assumptions for Comparison Companies**

Company	Stock Symbol	Discount Rate (or fixed income return if stated)	Pension Return	% equity	% debt	% cash if stated	Equity return (debt @ discount rate, cash @ 3%)
American Elec Pwr	AEP	5.75%	8.50%	69	26	5	9.93%
Black Hills Corp	BKH	5.75%	8.50%	75	25	0	9.42%
Cleco Corp.	CNL	5.50%	8.40%	79	21	0	9.18%
Dominion Resources	D	5.60%	8.75%	78	22	0	9.64%
DPL, Inc.	DPL	5.75%	8.50%	62	38	0	10.19%
DTE Energy	DTE	5.70%	8.75%	80	20	0	9.51%
Edison International	EIX	5.50%	7.50%	74	26	0	8.20%
Empire District Elec	EDE	5.65%	8.50%	71	29	0	9.68%
NiSource Inc.	NI	5.85%	9.00%	66	29	5	10.83%
Northeast Utilities	NU	5.80%	8.75%	76	24	1	9.64%
Pepco Holdings	POM	5.63%	8.50%	66	34	0	9.98%
PG&E Corp	PCG	5.90%	8.00%	60	40	0	9.40%
PNM Resources	PNM	5.75%	9.00%	78	22	0	9.92%
PPL Corp	PPL	5.94%	8.50%	72	27	1	9.51%
Progress Energy	PGN	5.65%	9.00%	79	21	0	9.89%
P S Enterprise Group	PEG	5.75%	8.75%	71	29	0	9.98%
Puget Energy	PSD	5.60%	8.25%	83	15	3	8.90%
Westar Energy	WR	5.75%	8.25%	62	35	3	9.92%
Xcel Energy, Inc.	XEL	5.75%	8.75%	76	22	2	9.77%
average		5.71%	8.53%	72	27	1	9.66%
risk premium relative to corporate bonds							3.94%

Source: Data taken from utility 2006 10-Ks or Annual Reports

In addition, I prepared a "Washington Group" of utilities. Data were obtained from the 10-K filings. Cascade Natural Gas has merged with MDU, but its figures are taken from the last 10-K prior to the merger. The spread in equity returns was from 8.8 percent to 10.0 percent (average 9.4 percent). Results are similar to those of the comparison companies.



**Table 5: Pension Return Assumptions for Other Washington Utilities**

	Avista Corp.	Pacific Power	Puget Sound Energy	Cascade Natural Gas *	Northwest Natural Gas	Average of Washington's large utility group
Equity, Real Estate, etc.	72%	65%	83%	60%	85%	73.08%
Debt	28%	35%	15%	40%	15%	26.52%
Cash	0%	0%	3%	0%	0%	0.60%
Return	8.50%	8.50%	8.25%	7.75%	8.25%	8.25%
Discount Rate	5.75%	5.75%	5.60%	5.75%	5.60%	5.69%
Equity return (debt @ discount rate)	9.6%	10.0%	8.8%	9.1%	8.7%	9.2%

\* Before merger with MDU

**Q: Are these implicit estimates of stock market returns by utility pension actuaries consistent with other information provided by utilities in their role as investors?**

**A:** Yes. In their role as managers of decommissioning trust funds, utilities also must project stock and bond market returns to assure the adequacy of funds. I provide some recent examples from filings by Entergy Arkansas, Inc. (EAI) and Southern California Edison Company (Edison).

EAI's workpapers on future commissioning fund returns filed in the November 1, 2006 Rider 26 update in Docket No. 87-166-TF, show an expected equity return of 7.1 percent in excess of the Consumer Price Index (CPI) inflation rate or an average of 9.3 percent from 2007 to 2011.<sup>6</sup>

What is particularly interesting about this estimate is that EAI's analysis of the same historical data from Ibbotson that Mr. Avera uses does not agree with Mr. Avera's testimony. The equity return estimate used to estimate decommissioning funding needs is based on a long-run equity return of 7.1 percent above the CPI. Mr. Avera asks the

<sup>6</sup> Exhibit No. \_\_\_\_ (WBM-5).

Commission to base Avista's rate of return (using the CAPM model) on the assumption  
that the equity return will exceed the bond return (which is higher than the CPI) by 7.1  
percent.

Edison has also made projections of stock market returns. In late 2005, it  
provided an arithmetic average estimate of stock market returns of 8.45 percent over the  
next 20 years prepared by the Global Insight economics consulting firm.<sup>7</sup> Even more  
importantly, Global Insight assumed a yield of 5.85 percent on the 10-year Treasury  
bond, which is consistent with a stock market risk premium of only 260 basis points.  
Similarly, PG&E used a Russell and Associates long-run equity market return estimate of  
8.5 percent. These figures are generally consistent with the equity return estimates that  
Edison and PG&E used when setting returns for their pension funds.

**Q: Please comment on how the expected return of pension and nuclear  
decommissioning funds relates to the return that prospective investors in utilities  
“require.”**

**A:** Explicitly defining the two terms is helpful:

- Expected return is the weighted-average most likely outcome of an investment in a particular security or portfolio of securities.
- Required return is the minimum return that an investor requires to compensate him for assuming a given level of risk.

Pension and decommissioning funds' stated expectations for returns from equities in  
which they have invested must be greater than or equal to their required returns for the

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<sup>7</sup> See Exhibit No. \_\_\_\_ (WBM-6).

1 stock market or the individual stocks they hold. Otherwise, their managers would not  
2 have invested in those individual stocks. If they did not like the “expected” return for the  
3 market as a whole, the managers would theoretically shift to a portfolio with more fixed-  
4 income securities—all the way up to a ratio of 100 percent if they did not like the  
5 expected return of a single, available stock. Despite the possibility of more heavily-  
6 weighted, fixed-income portfolios, these funds vote with their dollars to stay heavily  
7 invested in the stock market because the expected return is at least as great as the  
8 minimum return that they require for the level of risk they are assuming. These managers  
9 make such decisions notwithstanding returns that are lower than those which Mr. Avera  
10 believes are “required.”

11 In essence, fund investors are matching their “requirements” to their  
1 “expectations.” They simply do not “require” a 12 percent return when the federal bond  
13 rate is five percent, as Mr. Avera’s Capital Asset Pricing Model results would suggest.  
14 By staying in the market despite their stated “expectations” of 9.6 percent equity returns  
15 and 5.7 percent corporate bond returns, pension funds can provide dollars to retired  
16 workers with fewer contributions by corporations and governments. Because of the  
17 standards written into the Employee Retirement Income Security Act of 1974<sup>8</sup> (ERISA),  
18 we can reasonably assume that pension fund managers are providing those returns at a  
19 level of risk that they deem prudent. Pension fund behavior, in the face of current  
20 expectations of relatively low equity returns, shows that those low returns meet or exceed  
21 their “required” return on equity investments. We do not need to make a calculation

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<sup>8</sup> Federal law that establishes minimum standards for pension plans in private industry and provides for extensive rules on the federal income tax effects of transactions associated with employee benefit plans.

going back to 1926 to figure out the required return. Instead, all we have to do to uncover the required return is look at what market participants are actually doing with their own money in the face of current expectations.

**Q: Please comment on the risk equivalence between utility stocks and pension and decommissioning fund portfolios.**

A: It is common for utility witnesses to claim that pension and decommissioning funds are inherently less risky than utility stocks. One argument heard in the past from witnesses, including Mr. Avera, is that the prudence requirements of ERISA require the fund managers to rely on conservative estimates of expected returns when managing pension and decommissioning fund assets.<sup>9</sup> This argument is flawed, however. For one thing, investments in utility stocks are just not very risky, as I discuss further below. For another, the reliance on vague notions of the prudence requirement does nothing to refute the fact that pension and decommissioning fund portfolios provide good benchmarks of risk for utilities. The prudence requirement does not restrict fund managers' choices to only the safest of securities. ERISA's actual general requirement is:

[A] fiduciary shall discharge his duties with respect to a plan with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.<sup>10</sup>

<sup>9</sup> For example, Mr. Avera dismisses the applicability of utility pension funds as ROE benchmarks, essentially because "[t]he projection of pension returns falls under the scrutiny of the U. S. Department of Labor and the U. S. Securities and Exchange Commission, as well as the prudence requirements of the Employee Retirement Income Security Act of 1974 (ERISA)." (Avera, William, Prepared Testimony on behalf of PG&E, 2008 Cost of Capital, California PUC, Application A.07-05-008, pp. 2-36.)

<sup>10</sup> U.S. Department of Labor, Code of Federal Regulations Pertaining to Employee Benefits Security Administration. 29 CFR 2550.404a-1 - Investment duties. Available at: [http://www.dol.gov/dol/allcfr/ebsa/Title\\_29/Part\\_2550/29CFR2550.404a-1.htm](http://www.dol.gov/dol/allcfr/ebsa/Title_29/Part_2550/29CFR2550.404a-1.htm).

The Department of Labor, in an advisory opinion, also stated:

Within the framework of ERISA's prudence, exclusive purpose and diversification requirements, the Department believes that plan fiduciaries have broad discretion in defining investment strategies appropriate to their plans. In this regard, the Department does not believe that there is anything in the statute or the regulations that would limit a plan fiduciary's ability to take into account the risks associated with benefit liabilities or how those risks relate to the portfolio management in designing an investment strategy.

For these reasons, a fiduciary would not, in the view of the Department, violate their duties under sections 403 and 404 solely because the fiduciary implements an investment strategy for a plan that takes into account the liability obligations of the plan and the risks associated with such liabilities and results in reduced volatility in the plan's funding requirements. Whether any particular investment strategy is prudent with respect to a particular plan will depend on all the facts and circumstances involved.<sup>11</sup>

These statements do not support any implication that ERISA prevents utility (or other) pension fund managers from constructing an equity portfolio that is at least as risky as a utility stock. These statements look at the overall portfolio. Many of the risk avoidance measures that pension fund managers carry out are done through diversification of assets (i.e., not building a portfolio entirely of common stock).

**Q: Do you have an example of a pension fund's holdings?**

A: Yes. The California Public Employees' Retirement System (CalPERS) discloses its holdings to the public. Of CalPERS' investments, only 24.5 percent were in fixed income; the rest were in public equity (61.2 percent), real estate (7.2 percent), private equity (5.7 percent), and case (1.4 percent).<sup>12</sup> As of June 30, 2006, it held 13.9 percent of the total market value of its equity holdings (i.e., \$85,019,097,322) in 10 stocks, nine of

<sup>11</sup> U.S. Department of Labor, Employee Benefits Security Administration. 2006. Advisory Opinion issued in response to JPMorgan Chase Bank, N.A. inquiry.

<sup>12</sup> CalPERS, Annual Investment Report, June 30, 2006. Available: [https://www.calpers.ca.gov/mss-pub/SearchController?viewpackage=action&PageId=SearchCatalog&package\\_code=938](https://www.calpers.ca.gov/mss-pub/SearchController?viewpackage=action&PageId=SearchCatalog&package_code=938).

which are publicly traded, which are shown in 6.

**Table 6: Statistics on CalPERS Top 10 Equity Holdings**

<b>Security Holding</b>	<b>Market Value of Shares</b>	<b>% of Total Invested in Equity<sup>a</sup></b>	<b>ValueLine Beta<sup>b</sup></b>
Exxon Mobil Corp	1,901,583,496	2.2%	0.9
General Electric Co	1,777,710,652	2.1%	1.1
Microsoft Corp	1,257,986,968	1.5%	1
Citigroup Inc	1,242,890,045	1.5%	1.2
Bank of America Corp	1,054,667,921	1.2%	1
Relational Investors LLP	1,034,753,048	1.2%	NA
Johnson & Johnson	940,649,866	1.1%	0.6
Wal Mart Stores Inc.	932,410,264	1.1%	0.8
Pfizer Inc.	858,155,414	1.0%	0.8
JP Morgan Chase & Co	831,602,562	1.0%	1.35
<b>Total of Top 10 Holdings</b>	<b>11,832,410,235</b>	<b>13.9%</b>	
<b>Average of Top 10 Holdings</b>	<b>1,183,241,023</b>	<b>1.4%</b>	<b>0.97</b>

<sup>a</sup> Based on total equities market value on June 30, 2006, which was \$85,019,097,322.

<sup>b</sup> From ValueLine, Accessed September 14, 2007.

It is instructive that the average beta of CalPERS' nine largest publicly traded holdings is 0.97—almost identical to the beta of 0.99 that Mr. Avera identifies for his utility comparison group. Of additional interest, CalPERS holds shares in all of the companies in the utility proxy group.

More evidence supporting the use of pension funds as benchmarks for utility ROE testimony is available if one inspects the composition of the funds that respected multi-manager investment firms, such as Russell, offer to their ERISA-qualified purchasers (i.e., companies with federally-regulated pension funds). These funds have myriad levels of risk from which to choose. Exhibit No. \_\_\_\_ WBM-7) shows the funds that the Russell Investment Group offers to its pension fund clients. These funds are available in virtually all risk levels—from target-date and conservative funds to growth funds, small cap funds, and aggressive funds.

**Q: Does the Russell Investment Group use the same types of mathematical techniques that Mr. Avera uses to estimate future stock market returns?**

**A:** Yes. In particular, Russell uses a modified discounted cash flow methodology, which it calls the dividend discount model, to derive an equity risk premium.<sup>13</sup> Russell's analysis suggests a stock market return of nine percent, comprised of three percent inflation, a three percent real return on government bonds, and a three percent equity premium. The real equity return is divided into two components, an average long-term dividend yield of 2.3 percent and real earnings growth of 3.9 percent - components that are very similar to those used in a DCF method.

## **2. Other Information on Stock Market Returns**

**Q: What information can you bring to bear from other market participants on future stock market returns?**

**A:** There is a considerable amount of information—both in the popular press and academic literature—suggesting that stock market returns are likely to be less now than in the past.

**Q: What information have you found in recent articles addressed to individual investors?**

**A:** In the popular financial press:

- Warren Buffett has been projecting long-term stock market returns in the same range as, or even below, the pension actuaries for several years.<sup>14</sup> In his 2005

<sup>13</sup> See Exhibit No. \_\_\_\_ (WBM-8).

<sup>14</sup> "Stock Investors Should Expect 6-7 Percent Annual Return, Buffett Says." Bloomberg News Service (May 3, 2003). <http://quote.bloomberg.com/apps/news?pid=10000103&sid=a1.neDMY8DEU&refer=us>

letter to Berkshire Hathaway shareholders discussing the company's stock  
portfolio, he stated:

Expect no miracles from our equity portfolio. Though we own major interests in a number of strong, highly-profitable businesses, they are not selling at anything like bargain prices. As a group, they may double in value in ten years. The likelihood is that their per-share earnings, in aggregate, will grow 6-8% per year over the decade and that their stock prices will more or less match that growth. (Their managers, of course, think my expectations are too modest – and I hope they're right.)<sup>15</sup>

- Exhibit No. \_\_\_\_ (WBM-9) is a July 11, 2005, Fortune magazine article entitled, "Get Real About Your Future," in which a panel of five experts all suggest returns in the overall equity market of less than 10 percent.
- Exhibit No. \_\_\_\_ (WBM-10) is an August 29, 2005 Barron's magazine article entitled, "Preparing for Low Returns," by Keith Wibel. Mr. Wibel suggests that over the next ten years, S&P 500 returns will be in the vicinity of six percent including dividends (although with a relatively wide range); with historical earnings growth plus dividends, the return would be closer to eight percent.

**Q: What information has been developed in recent academic literature that relates to the rate of return?**

A: In the academic literature, there has been considerable focus on the "risk premium"—the difference in returns between stocks and bonds. This is a key input into the Capital Asset Pricing Model (CAPM) used to analyze the rate of return.

Arnott and Bernstein's 2002 paper specifically states that "observed" excess returns to stocks and the "prospective" or expected risk premium are two different

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<sup>15</sup> Warren Buffett, Letter to the Shareholders of Berkshire Hathaway, Inc., 2005, page 15.  
<http://www.berkshirehathaway.com/letters/2005ltr.pdf>



concepts and that the Ibbotson method of looking at historical data does not provide a risk premium.<sup>16</sup> Their paper suggests that stock prices increase in real terms approximately equally to the real per capita GDP growth over the long term. Specifically, they state:

- “The consensus that a normal risk premium is about 5 percent was shaped by deeply rooted naiveté in the investment community.”<sup>17</sup>
- “The observed real stock returns and the excess returns for stocks relative to bonds in the past 75 years have been extraordinary, largely as a result of important nonrecurring developments.”<sup>18</sup>
- “The historical average equity risk premium measured relative to 10-year government bonds as the risk premium investors might objectively have expected on their equity investments is about 2.4 percent, half what most investors believe.”<sup>19</sup>

Clark and de Silva suggest that the equity risk premium as observed in the marketplace can be separated into several components: the dividend yield on stocks, plus the real earnings growth associated with stocks, plus changes in the price/earnings ratio of the market, minus the real return on government bonds.<sup>20</sup> One of those components – changes in the price/earnings ratio – caused a large increase in stock prices through the

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<sup>16</sup> Exhibit No. \_\_\_\_ (WBM-11), Robert D. Arnott and Peter L. Bernstein, “What Risk Premium Is ‘Normal’?” *Financial Analysts Journal*, Vol. 58, No. 2, 64-85. (March-April 2002)

<sup>17</sup> *Id.*, p. 81.

<sup>18</sup> *Id.*, p. 80.

<sup>19</sup> *Id.*, p. 81.

<sup>20</sup> Exhibit No. \_\_\_\_ (WBM-12), Roger G. Clarke and Harindra de Silva, “Reasonable Expectations for the Long-Run U.S. Equity Risk Premium,” *Analytic Investors, Risk Management Perspectives* (April, 2003).

1980s and 1990s, but is estimated to be near zero. These analysts therefore estimate a long-run risk premium (without price/earnings effects) in the vicinity of four percent and cite a number of other studies in the 2.4 percent to 4.5 percent range (with one outlier of seven percent).

Harvey and Graham have conducted extensive empirical studies of the equity risk premium by interviewing CFOs of large companies and asking them what they expect as a risk premium.<sup>21</sup> They have found a 10-year equity risk premium (relative to 10-year Treasury bonds) declining from about 4.5 percent in 2000 to the three percent range recently. Exhibit No. \_\_\_\_ (WBM-13) contains a recent report. The average from 2000 to 2006 is about 3.5 percent. Graham and Harvey state, based on interviews with CFOs, that it is an expected return over 10 years based on a buy-and-hold strategy. The equity risk premium was found to be significantly, though relatively weakly, correlated to the real rate of interest, as paid on Treasury Inflation Indexed Notes (not to be confused with nominal rates including inflation). They found the equity risk premium to be higher with higher real rates, rising by about 37 basis points for every 100 basis points in the real rate of interest. Graham and Harvey also asked the CFOs to assess a one-in-ten chance that the market would exceed or fall below a certain level. The 90<sup>th</sup> percentile return for the entire market estimated by these CFOs averaged 11.5 percent from 2002 to the present.

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<sup>21</sup> John R. Graham and Avera R. Harvey, "The Long Run Equity Risk Premium" Social Science Research Network. Download from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=795369](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=795369) and John R. Graham and Avera R. Harvey, "The Equity Risk Premium in January 2007: Evidence from the Global CFO Outlook Survey" (January 25, 2007). Available at SSRN: <http://ssrn.com/abstract=959703>

The risk premium associated with this 90<sup>th</sup> percentile return was 7.1 percent.

Donaldson, Kamstra, and Kramer claim that it is simplistic to estimate the *ex ante* risk premium expected by investors solely using historical data on *ex post* returns without considering other aspects of the data related to market returns.<sup>22</sup> This information specifically includes dividend yields, Sharpe ratios (measuring the riskiness of a portfolio based on the portfolio return, minus the risk-free rate, divided by the standard deviation of portfolio returns), and return volatility. When all of this information is used to simulate the performance of US markets over the past 50 years, these authors compute an *ex ante* risk premium of 3.5 percent. Exhibit No. \_\_\_\_ (WBM-14) contains the abstract of this paper.

Ivo Welch's 2001 "Welch Survey" is a survey of 510 finance and economics professors.<sup>23</sup> It indicates a one-year equity premium of between about three percent and 3.5 percent coupled with a 30-year arithmetically-averaged equity premium of between about five percent and 5.5 percent—some 150 to 200 basis points below the earlier figures. The 2001 Welch Survey abstract is provided in Exhibit No. \_\_\_\_ (WBM-15).

As a final example, Dimson, Marsh, and Stanton, in an article that focuses on how big the equity risk premium has been historically and what risk premium investors, corporate managers, and regulators can expect going forward, conclude that "[a] plausible, forward-looking risk premium for the world's major markets would be on the

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<sup>22</sup> Donaldson, Glen, Kamstra, Mark J. and Kramer, Lisa A., "Estimating the Ex Ante Equity Premium" (November 2006). Rotman School of Management Working Paper Available at SSRN: <http://ssrn.com/abstract=945192>

<sup>23</sup> Abstract available at: Welch, Ivo, "The Equity Premium Consensus Forecast Revisited" (September 2001). Cowles Foundation Discussion Paper No. 1325. Available at SSRN: <http://ssrn.com/abstract=285169>.

order of 3 percent on a geometric mean basis, while the corresponding arithmetic mean risk premium would be around 5 percent.”<sup>24</sup>

### 3. Removing Unregulated Companies from Mr. Avera’s Proxy Group

**Q: Will you comment further on the need to set a return for regulated operations only?**

**A:** It should be self-evident that the Commission is estimating the rate of return for a regulated utility. Avista’s evidence does not follow this principle adequately, however, and therefore overstates the return on equity required by the utility operations of a regulated electric and gas company. Mr. Avera’s criteria were based entirely on the firm’s bond rating, Value Line safety and financial strength ratings, and the availability of earnings forecasts. However, he completely failed to analyze his proxy companies to see if they were really regulated electric utilities, instead merely accepting Value Line’s word that they belonged in the “utility” category.

I reviewed his proxy companies and found that five of the 19 companies had less than 50 percent (some much less than 50 percent) of their income and assets from regulated operations. This includes two companies that own what are still called utility generation facilities, but where the generation was deregulated in New Jersey and Ohio. The table below shows the results, with the five companies shaded in gray.

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<sup>24</sup> E. Dimson, P.R. Marsh, M. Stanton, “Global Evidence of the Equity Risk Premium,” Journal of Applied Corporate Finance, Vol.15, No.4 (2003).

**Table 7: Regulated and Non-Regulated Income and Assets, Avera Proxy Group**

Company	Stock Symbol	Net income utility	Net income non-regulated	Assets utility	Assets non-regulated	Net income utility %	Assets utility %	Average utility %
American Elec Pwr	AEP	1,028	92	39,254	2,767	91.8%	93.4%	92.6%
Black Hills Corp	BKH	24	56	741	1,486	30.3%	33.3%	31.8%
Cleco Corp.	CNL	55	(2)	2,024	330	104.0%	86.0%	95.0%
Dominion Resources	D	798	1,217	26,300	19,500	39.6%	57.4%	48.5%
DPL, Inc.	DPL	n/a	n/a	1,515	5,002		23.2%	23.2%
DTE Energy	DTE	375	123	17,663	3,792	75.3%	82.3%	78.8%
Edison International	EIX	26,110	10,482	776	433	71.4%	64.2%	67.8%
Empire District Elec	EDE	39,972	(109)	1,375	21	100.3%	98.5%	99.4%
NiSource Inc.	NI	600	301	10,363	5,022	66.6%	67.4%	67.0%
Northeast Utilities	NU	257	(126)	10,436	277	196.0%	97.4%	146.7%
Pepco Holdings	POM	238	71	10,775	2,213	77.1%	83.0%	80.0%
PG&E Corp	PCG	only unregulated activity is discontinued operation				100%	100%	100.0%
PNM Resources	PNM	45	25	2,831	969	63.9%	74.5%	69.2%
PPL Corp	PPL	167	698	5,719	14,655	19.3%	28.1%	23.7%
Progress Energy	PGN	791	90	18,711	540	89.8%	97.2%	93.5%
P S Enterprise	PEG	261	554	14,553	14,233	32.0%	50.6%	41.3%
Puget Energy	PSD	only unregulated activity is discontinued operation				100%	100%	100.0%
Westar Energy	WR	no unregulated activities listed in 10-K				100%	100%	100.0%
Xcel Energy, Inc.	XEL	253	19	n/a	n/a	93.0%		93.0%

**Q: How should the Commission deal with this issue?**

**A:** The Commission should, at a minimum, remove the five companies with less than 50 percent of their income and assets coming from regulated operations (Black Hills Corporation, Dominion Resources, DPL, Inc., PPL Corporation, and Public Service

Enterprise Group). In addition, the Commission should use judgment when reviewing results from other utilities, in particular, if Value Line identifies significant reasons for unregulated growth in a discounted cash flow (DCF) analysis, and by “rounding down” estimates of beta in the Capital Asset Pricing Model to reflect more risky unregulated activities.

**4. Impact of Removing Companies with Heavy Unregulated Operations on Mr. Avera’s Results.**

**Q: How would removing these companies affect Mr. Avera’s results?**

**A:** It would have a significant impact on both his comparable earnings and DCF analysis.

**Q: Will you first discuss the impact on Mr. Avera’s comparable earnings results?**

**A:** Turning first to comparable earnings (shown on Exhibit No. \_\_\_\_ (WEA-8)), Mr. Avera simply reported the Value Line projections for return on book value equity for the 19 companies. He came up with an average of 10.50 percent (10.77 percent after including an adjustment factor that may arguably apply to DCF results but should not be applied here) after removing two companies earning 17.5 percent or more. Both of the companies he removed had a heavy concentration of unregulated activities.

However, four of the 19 companies had a projected ROE above 13 percent, a level that raises serious questions. A return over 13 percent for regulated utility operations is not sustainable in the current environment because a utility with such a return would be called in for an earnings review unless the earnings were based on some type of special incentive mechanism. Such a return, if it would occur at all, is likely to be the result of unregulated activities, which is borne out by the fact that all of the companies with an ROE above 13 percent had over 50 percent unregulated income and assets.

After the five companies with over 50 percent unregulated operations are removed, the Value Line return on equity for the remaining 14 companies is 9.93 percent (10.14 percent after Mr. Avera's adjustment).

**Q: How does removing those companies affect Mr. Avera's DCF results?**

A: The DCF return is also reduced. The average value of his four different DCF figures is reduced from 10.3 percent to 10.0 percent when the five companies are removed.

**Q: Are there any other concerns regarding Mr. Avera's DCF results?**

A: Yes. There are two additional issues besides the inclusion of the five inappropriate companies: (1) the way in which the results using two different methodologies are averaged, and (2) the treatment of outliers.

**Q: Will you discuss Mr. Avera's methodology and the issue regarding the averaging of two divergent methodologies?**

A: Mr. Avera uses three different estimates from stock market analysts, as well as a fourth "fundamental" method. The fundamental or "earnings retention" method measures the sustainable increase in book value (related to ROE for an electric utility under rate base regulation), which is a way of indicating a utility's long-run ability to increase its earnings, and hence dividends. It is based on the earned rate of return multiplied by the retention ratio (the percentage of earnings not paid out in dividends) plus an adder for the accretion to book value that arises when a utility finances construction by selling stock at a price above book value.

The fundamental method produces a DCF return of 9.6 percent using Mr. Avera's sample (excluding the outliers he identified). By contrast, the fundamental method yields 8.8 percent after removing the entire cohort of companies that ought to be removed (i.e.,

1 those with less than 50 percent of their combined income and assets derived from, and  
2 occupied by, regulated activities). The stock analysts are much more optimistic in  
3 predicting utility returns than the fundamental approach. They predict an average DCF  
4 return of 10.6 percent using Avera's full sample (excluding outliers) and 10.4 percent  
5 excluding the five companies with heavy non-utility operations.

6 Because Mr. Avera supplies us with the results of three separate market analysts  
7 but just one fundamental analysis, Mr. Avera overpowers the fundamental results. By  
8 using simple averaging he gives a weighting of only 25 percent to the fundamental  
9 method, while market analysts' results receive a summed weight of 75 percent in his  
10 overall DCF average. This simple averaging approach yields a skewed result. It is more  
11 appropriate to give the fundamental method a higher weighting because it reflects the  
12 utility's long-term ability to grow, as opposed to market analysts' shorter-term, and less  
13 fundamentally based, approaches. If one were to weight the average of the three analysts  
14 at 50 percent and the fundamental method at 50 percent, the DCF-based ROE would  
15 decline significantly – to 9.6 percent excluding the five inappropriate companies.

16 **Q: Will you discuss the treatment of outliers?**

17 A: The second issue that raises a concern involves the treatment of "outliers." Mr. Avera  
18 judgmentally excludes all of the results with a return of less than 7.2 percent as being  
19 unreasonable, while excluding only one high number (18.3 percent). He takes the  
20 averages after making these exclusions. If one left out all of the outliers in the analysis,  
21 the average DCF after excluding the five companies would be well under 10 percent.

22 **Q: Will you summarize your conclusions on Mr. Avera's DCF analysis?**



A: The table below shows DCF results that vary because of (1) inclusion or exclusion of the five companies with heavy unregulated operations; (2) the method of averaging; and, (3) the treatment of outliers. Changing either the treatment of outliers or the weighting given to the fundamental approach, while removing the five inappropriate companies, yields a DCF figure of 9.6 percent. Changing both reduces the figure even further.

**Table 8: Mr. Avera's DCF Analysis Modified to Exclude Five Companies and for Weighting of Fundamentals and Treatment of Outliers**

	I/B/E/S	Value Line	Reuters	Average of analysts	Fundamental	Difference	50% analysts, 50% fundamentals	Avera 75% analysts, 25% fundamentals
Avera sample, excludes outliers	10.7%	10.2%	10.9%	10.6%	9.6%	1.0%	10.1%	10.3%
Avera sample, excludes outliers, without 5 companies	10.6%	10.2%	10.4%	10.4%	8.8%	1.5%	9.6%	10.0%
Avera complete sample	10.4%	10.1%	10.7%	10.4%	9.0%	1.4%	9.7%	10.1%
Avera complete sample, without 5 companies	10.3%	9.6%	10.2%	10.0%	8.5%	1.6%	9.2%	9.6%

## 5. Use of the Capital Asset Pricing Model (CAPM) to Analyze the Effect of Lower Equity Returns from Pension and Literature Sources

**Q: Will you provide some background by discussing how the Capital Asset Pricing Model (CAPM) method is implemented?**

A: The Capital Asset Pricing Model (CAPM) relates the required return to two components – the risk-free rate of return, and the market risk premium (amount by which typical stock market returns exceed the risk-free rate of return) – using a measure called “beta” that quantifies the riskiness of the individual stock or investment as compared to the market risk. This can be expressed as follows:

$$\text{Return} = \text{Risk-Free Rate} + \text{Beta} \times \text{Market Risk Premium}$$

1 The risk-free rate for purposes of setting a utility return is typically a long-term  
2 government bond rate. Mr. Avera uses 5.0 percent as the risk-free rate based on data  
3 available when he wrote his testimony. I have updated it to 4.8 percent based on market  
4 conditions in the 30 days ending on October 1, 2007. But we do not disagree on the  
5 general principle of how it is computed.

6 The "market risk premium" is the most contentious item here. Mr. Avera has  
7 used two different methods. One is based on a "forward-looking" premium of 8.3  
8 percent, which is based on growth projections from investment analysts over the next  
9 several years and an expected market return of 13.3 percent. In the other, Mr. Avera uses  
10 a historical risk premium of 7.1 percent based on data from 1926 to 2005 on stock and  
11 bond returns. I believe that the risk premium is considerably lower than either the  
1 forward-looking or historical risk premium, based on the information from pension fund  
13 actuaries and the literature cited above.

14 "Beta," or the risk of individual stock or stocks, is calculated by comparing the  
15 returns on individual stocks to the market return over a period of time. A beta of less  
16 than one indicates that a stock will tend to increase at a rate that is less than the market  
17 return when the market goes up, and decrease at a rate that is less than the market decline  
18 when it drops. Conversely, a beta greater than one means that a stock will increase or  
19 decrease more rapidly than the rate at which an increasing or decreasing market would.  
20 Again, the further beta is from one, the greater this effect.

21 Theoretically, beta is the portion of systematic or non-diversifiable risk associated  
22 with a given stock. The source of beta traditionally used in utility rate cases comes from  
2 Value Line, which has made such calculations for over 30 years. However, new sources

of beta, calculated in different ways, have become more available in the Internet age (from Google, Yahoo, and MSN). At the moment, these betas are considerably lower than Value Line betas.

**Q: Please describe Mr. Avera's forward-looking CAPM analysis.**

A: Mr. Avera uses weighted averages of analysts' estimates for both the dividend yield and growth rate estimates of his dividend-paying comparison companies from a single source and single point in time<sup>25</sup>—as opposed to obtaining a historical range of projections from a diverse group of sources—to obtain “market return” estimate for his comparison group. He then subtracts the average current yield (as of January 2007) on the 20-year T-bond from the analysts' estimates of “market return” to obtain a “risk premium” for the S&P 500. With his risk premium in hand, Mr. Avera uses his proxy group's beta to calculate its risk premium.

**Q: What is wrong with Mr. Avera's forward-looking “risk premium” for the CAPM?**

A: To the extent that Mr. Avera's calculation of a forward-looking “risk premium” relies on growth rate estimates to derive “market return” data from Value Line, there is a significant problem. The problem with using Value Line data is that it is explicitly based on the assumption that the probability of a recession in the next five years is zero. We must remember what the main purpose of the Value Line service is – to compare stocks to each other and choose stocks that are likely to go up relative to the market as a whole. It is understandable that Value Line would use a standard set of assumptions for comparing stocks to each other based on a consistent forecast of economic conditions in

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<sup>25</sup> Mr. Avera obtained dividend yields from [www.ValueLine.com](http://www.ValueLine.com) on February 9, 2007, and growth rates from S&P's Earnings Guide (January 2007) and [www.ValueLine.com](http://www.ValueLine.com) on February 9, 2007.

1 the economy as a whole. It is also understandable that the consistent set of assumptions  
2 would be relatively rosy – because it is far more complex to forecast the differential  
3 impacts of a potential recession on different companies. However, it is unreasonable to  
4 believe that investors “expect” that a “Pollyanna” economy will continue without  
5 interruption into the future just because Value Line’s analysis assumes that it will.

6 For example, the December 15, 2006, Value Line at page 404 states:

7 The hypothesized 2009-2011 economic environment into which earnings  
8 are forecast is as follows: Unemployment will average 4.8% of the  
9 national labor force, compared to 5.1% in 2005. There will be no major  
10 war in progress at that time. Industrial production will be expanding about  
11 2.8% per year. Inflation will continue to be modest. Prices as measured  
12 by the broad-based GDP deflator will advance about 2.2% per year on the  
13 average. The corporate income tax rate will be around 35%. Long-term  
14 interest rates on high-grade corporate bonds are projected to be about  
15 6.4% in the years 2009-2011. We expect the Federal Reserve to pursue  
16 fairly accommodative policies except in years in which the economy is  
1 overheating. Based on these assumptions, the Gross Domestic Product  
18 will average \$16,224 billion in the years 2009-2011, a level that is about  
19 30% above the 2005 total of \$12,456.

20 Things may turn out differently. But in the absence of knowledge of the  
21 future, we use the above assumptions, which appear to be the most  
22 plausible. Thus we are able to apply a common economic environment to  
23 all stocks for the purpose of measuring relative growth potential.  
24

25 **Q: What methods does Mr. Avera use to estimate the historical “risk premium” for the**  
26 **CAPM?**

27 **A:** Mr. Avera relies on long-run historical estimates of *ex post* returns. He uses a historical  
28 total market risk premium of 7.1 percent,<sup>26</sup> based on the arithmetic mean of data from  
29 1926 to 2005 on page one of Schedule WEA-7 of his direct testimony.

30 **Q: Will you evaluate Mr. Avera’s historical estimating method for computing the**  
31 **historical “equity risk premium” used in the CAPM analysis?**

1 A: A constant risk premium can only be justified from the narrow perspective of pure  
2 statistics. Because returns on stocks and bonds are volatile from year to year, it is  
3 impossible to discern trends in highly aggregated data on returns using standard statistical  
4 techniques without analyzing other information. (For example, the information analyzed  
5 in a more sophisticated way by Donaldson, Kamstra, and Kramer, provided in Exhibit \_\_  
6 WBM-14.) However, the statistical perspective is a narrow one; it states that statistical  
7 methods cannot discern a trend in data, not that such a trend is absent.

8 While investors do not necessarily believe that every year will be economically  
9 rosy, by using data beginning from 1926, Mr. Avera is assuming that investors today give  
10 significant weight to a recurrence of the economic conditions of 60 to 80 years ago.  
11 Those conditions included the Great Depression, World War II, and a Federal Reserve  
12 Board monetary policy designed to keep interest rates down for the purpose of financing  
13 government war debt cheaply.<sup>27</sup> The Federal Reserve Board itself recently rejected use of  
14 data going back to 1927 when calculating the return on equity capital used to estimate  
15 returns on Federal Reserve Bank priced services. It made the determination to use only  
16 40, rather than 80, years of historical data.<sup>28</sup>

17 As discussed above, considerable amounts of the academic literature are  
18 identifying a risk premium in the range of 3.5 to four percent. Corporate CFOs are  
19 identifying a risk premium of 3.6 percent and are stating that a risk premium above 7.21  
20 percent would only be observed with a 10 percent probability. Most utilities' own  
21

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<sup>26</sup> Rounded from 7.08.

<sup>27</sup> Donaldson, Kamstra, and Kramer, *op. cit.*, p. 9 stated that "modern monetary policy" began in 1951.

<sup>28</sup> 70 Federal Register, 60341-60347, October 17, 2005. Notice in Docket OP-1229.

pension actuaries and decommissioning fund managers are showing 9 to 10 percent stock market returns with fixed income returns in the six percent range. In that light, Mr. Avera's 7.1 percent estimate of the long run risk premium is not a reasonable predictor of investors' expectations over the next ten years, regardless of long-ago history or statistical niceties.

**Q: Have you prepared any comparisons of historical stock market returns, returns on utility stocks, and bond returns over a long period of time (i.e., a period of time that could be used in a historical CAPM)?**

**A:** Yes. While I have deliberately not gone all the way back to 1926, I have prepared a comparison of returns for electric utilities, gas utilities, the S&P 500, and bonds (using electric and gas utility return and bond return data presented by Dr. Roger Morin<sup>29</sup> and S&P 500 data developed by Dr. James Vander Weide, a utility witness in a recent Pacific Gas and Electric Company cost of capital case).

I used the period 1955 to 2001. I purposely chose a period starting after the Korean War, the ensuing 1954 recession, and the beginning of "modern monetary policy." The period of time that includes the Great Depression and World War II and its aftermath does not reflect conditions that current investors believe hold today or are likely to recur in the future, even though reaching farther back in history produces higher risk premium numbers that utility rate of return analysts like to use. The end of the period (2001) was the last year for which Dr. Morin presented data in his recent rate case

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<sup>29</sup> Electric utility and bond return from Exhibit No. \_\_\_\_ (RAM-3) of his testimony in Arkansas PSC Docket 06-101-U (Entergy Arkansas), available at [http://www.apscservices.info/PDF/06/06-101-u\\_16\\_1.pdf](http://www.apscservices.info/PDF/06/06-101-u_16_1.pdf); gas utility return from Exhibit No. \_\_\_\_ (RAM-3) of Arkansas PSC Docket 04-176-U (an Arkansas Western Gas Company rate case), available at [http://www.apscservices.info/efilings/Docket\\_Search\\_Documents.asp?Docket+04%2D176%2DU&DocNumVal+9](http://www.apscservices.info/efilings/Docket_Search_Documents.asp?Docket+04%2D176%2DU&DocNumVal+9).

filings.

**Table 9: Returns and Risk Premiums for Electric Utilities, Gas Utilities,  
the S&P 500, and Long-Term Treasury Bonds**

	1955-2001	1960-2001	1967-2001	1983-2001	1955-1966	1967-1982
S&P 500 return	11.86%	11.77%	12.31%	15.33%	10.57%	8.73%
Electric Utility Return	11.53%	11.47%	11.53%	15.30%	11.52%	7.05%
Gas Utility return	12.16%	11.79%	12.25%	15.07%	11.91%	8.91%
Bond Return	6.33%	7.27%	7.90%	11.17%	1.73%	4.02%
Electric Utility risk premium	5.20%	4.20%	3.62%	4.13%	9.79%	3.03%
Gas Utility risk premium	5.84%	4.52%	4.35%	3.89%	10.18%	4.89%
S&P 500 risk premium	5.54%	4.51%	4.41%	4.15%	8.84%	4.71%
Electric utility return as % of S&P 500	97.1%	97.4%	93.6%	99.8%	109.0%	80.8%
Gas utility return as % of S&P 500	102.5%	100.1%	99.5%	98.3%	112.7%	102.1%

Over the 46 years from 1955 to 2001, the S&P 500 had a return that averaged 5.54 percent above long-term treasury bonds. This is approximately 100 basis points below the risk premium derived using the total return on bonds for 1926 to 2005 identified by Ibbotson (6.6 percent) and 150 basis points below the Ibbotson estimate using the income return on bonds (7.1 percent). Using 40 years of data gives a risk premium of about 4.5 percent for the S&P 500.

**Q: Will you compare the returns on utility stock versus the S&P 500 in Table 9?**

**A:** The rest of this chart is even more interesting than the risk premium estimate. Over the 46 years ending in 2001, electric utilities underperformed the S&P 500 by only 32 basis points (2.9 percent) despite being considerably less risky (with betas less than one). Over sub-periods, the return ranged from 81 percent to 109 percent of the S&P 500. The lowest return was experienced in the 1967-1982 period, a time when electric utilities in particular faced depressed prices due to the lack of fuel adjustment clauses in the 1974 oil shock, coupled with dramatic reductions in demand growth, massive capital spending

1 programs, and burgeoning interest rates. In the 1983-2001 periods, electric utilities  
2 provided a return virtually identical to the S&P 500.

3 From 1955 to 2001, Gas utilities had an even better performance. Gas utilities  
4 outperformed the S&P 500 by 30 basis points (2.5 percent) despite being less risky (with  
5 betas less than 1 over the vast portion of the historical period). Over sub-periods, the  
6 return ranged from 98 percent to 113 percent of the S&P 500 – a return virtually identical  
7 to the market as a whole.

8 This finding needs to be compared with a principle cited in key court cases on rate  
9 of return—that the authorized return on common equity should be the same as returns on  
10 investments in other firms with similar risks. For a group of less risky, low-beta,  
11 regulated utility stocks to perform equivalent to the market as whole violates this risk  
12 principle.

13 This may even suggest there has been some kind of long term “free lunch” for  
14 utility investors that the market may not yet have fully recognized. This “free lunch”  
15 may potentially arise from the circular nature of setting utility returns – high returns in  
16 the past beget requests by utilities for high returns in the future, which in turn begets  
17 stock performance equal to the S&P 500 over the long run with considerably less risk  
18 (particularly in the past) than the S&P 500.

19 **Q: Have any recent tax changes affected utilities’ cost of capital?**

20 A: Yes. The new lower tax rates on both dividends and capital gains have increased the  
21 after-tax returns for at least some investors in the market, which all else being equal,  
22 should lower the cost of equity capital relative to the period before 2003.



1 **Q: Are you providing any additional quantitative information as a check on the**  
2 **information presented by Mr. Avera and Staff?**

3 A: Yes. I provide CAPM calculations over a range of market assumptions. These  
4 assumptions are based generally on the following information:

- 5 1. Avista itself expects that the broad equity market will earn 9.6 percent when making  
6 pension fund projections.
- 7 2. The average equity return expected by the pension actuaries of the 19 utilities  
8 identified by Mr. Avera as a comparison group to Avista is 9.66 percent, given an  
9 average discount rate (high grade long-term corporate bond rate) of 5.71 percent.
- 10 3. There are a number of outliers with lower returns, including all of the California  
11 utilities, who are expecting equity returns on pension funds or decommissioning  
12 funds of nine percent or less.
- 13 4. The 90<sup>th</sup> percentile return for the entire market from Graham and Harvey's CFO  
14 survey averaged 11.5 percent from 2002 to the present. The CFOs' average expected  
15 return was around eight percent (risk premium of 3.5 percent).
- 16 5. Other academic literature, as well as the analysis by the Russell Investment Group,  
17 suggests a risk premium of three percent to four percent, which corresponds to an  
18 overall stock market return below nine percent.

19 Before diving into these calculations, however, it is useful to first focus on the  
20 choice Mr. Avera made for "beta." As seen in Table 10, Mr. Avera arrives at his beta of  
21 0.99 by averaging the Value Line-sourced betas from his proxy group, although one can  
22 make the case for excluding American Electric Power and Cleco Corporation as outliers.  
2 This would make the average of the proxy group betas from Value Line 0.95 instead of

0.99. Table 10 also contains the average beta from a group of alternative sources, which  
comprise here Google Finance, Yahoo! Finance, and MSN Money (GYM)<sup>30</sup>. The GYM  
group of beta sources contains beta estimates for the comparison group that average out  
to 0.53 – considerably lower than the 0.99 average that Value Line offers. Granting that  
Value Line adjusts its betas upward if they are less than one, this does not explain the  
difference between its average beta and that of the GYM group. In fact, GYM's betas are  
lower for the average of a group of utilities not only on a raw basis, but even after  
adjusting them upward to 0.67 using the Empirical Capital Asset Pricing Model.<sup>31</sup>

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<sup>30</sup> Google Finance, Yahoo! Finance, MSN Money, Value Line, E-Trade, and presumably a number of other financial services all have their own betas which differ by time periods and depending on whether adjustment factors are used.

<sup>31</sup> I do not support Empirical CAPM as a matter of theory but use it here for the purpose of stating Value Line and GYM results on a roughly comparable basis

**Table 10: Alternative Betas for Mr. Avera's Comparison Group**

Company	ValueLine <sup>1</sup>	Alternative Sources of Beta <sup>2</sup>			Average of	
		Google Finance	Yahoo! Finance	MSN Money	Average of Alternative Sources	Average of Alternative Sources with ECAPM
American Elec Pwr	1.35	0.89	0.32	0.67	0.63	0.72
Black Hills Corp	1.1	0.54	0.9	0.55	0.66	0.75
Cleco Corp.	1.3	1.13	1.01	0.93	1.02	1.02
Dominion Resources	1.05	0.48	0.17	0.09	0.25	0.44
DPL, Inc.	0.95	0.70	0.5	0.55	0.58	0.69
DTE Energy	0.75	0.50	0.71	0.56	0.59	0.69
Edison International	1.15	0.69	0.56	0.4	0.55	0.66
Empire District Elec	0.8	0.69	0.56	0.72	0.66	0.74
NiSource Inc.	0.95	0.64	0.14	0.44	0.41	0.56
Northeast Utilities	0.9	0.26	0.57	0.22	0.35	0.51
Pepco Holdings	0.9	0.56	0.5	0.58	0.55	0.66
PG&E Corp	1.15	0.68	0.63	0.82	0.71	0.78
PNM Resources	1	0.85	0.72	0.8	0.79	0.84
PPL Corp	0.95	0.31	0.07	0.17	0.18	0.39
Progress Energy	0.9	0.68	0.71	0.54	0.64	0.73
P S Enterprise Group	0.95	0.28	0.13	0.05	0.15	0.37
Puget Energy	0.8	0.49	0.67	0.44	0.53	0.65
Westar Energy	0.95	0.92	0.58	0.82	0.77	0.83
Xcel Energy, Inc.	0.9	0.60	0.63	0.62	0.62	0.71
<b>Average</b>	<b>0.99</b>	<b>0.63</b>	<b>0.53</b>	<b>0.52</b>	<b>0.56</b>	<b>0.67</b>
<b>Average w/o American Elec Pwr &amp; Cleco</b>	<b>0.95</b>	<b>0.60</b>	<b>0.50</b>	<b>0.50</b>	<b>0.53</b>	<b>0.65</b>

<sup>1</sup> Taken from ValueLine Investment Survey, December 29, 2006.

<sup>2</sup> Accessed on the sources' respective Websites on September 12, 2007

It is also interesting to note that Value Line betas of the recent past have been rising rapidly. A comparison group of electric utilities assembled by Dr. Morin only six months earlier than Mr. Avera's analysis in this case computed a Value Line electric utility average beta of only 0.85. It is a matter of common sense that electric utilities have not gained 14 percentage points in non-diversifiable risk relative to the stock market as a whole in the last six months. It is unreasonable to assume that utilities will need 60 to

100 basis points more return<sup>32</sup> to compensate for this much higher alleged risk than these same utilities faced six months ago. While mathematical gyrations can produce high betas, the value of these numbers in setting rates of return is becoming more and more questionable.

As to the actual CAPM calculations, Table 11 depicts my CAPM calculations over a range of market return assumptions. A 4.8 percent risk free rate based on current market conditions was used in all but Case 8 (the California decommissioning fund estimate), where the higher risk-free rate contained in that analysis was used. I used a selection of beta choices from Table 10.<sup>33</sup> We exclude AEP and Cleco from the beta analysis because of their status as outliers and start with a Value Line beta of 0.95.

**Table 11: Range of Capital Asset Pricing Method Results**

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Average cases 1-6
Risk-free rate	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	5.83%	4.80%
Market equity return		9.66%	9.30%	10.39%				8.45%	
Risk premium	5.54%	4.86%	4.50%	5.59%	4.00%	3.59%	3.00%	2.62%	4.68%
Value Line beta	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Return on equity	10.06%	9.41%	9.08%	10.11%	8.60%	8.21%	7.65%	8.32%	9.25%
Return on equity w/ beta = 0.80 <sup>1</sup>	9.23%	8.69%	8.40%	9.27%	8.00%	7.67%	7.20%	7.93%	8.54%
Return on equity w/ beta = 0.65 <sup>2</sup>	8.41%	7.96%	7.73%	8.44%	7.40%	7.14%	6.75%	7.54%	7.85%

Case 1 - Historical Risk Premium - 1955-2001 average S&P risk premium

Case 2 - Pension equity returns 19 comparison electricity companies

Case 3 - Entergy nuclear decommissioning return - geometric mean with current inflation

Case 4 - Entergy nuclear decommissioning return - approximate arithmetic mean with current inflation \*

Case 5 - Clark and da Silva risk premium estimate

Case 6 - Graham and Harvey average risk premium 2000-2005 (close to Donaldson, Kamstra and Kramer estimate)

Case 7 - Frank Russell estimate of equity premium over government debt of 3.0%.

Case 8 - California utilities' equity and debt market estimates (decommissioning funds)

\* added 109 basis points for difference between geometric and arithmetic means for S&P-500 minus GDP implicit price deflator for 1955-2001. Note that I do not accept the contention that the arithmetic mean is the only appropriate measurement of equity returns but am providing this figure to show the impact.

<sup>1</sup> Average of GYM beta with ECAPM applied and ValueLine beta.

<sup>2</sup> Average of Google Finance, Yahoo! Finance, and MSN Money betas with ECAPM applied for consistency with VL estimate; raw beta estimates come from respective sources' Websites, accessed on September 12, 2007. Excludes American Electric Power and Cleco for consistency.

<sup>32</sup> A four-hundred basis point risk premium multiplied by a 0.14 increase in beta equals 56 basis points; a 700 basis point risk premium (per Mr. Avera) multiplied by a 0.14 increase in beta equals 98 basis points.

<sup>33</sup> Figures would be 20 basis points higher with a risk-free rate that is 20 basis points higher.

1 The overall range in Table 11 is wide – from 6.75 percent to 10.11 percent. However, I  
2 would point out that the highest possible number calculated using my highest risk  
3 premium and highest beta is already below the current authorized rate of return for  
4 Avista.

5 While I do not recommend that returns be set on the lower end of the range that is  
6 shown in this chart, I should point out that figures below nine percent are not unheard of.  
7 The Alberta Energy and Utilities Board's current formula for setting the utility cost of  
8 capital, based on a risk premium method, which started out at 9.6 percent in 2004, has  
9 been indexed at 8.51 percent in 2007.<sup>34</sup> Indeed, it would be 8.94 percent if the Alberta  
10 formula were applied to my 4.8 percent risk-free (long Treasury bond) interest rate.

11 I place more weight on the information bounded by Cases 1 through 6 and the  
12 betas of 0.8 to 0.95. Averaging the four bookend results (beta of 0.8 and 0.95, risk  
13 premium of 3.59 percent (case 6) to 5.59 percent (Case 4) yields a CAPM-based equity  
14 return of 8.82 percent.

15 Two other benchmarks stand out. First, with a market risk premium of 400 basis  
16 points, the CAPM return is 8.6 percent. A risk premium of 400 basis points is reasonably  
17 consistent with averaging an arithmetic and geometric mean and starting with the 300  
18 basis point geometric mean risk premium that would flow from the Russell Investment  
19 Group analysis and the Dimson, Marsh, and Stanton article.

20 Second, with a 500 basis point risk premium and a beta of 0.8 the CAPM return is  
21 8.8 percent. This approach averages Value Line and CYM – numbers that are also  
22

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<sup>34</sup> Exhibit No. \_\_\_\_ (WBM-16)

generally consistent with Value Line betas from only six months earlier.

In sum, my CAPM results show that Mr. Avera's back-to-1926 and Value-Line-Pollyanna-economy methods are unreasonable. My analysis further shows that a CAPM analysis supports considerably lower numbers than have been adopted, and that a reasonable CAPM estimate, taking all of the information into account, is below nine percent.

**Q: Are there other commissions that have approved rates of return that are on the order of what your results suggest?**

A: Yes, in addition to the Alberta decision that I reference above, there are a number of state commissions in the United States that have approved ROEs of less than 10 percent in recent years. The following is an illustrative list. There may be others examples as well.

- In 2005, the New Hampshire Public Service Commission approved a return on equity of 9.63 percent on generation. It held that the appropriate rate for a diversified utility would be 9.42 percent and added 21 basis points for risks of regulated generation.<sup>35</sup>
- The Arkansas Public Service Commission approved a rate of return on equity of 9.4 percent in 2004,<sup>36</sup> rates of 9.7 percent in 2004 and 2005,<sup>37</sup> and a rate of 9.9 percent in 2006.<sup>38</sup>

<sup>35</sup> Public Service Company of New Hampshire, Docket DE-04-177, Order No. 24,473.

<sup>36</sup> CenterPoint Energy Arkla, Docket No. 04-12-U.

<sup>37</sup> Arkansas Western Gas Company, Docket No. 04-176-U and Arkansas Oklahoma Gas Corporation, Docket 05-006-U, Order No. 7.

<sup>38</sup> Entergy Arkansas, Inc., Docket No. 06-101-U, Order No. 10.

- In 2006, the New York Public Service Commission approved returns of 9.55 percent,<sup>39</sup> 9.8 percent<sup>40</sup> and 9.6 percent.<sup>41</sup>
- The New Mexico Public Regulation Commission approved an ROE of 9.5 percent earlier this year.<sup>42</sup>

In sum, other commissions are authorizing single-digit equity returns in the current economic environment.

**Q: What rate of return are you using in your analysis going forward?**

A: Before considering the effects of Avista's Energy Recovery Mechanism and its decoupling mechanism, I am recommending a return of 9.5 percent. A CAPM analysis in the 8.8 percent range (as discussed above) is reasonable based on a considerably lower risk premium and a somewhat lower beta than Mr. Avera has used. A DCF analysis between 9.5 percent and 10 percent is similar to several that I have recently reviewed and is consistent with the 9.6 percent or lower DCF-based results that I computed from Mr. Avera's own sample after removing the five companies with non-utility operations and giving more weight to the fundamental analysis. The CAPM and DCF would, if averaged, produce a figure in the range of 9.2 percent. I raise the figure to 9.5 percent because of Avista's split BBB-/BB+ bond rating and to take into consideration the Commission's previous commentary on inclusion of flotation costs in the return on equity, even though I do not specifically agree with it.

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<sup>39</sup> New York State Electric and Gas Corporation, Case 05-E-1222.

<sup>40</sup> Orange and Rockland, Case 05-G-1494

<sup>41</sup> St. Lawrence Gas, Case 05-G-1635. Press release at

<http://www.stlawrencegas.com/pressrel/Press%20Release%20-%20November%202006.pdf>; Central Hudson, Cases 05-E-0934 & 05-G-0935.

<sup>42</sup> Available [http://www.nmprc.state.nm.us/news/pdf/062907pnm\\_ratehick.pdf](http://www.nmprc.state.nm.us/news/pdf/062907pnm_ratehick.pdf) va

***D. Avista's Energy Recovery Mechanism (ERM), Decoupling and the Return on Equity***

**Q: In general terms, how does Avista's ERM plan work?**

A: First approved in 2002, Avista's ERM allows the Company to pass on energy costs to customers without having to request a full rate case. In docket UE-060181, the Commission approved modifications to the original ERM proposed by Avista and other interested parties in settlement agreement.<sup>43</sup> In its present form, the ERM contains a provision for a deadband of \$4 million, which is the net deviation in actual cost from a baseline which Avista either absorbs, in the case of net excess costs, or retains, in the case of net savings. The Company and its customers share (50/50) any positive or negative differences between actual and base power costs between \$4 million and \$10 million. Above the \$10 million threshold, the sharing band is 90/10. The Commission's order, by virtue of adopting the ERM settlement, specifies that the impact of the ERM on Avista's cost of capital is to be considered in this proceeding.

**Q: Do the modifications to Avista's ERM reduce its risk?**

A: Yes. Avista has less exposure to fluctuating power costs under the new mechanism. If there is an under-recovery of more than \$4 million, Avista would receive a larger share of the under-recovery; conversely, ratepayers would receive a larger share of any over-recovery of more than \$4 million. For any over-recovery or under-recovery in excess of

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<sup>43</sup> *In the Matter of the Petition of Avista Corporation for the Continuance of the Company's Energy Recovery Mechanism, with Certain Modifications*, Docket No. UE-060181, Order 03.



the \$10 million level, \$2.1 million more would be placed in rates under the new mechanism.<sup>44</sup>

**Q: What is a \$2.1 million differential expressed in terms of rate of return.**

A: A \$2.1 million differential is \$1.364 million after income tax. With Avista's total electric rate base on \$897 million, this is 15 basis points return on rate base or 35 basis points on equity, using my recommended 44 percent equity ratio.

**Q: Is there another way to look at this money?**

A: Yes. If one were to stress-test an interest coverage ratio analysis for Avista (by assuming more than \$10 million in energy under-recoveries), the addition of \$2.1 million in pre-tax income would increase the pre-tax interest coverage and reduce its risk.

**Q: Do you recommend any reduction to Avista's return on equity as a result of this mechanism?**

A: Yes. I recommend a 10-basis point reduction to the electric ROE based on the additional risk reduction provided by this mechanism, relative to Avista's position prior to when the mechanism was placed into effect.

**Q: In general terms, how does Avista's gas decoupling plan work?**

A: Avista is allowed to increase rates by up to two percent per year between rate cases if use per customer declines (based solely on the historic number of customers in the test year). It makes the company whole for conservation funded by either the company or by its customers, as well resulting from price elasticity.

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<sup>44</sup> At \$10 million, the new mechanism would allow recovery of \$3 million (50 percent of the amount between \$4 million and \$10 million). The old mechanism would have allowed recovery of \$0.9 million (90 percent of the excess above \$9 million). Both mechanisms provide for 90 percent recovery of amounts in excess of \$10 million, so the differential between the two is fixed for differentials above \$10 million.

**Q: Does decoupling reduce risk for a gas utility?**

A: Yes, because, in large part, it counteracts the fact that use per customer is declining. It also dampens the volatile effect of variations in weather conditions. Moody's bond rating service stated:

Moody's believes that having utility rate designs that compensate the gas LDCs for margin losses caused by variations in gas consumption due to conservation as with variations due to weather, would serve to stabilize the utility's credit metrics and credit ratings. Utilities having these ratemaking mechanisms also tend to carry 'A' credit ratings.<sup>45</sup>

Recently, Northwest Natural Gas had its business risk profile reduced by Standard and Poors due to a weather normalization mechanism (more modest than full decoupling).<sup>46</sup>

**Q: What is your recommendation regarding the impact of decoupling on the return on equity?**

A: I recommend a reduction in the return on equity of 15 basis points for only Avista's gas utility operations. My recommendation reflects that the specific mechanism adopted for Avista is less expansive than other decoupling mechanisms that I have previously reviewed. Features that make it less expansive include the exclusion of new customers from the mechanism, the fact that the mechanism is weather-normalized (leaving Avista

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<sup>45</sup> "Impact of Conservation on Gas Margins and Financial Stability in the Gas LDC Sector," Special Comment Report, Moody's Investor Service, June 2005.

<sup>46</sup> Jim Lazar, "Examples of Good, Bad, and Ugly Decoupling Mechanisms," Presented at NARUC Symposium on Aligning Regulatory Incentives with Demand-Side Resources, August 2, 2006, 15<sup>th</sup> unnumbered slide. <http://www.naruc.org/associations/1773/files/Presentation%204.pdf>.

with the risk of warmer or cooler weather than normal), the requirement that conservation measures be well implemented, and the two percent cap on rate impacts.<sup>47</sup>

Nevertheless, Avista's decoupling mechanism still provides the company with a significant revenue stream, outside of a rate case. For example, Avista has deferred revenue of \$343,886 under the decoupling mechanism for the first six months of 2006, and is therefore on track to collect approximately \$687,770 in additional revenue from ratepayers.<sup>48</sup> This represents more than two thirds of the additional revenue Avista received in its previous natural gas general rate case.<sup>49</sup>

I thus recommend a return on equity of 9.40 percent for the electric utility operations of Avista and 9.35 percent for the gas utility operations of Avista.

***E. Summary of Rate of Return***

**Q: Will you summarize your position regarding the rate of return?**

A: The requested 11.3 percent return on equity for a utility like Avista is simply not reasonable under the circumstances.

- Avista itself expects that the broad equity market will earn 9.6 percent when making pension fund projections.
- The average equity return expected by the pension actuaries of the 19 utilities identified by Mr. Avera as a comparison group to Avista is 9.66 percent, given an average discount rate (high grade long-term corporate bond rate) of 5.71 percent.

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<sup>47</sup> Had these features (which tend to protect consumers) not been included in Avista's decoupling mechanism, I would have recommended a larger reduction in the return on equity commensurate with a greater amount of risk reduction to the utility.

<sup>48</sup> Avista Response to Public Counsel Data Request No. 174, Attachment A.

<sup>49</sup> *WUTC v. Avista Corp.*, Docket No. UG 050483, Order 05, ¶ 160 (general gas rate increase of \$968,000).

- There are a number of outliers with lower returns, including Puget Sound Energy, Northwest Natural Gas, and Edison International, with pension equity returns well under nine percent.
- The 90<sup>th</sup> percentile return for the entire market from Graham and Harvey's CFO survey averaged 11.5 percent from 2002 to the present. The CFOs' average expected return was around eight percent (risk premium of 3.5 percent).
- Other academic literature, as well as the analysis by the Russell Investment Group, suggests a risk premium of three percent to four percent, which corresponds to an overall stock market return at or below nine percent.
- Historical data that does not reach back to the Depression and World War II supports equity returns of 10 percent or less.
- As a result of all of these factors, plus a small reduction from updating Treasury bond rates, a reasonable CAPM analysis would be in the range of 8.8 percent.
- Mr. Avera's comparable earnings and discounted cash flow results are faulty because he included five companies with over 50 percent of their income and assets in unregulated businesses; leaving those companies out would reduce his return to 10 percent or less.
- Mr. Avera has also over-weighted analysts' estimates relative to fundamental analyses of growth based on earnings retention in the DCF method. Leaving the five companies out and assigning equal weights to the two types of DCF estimates (instead of a 75 percent weight to the analysts) reduces his DCF return to 9.6 percent (or less depending on treatment of outliers).

- A reduction in return on equity is warranted for Avista's gas operations to reflect the reduction in risk from its decoupling plan, and for its electric operations to reflect the ERM.

My recommended return on equity is 9.40 percent for Avista's electric operations and 9.35 percent for Avista's gas operations, reflecting a 10-basis point reduction to electric from the ERM and a 15-basis point reduction to gas for decoupling, respectively. A lower equity percentage in the capital structure and a lower cost of debt, reflecting the refinancing at maturity of the 9.75 percent debt issued during the energy crisis, are also appropriate.

**Q: Have you prepared a summary showing your proposed rate of return on rate base?**

**A:** Yes. It is provided below for the electric and gas utilities.

**Table 12: Public Counsel's Capital Structure and Rate of Return**

	<u>percentage</u>	<u>return</u>	<u>total return</u>	<u>after tax return</u>
<b><u>Public Counsel Electric</u></b>				
debt	50.99%	6.97%	3.55%	3.55%
trust preferrec	5.01%	7.04%	0.35%	0.35%
common equi	44.00%	9.40%	4.14%	6.36%
			8.04%	10.27%
<b><u>Public Counsel Gas</u></b>				
debt	50.99%	6.97%	3.55%	3.55%
trust preferrec	5.01%	7.04%	0.35%	0.35%
common equi	44.00%	9.35%	4.11%	6.33%
			8.02%	10.24%
<b><u>Avista</u></b>				
debt	47.54%	7.70%	3.66%	3.66%
trust preferrec	4.68%	7.04%	0.33%	0.33%
common equi	47.78%	11.30%	5.40%	8.31%
			9.39%	12.30%

For the electric department, the rate of return is 8.04 percent (10.27 percent pre-tax), while for the gas department, the rate of return is 8.02 percent (10.24 percent pre-tax). This compares to Avista's recommendation of 9.39 percent on a weighted basis or 12.30 percent pre-tax. About 37 basis points (pre-tax) of the difference arise from the change in capital structure. Another 37 basis points arises from the change in the cost of debt. The remainder (129 basis points electric and 132 basis points gas) arises from the lower equity return. At Avista's proposed rate base of \$897.4 million (electric) and \$140.5 million (gas), the difference between Public Counsel's position and Avista's position is \$18.2 million on the electric revenue requirement and \$2.9 million on the gas revenue requirement.<sup>50</sup>

### III. ADJUSTMENTS TO AVISTA'S PROPOSED TEST YEAR EXPENSE

#### A. *Executive Compensation*

**Q: Have you evaluated Avista's compensation for executives?**

A: Yes. Public Counsel made a series of data requests to ascertain trends in compensation for directors and officers and to compare that level of compensation to that of line workers.<sup>51</sup>

In my review, I have taken into account that this Commission does not include long-term (stock-based) compensation in utility revenue requirements and has only examined other forms of compensation for which ratepayer funding is requested. However, we specifically note from our review of information provided by Avista, that stock-based compensation for the Chief Executive Officer (CEO) and other top

<sup>50</sup> Of this amount, \$0.15 million is related to the 15-basis point adjustment for gas decoupling.

<sup>51</sup> Avista Responses to Public Counsel's Data Requests Nos. 125 to 142.

executives has escalated even more rapidly than those forms of compensation this  
Commission has approved.

**Q: How is compensation set for Avista's executives?**

A: Without divulging specific confidential information, I can state that Avista has hired a  
compensation consultant (Towers Perrin) for a number of years. Towers Perrin  
conducts a survey of other companies and provides information relating compensation at  
Avista to the [Begin Confidential] XXXXXXXXXXXXXXXXXXXXXXX [End  
Confidential] of compensation of two sets of other comparable firms (utilities and  
companies with revenues of \$1 to \$3 billion). [Begin Confidential] XXXXXXXXXXXXXXX  
XX  
XX. [End Confidential]

**Q: What is your evaluation of the practice of targeting utility compensation based on  
the [Begin Confidential] XXXXXXXXXXXXXXXXXXXXXXX [End Confidential]?**

A: It is both common among utilities and pernicious. While it sounds like a good idea on the  
surface, it does not work very well for very high-level management employees.  
Justifying increased payments by ratepayers for executive compensation through surveys  
of how other companies are paying their executives is circular, and I would assign little  
probative value to those data for purposes of apportioning the utility's executive  
compensation to ratepayers and shareholders. If other utilities follow Avista's practice of  
targeting their compensation based on an average compared to a peer group, the average  
will increase and executive compensation will rise, as it has done in the economy as a  
whole and among utilities over the past ten years. Increases in compensation justified by  
surveys and averages will beget further increases in compensation, as boards of directors'

management compensation committees engage in a new version of “keeping up with the Joneses.”

For an unregulated industry in a competitive market, this type of potential excess in executive compensation is less likely to result in higher prices than in a regulated monopoly utility environment. The result in the competitive market may be some combination of cost-cutting leading to lower wages for line workers, lower shareholder profits, and possibly disgruntled shareholders, if compensation gets out of line with stock performance. For a regulated utility, however, the end result is likely to be different. Ratepayers are asked to pay for the increases in executive compensation as a “cost of doing business.” Ratepayers can only hope that the executives improve shareholder value by cutting costs and being productive, not simply by asking for rate relief.

**Q: Aside from your concerns that targeting the median of a peer group produces pressure to increase compensation, is the Towers Perrin analysis otherwise appropriate and dispositive?**

**A:** No. First, the Towers Perrin study [Begin Confidential] XXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX. <sup>52</sup> [End Confidential] Moreover, one may assume that Avista’s revenues have become even smaller since the study was completed because it has since sold a major subsidiary, Avista Energy.

Second, the Commission has previously indicated that revenues are not a good basis for comparing one utility’s compensation to a group. In the past, the Commission has placed more importance on assets, number of employees, and market capitalization,

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<sup>52</sup> “Employee Compensation Competitive Analysis from Towers Perrin,” Avista Response to Public Counsel Data Request No. 139, Attachment D (hereinafter “Towers Perrin”).



1 than on annual revenues.<sup>53</sup> The Towers Perrin profile selected companies to compare to  
2 Avista based only on annual revenues—it did not compare Avista to companies similar in  
3 any other respect.<sup>54</sup>

4 Finally, the Commission has expressed concern over the reliability of  
5 compensation recommendations prepared by paid compensation consultants. The  
6 Commission stated, “we are wary of studies by consultants that potentially are self-  
7 serving and may not provide objective information that is useful to us.”<sup>55</sup> The  
8 Commission is not alone in its skepticism. Congressional oversight committees have  
9 recently begun investigating private consulting firms, including Towers Perrin.<sup>56</sup>

10 **Q: Have you compared trends in the utility’s executive compensation to trends in**  
11 **compensation of line workers?**

12 **A:** Yes. The table below compares the trends in compensation – excluding long-term  
13 stock-based compensation not charged to ratepayers – for the CEO, the 17 other  
14 executives and managers earning more than \$150,000 per year in 2006,<sup>57</sup> the  
15 average of the five most common line worker positions, and Avista’s union  
16 contract. Line workers’ compensation rose at slightly over three percent per year from  
17 2000 to 2006, while the CEO’s compensation (excluding long-term stock- based  
18 compensation) increased by 5.5 percent per year and other executives’ compensation  
19 increased by 9.2 percent per year.

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<sup>53</sup> *WUTC v. Avista Corp.*, Docket Nos. UE-991606 & UG-991607, Third Supplemental Order, ¶¶ 251, 253.

<sup>54</sup> Direct Testimony of Karen Feltes, p. 7, Exhibit No. \_\_\_\_ (KSF-1T).

<sup>55</sup> *WUTC v. PacifiCorp*, Docket Nos. UE-061546, UE-060817, Order No. 08, ¶¶ 174-175.

<sup>56</sup> Gretchen Morgenson, “Subpoena For Advisers On Salaries,” June 30, 2007, New York Times, page C1.

<sup>57</sup> Data from Avista Response to Public Counsel Data Request No. 125.

**Table 13: Trends in Executive and Worker Compensation at Avista 2000-2006 [Begin**  
**Confidential]**

Year	CEO		Executive w/ Salary > \$150,000 (Excluding CEO; Average)		Line Worker from PC-128										Line Worker Average	Union Contract from PC- 127
					Customer Service Representative		Journeyman Lineman		Meter Reader		Customer Project Coordinator		Line Foreman			
	Total Comp. except long-term	% Change (Year-on- year)	Total Comp. except long- term	% Change (Year-on- year)	\$/hour	% Change (Year-on- year)	\$/hour	% Change (Year-on- year)	Total Comp.	% Change (Year-on- year)	\$/hour	% Change (Year-on- year)	\$/hour	% Change (Year-on- year)	% Change (Year-on- year)	% Change (Year-on- year)
2000	\$1,050,000		\$202,646		\$17.32		\$25.95		\$16.46		\$28.11		\$29.20			
2001	\$500,000	-52.4%	\$162,609	-19.8%	\$17.83	2.9%	\$26.58	2.4%	\$16.51	0.3%	\$29.30	4.2%	\$29.93	2.5%	2.5%	2.00%
2002	\$687,464	37.5%	\$218,437	34.3%	\$17.85	0.1%	\$27.61	3.9%	\$16.95	2.7%	\$30.48	4.0%	\$31.19	4.2%	3.0%	4.04%
2003	\$800,371	16.4%	\$227,451	4.1%	\$17.52	-1.9%	\$28.55	3.4%	\$17.29	2.0%	\$31.36	2.9%	\$32.60	4.5%	2.2%	3.00%
2004	\$874,732	9.3%	\$233,275	2.6%	\$17.88	2.1%	\$29.55	3.5%	\$18.64	7.8%	\$32.90	4.9%	\$33.74	3.5%	4.4%	3.50%
2005	\$1,197,659	36.9%	\$295,403	26.6%	\$18.67	4.4%	\$30.60	3.6%	\$19.62	5.3%	\$32.66	-0.7%	\$34.94	3.6%	3.2%	3.55%
2006	\$1,448,493	20.9%	\$344,164	16.5%	\$19.51	4.5%	\$31.05	1.5%	\$19.36	-1.3%	\$33.21	1.7%	\$35.99	3.0%	1.9%	3.00%
% Change (2000-2006)		38.0%		69.8%		12.6%		19.6%		17.6%		18.1%		23.2%	18.2%	-100.0%
6-Year Compound Growth		5.5%		9.2%		2.0%		3.0%		2.7%		2.8%		3.5%	2.8%	3.2%
3-Year Compound Growth		21.9%		14.8%		3.7%		2.8%		3.8%		1.9%		3.4%	3.1%	-100.0%

[End Confidential]

**Q: Does this comparison raise concerns regarding the level of Avista's executive compensation?**

**A:** Yes. This table shows that executive compensation has been increasing at rates many times higher than compensation of Avista's line workers. Whereas the average top-five most common line worker saw his salary increase by 18.2 percent in total since 2000, Avista's board of directors saw their overall compensation rise by 18.3 percent per year over the last three years. Whereas the top-five most common line worker classifications saw their salaries increase by 18.2 percent since 2000, the board of directors, CEO, and non-officers were rewarded with six-year compensation increases of 83.2 percent, 38.0 percent, and 69.8 percent over the same period of time. Whereas the line workers averaged 3.1 percent wage growth on a compound basis during the last three years, the board of directors, CEO, and non-officers were rewarded with yearly compensation boosts of 18.3 percent, 21.9 percent, and 14.8 percent. One could go on, but the point is clear: directors and employees in the executive suite are seeing their compensation rise

well above what is reasonable. The Commission should not require ratepayers to foot the bill.

**Q: Do you have any other concerns with Avista's executive compensation levels?**

A: Concerns can be raised in light of Avista's outstanding deferral account balance. In 2001, Avista asked the Commission to authorize it to recover a massive deferral balance through a three year, 36.5 percent customer surcharge.<sup>58</sup> To support its request, Avista executives testified that the company was doing its best to alleviate the problem by tightening its belt. In particular, Avista claimed it was implementing cash-saving measures including salary cuts. The company seemed to indicate these measures would remain in place until the deferral balance was paid off.<sup>59</sup>

Avista's own cost-cutting efforts were an important part of Avista's petition for the surcharge. Avista's then-CEO, Gary Ely, testified that the company had "implemented budget cuts and other cost saving measures" to mitigate the impact of the surcharge on ratepayers.<sup>60</sup> Vice President and CFO, Jon Eliassen, also testified about Avista's efforts to cut costs. In his direct testimony, Mr. Eliassen stated that "the [c]ompany has implemented budget cuts and other cash-saving measures, [and] initiated a hiring freeze."<sup>61</sup> At the hearing, Mr. Ely testified that Avista cut management salaries in its effort to improve its financial condition.<sup>62</sup>

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<sup>58</sup> Direct Testimony of Gary Ely, Docket No. UE-010395, Exhibit No. 50T, pp. 5-6 (hereinafter "Ely").

<sup>59</sup> Direct Testimony of Jon Eliassen, Docket No. UE-010395, Exhibit No. 150T, pp. 11-12 (stating that the "potential cash conservation from [such] steps is important") (hereinafter "Eliassen").

<sup>60</sup> Ely, p. 8.

<sup>61</sup> Eliassen, pp. 11-12.

<sup>62</sup> Transcript, pp. 172-74. Indeed a salary reduction in 2001 can be seen relative to the year 2000.

In the end, the Commission granted the company a 25 percent surcharge.<sup>63</sup> The Commission indicated in its Order that Avista's own cost-cutting efforts were an integral part of the plan. The Commission stated that, "Avista require[d] a plan that includes both immediate new revenue and *aggressive actions by the Company to work out of its current financial difficulties*."<sup>64</sup> The Commission also referred to Mr. Eliassen's testimony, noting that the company had, "already taken steps to improve its financial condition, including cutting management salaries."<sup>65</sup>

Avista initially claimed that it would reduce the deferral balance to zero and stop collecting the surcharge from its customers by 2003.<sup>66</sup> However, Avista has not paid off its deferral and continues to collect the surcharge from its customers. At the same time, the company has disregarded its commitment to cut management salary costs. See information on CEO and executive compensation in Table 13 above. Avista's executive salaries have increased significantly in the past six years and are currently [**Begin Confidential**] XXXXXXXXXXXX [**End Confidential**] levels of similar companies (discussed above).

**Q: Taking all of this information into account, what is your primary recommendation for executive compensation?**

**A:** I recommend that the Commission allow in 2006 test year rates, a 20.7 percent increase from 2000 levels to obtain 2006 executive compensation. Any increases above 20.7 percent should not be allowed in rates. This 20.7 percent figure is based on increases that

<sup>63</sup> *In the Matter of Avista Corporation Request Regarding Recovery of Power Costs Through a Deferral Mechanism*, Docket No. UE-010395, Sixth Supplemental Order, ¶ 4 (Sixth Supplemental Order).

<sup>64</sup> Sixth Supplemental Order, Docket No. UE-010395, ¶ 60 (emphasis added).

<sup>65</sup> Sixth Supplemental Order, Docket No. UE-010395, ¶ 81.

<sup>66</sup> Ely, p. 6.

Avista's non-executive workers have received during this time frame. It is equal to the increases contained in Avista's union contracts and is slightly higher than the 18.2 percent average increase paid to the five positions with the largest number of utility workers.

~~[Begin Confidential]~~ Table 14: **Executive Compensation Disallowance**

Year	CEO		Executive w/ Salary > \$150,000 (Excluding CEO; Average)		Total
	Total Comp. except long-term	% Change (Year-on-year)	Total Comp. except long-term	% Change (Year-on-year)	
2006	\$1,448,493	20.9%	\$344,164	16.5%	
% Change (2000-2006)		38.0%		69.8%	
Allowed in rates		20.7%		20.7%	
Disallowed per executive		\$ 181,143		\$ 99,570	
Number of executives		1		17	
Total disallowance		\$ 181,143		\$ 1,692,697	\$ 1,873,840
Washington Electric		\$ 88,201		\$ 824,199	\$ 912,401
Washington Gas		\$ 22,995		\$ 214,877	\$ 237,873

~~[End Confidential]~~

The total disallowance in this rate case is \$1,873,840 for the total company, or \$912,401 for Washington electric operations and \$237,873 for Washington gas operations.

**Q: Does the partial stipulation in this matter address executive compensation?**

A: Yes. The partial stipulation includes a reasonable disallowance for executive compensation. The stipulation is a satisfactory resolution of this issue for purposes of this case.

**B. Board of Directors Compensation**

**Q: How has the Avista Board of Directors' compensation changed since 2000?**

A: According to Avista Response to Public Counsel Data Request No. 142, Board of Directors' compensation has increased from \$530,000 (exclusive of travel reimbursement) in 2000 to \$971,000 in 2006. The increase is 83.2 percent. The Board has remained at 11 directors. Thus, compensation per director has increased from \$48,193 to \$88,301.

**Q: Should ratepayers bear the entire cost of this compensation?**

A: No. Just as with executives, an 83 percent increase in directors' compensation should not be charged to ratepayers. As noted above, the average hourly compensation for the five most common positions at the company has only increased by 18.2 percent since 2000, and union contracts have increased by only 20.7 percent.

Therefore, like executive compensation, the ratepayer share of the directors' compensation should be limited to 20.7 percent. The disallowance is \$331,458 (total company), or \$161,392 for Washington electric operations and \$42,077 for Washington gas operations.

**Q: Does the partial stipulation in this matter address Board of Directors compensation?**

A: Yes. The partial stipulation includes a reasonable disallowance for Board of Directors compensation. The stipulation is a satisfactory resolution of this issue for purposes of this case.

**C. Directors' and Officers' Insurance**

**Q: What has Avista requested for Directors' and Officers' (D&O) liability insurance policy expense?**

A: According to Avista Response to Public Counsel Data Request No. 143, Avista is requesting \$1,871,103, of which \$1,148,581 is allocated to Washington's electric and gas operations.

**Q: What is your policy position with respect to ratemaking for the D&O liability insurance policy?**

A: I do not believe that 100 percent of the cost of D&O insurance should be allocated to utility ratepayers. I believe it is reasonable to share the cost of this insurance on a 50-50 basis between ratepayers and shareholders. The reason is that D&O insurance is often called into play when shareholders of publicly traded companies sue company management. D&O insurance provides a mechanism for aggrieved shareholders to collect funds under certain circumstances.

The rationale for shareholders to fund a portion of D&O insurance has nothing to do with how directors and officers make decisions, the quality of the decisions, or the regulatory process. The shareholder contribution is instead simply related to who gets the payoff from the insurance policy when something goes wrong. It is money that is often available to shareholders to mitigate the risk of a bad decision or outcome. D&O insurance is thus a supplemental source of shareholder value that should be funded by both shareholders and ratepayers, rather than exclusively by ratepayers.

**Q: Has Avista's D&O insurance actually served as a source of funds for shareholders?**

A: Yes. This year (2007), Avista settled just this type of suit, as detailed in Avista Response to Public Counsel Data Request No. 144, Exhibit No. \_\_\_\_ (WBM-17). In 2002, four of its shareholders filed a suit on behalf of "all persons who purchased, converted, exchanged or otherwise acquired the [c]ompany's common stock in the period November

23, 1999 to August 13, 2002.”<sup>67</sup> The settlement, now pending court approval, required Avista’s insurance company to pay out \$8.5 million and Avista, itself, to pay out \$1 million. The settlement dismissed the individual defendants (current and former senior executives, board members, and officers) from the lawsuit.

**Q: Have any other state Commissions adopted 50-50 sharing of D&O insurance?**

A: Yes. The California Public Utilities Commission has required a 50-50 sharing of this cost since 1996. The decisions in the two cases where the issue was specifically litigated were D. 96-01-011, regarding Southern California Edison Company, and D. 00-02-046, regarding Pacific Gas and Electric Company).<sup>68</sup> The Arkansas Public Service Commission has also repeatedly assigned 50 percent of D&O insurance to shareholders since 2002 (in non-settled Dockets 02-227-U, 04-121-U, 04-176-U, and 06-101-U among others).

**Q: What is the effect of your proposed 50-50 sharing of D&O insurance?**

A: According to the Avista Response to Public Counsel Data Request No. 143, \$911,056 and \$237,525 in D&O liability insurance is charged to Avista for electricity and gas service, respectively, in the test year, for a total payment of \$1,148,581. A 50 percent sharing of this insurance would disallow \$455,528 for electric services and \$118,763 for gas services, or a total of \$574,291.

**D. Advertising Expenses**

**Q: Do you propose an adjustment to Avista’s advertising expenses?**

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<sup>67</sup> Exhibit No. \_\_\_\_ (WBM-17).

<sup>68</sup> These utilities have adjusted their filings to remove one-half of D&O insurance in later rate cases.



1 A. Yes. In Avista Response to Public Counsel Data Request No. 74, Avista identified  
2 \$109,250 of total costs for sponsorship of Avista Stadium and the Spokane Chiefs. Of  
3 this amount, \$44,863 is allocated to the Washington electric jurisdiction and \$27,592 to  
4 the Washington gas jurisdiction. In this data response, Avista states, “[a]fter further  
5 review of these costs, these expenditures should have been recorded to non-utility.”

6 Public Counsel therefore recommends disallowance of these costs.

7 **Q: Does the partial stipulation in this matter address advertising expense?**

8 A: Yes. The partial stipulation includes a reasonable disallowance for advertising expenses.  
9 The stipulation is a satisfactory resolution of this issue for purposes of this case.

10 ***E. Edison Electric Institute Dues***

11 **Q: Have you reviewed Avista’s dues payments to the Edison Electric Institute (EEI)?**

12 A: Yes. According to Avista Response to Public Counsel Data Request No. 145, Avista  
13 spent \$268,044 on EEI dues and requests \$186,843 as a utility expense. Avista removed  
14 from its request 25 percent of regular activities costs and 70 percent of the costs of  
15 industry structure assessment because EEI stated that these were the percentages that  
16 would constitute non-tax-deductible lobbying.

17 **Q What is your recommendation regarding EEI dues?**

18 A: I recommend that a larger reduction be taken from regular activities dues. I recommend  
19 that the Commission disallow 49.93 percent of these regular activities dues for  
20 ratemaking purposes. This amount is larger than the non-taxable amount that even EEI  
21 identifies as lobbying, because 49.93 percent of EEI costs go for legislative and  
22 regulatory advocacy, advertising, marketing, and public relations. The table below,

extracted from a data response provided in a recent Entergy Arkansas rate case,<sup>69</sup> shows  
how EEI spends its money.

**Table 15: EEI Spending**

**Edison Electric Institute  
Schedule of Expenses by NARUC Category  
For Core Dues Activities  
For the Year Ended December 31, 2005**

<u>NARUC Operating Expense Category</u>	<u>% of Dues</u>
Legislative Advocacy	20.38%
Legislative Policy Research	6.02%
Regulatory Advocacy	16.49%
Regulatory Policy Research	13.99%
Advertising	1.67%
Marketing	3.68%
Utility Operations and Engineering	11.31%
Finance, Legal, Planning and Customer Service	18.75%
Public Relations	7.71%
Total Expenses	<u>100.00%</u>

**Q: What is the amount of money that you propose to disallow in addition to costs that Avista moved to non-utility activities?**

**A:** I propose to disallow an additional 24.93 percent of the \$228,734 of regular activities dues or \$57,023. The Washington jurisdictional share is 66.21 percent or \$37,755.

**Q: Does the partial stipulation in this matter address EEI dues?**

<sup>69</sup> Attorney General DR 2-55 in Arkansas PSC Docket 06-101-U.

1 A: Yes. The partial stipulation includes a reasonable disallowance for a portion of EEI dues  
2 expense. The stipulation is a satisfactory resolution of this issue for purposes of this  
3 case.

4 ***F. Other Dues and Donations***

5 **Q: Have you reviewed other dues and donations?**

6 A: Yes. Data were provided to us in Avista Response to Public Counsel Data Request No.  
7 148. I have identified 23 organizations where the Commission should disallow dues,  
8 including: all chambers of commerce; advocacy organizations for various business  
9 interests (taxpayers associations, liability reform, etc.); and, social organizations and  
10 donations (Rotary Club and public television memberships and contributions). The total  
11 is \$64,737, of which \$43,471 is Washington jurisdictional electric expenses and \$11,133  
12 are Washington jurisdictional gas expenses.

13 **Q: Does the partial stipulation in this matter address these other dues and donations**  
14 **issues?**

15 A: Yes. The partial stipulation includes a reasonable disallowance for other dues and  
16 donations. The stipulation is a satisfactory resolution of this issue for purposes of this  
17 case.

18 ***G. Summary of Expense Adjustments***

19 **Q: Will you summarize the expense adjustments that you recommend?**

20 A: The data are summarized in the table below. The total reduction in operating expenses  
21 recommended in this testimony is \$2,092,000, which, after tax, translates into \$1,360,000  
22 higher net operating income than the Company's estimate.

**Table 16: Summary of Public Counsel's Expense Adjustments**

	Executive compensation	Board of Directors compensation	D&O Liability Insurance	Advertising	Edison Electric Institute	Other dues and memberships	Total
<b><u>Electric</u></b>							
Operating Expenses	(912)	(161)	(456)	(45)	(38)	(43)	(1,655)
Income Taxes	319	56	159	16	13	15	579
Net Operating Income	593	105	296	29	25	28	1,076
<b><u>Gas</u></b>							
Operating Expenses	(238)	(42)	(119)	(28)		(11)	(437)
Income Taxes	83	15	42	10	-	4	153
Net Operating Income	155	27	77	18	-	7	284

#### IV. LATE PAYMENT CHARGE

**Q: Please describe Avista's proposal for a late payment charge.**

A: Avista proposes to implement a 1 percent per month late charge for bills that remain unpaid past the next month's bill date, or approximately 30 days.<sup>70</sup>

**Q: What amount of additional revenue does the Company estimate it will collect through a late payment charge?**

A: Based on 2006 billings, Avista anticipates it will collect a total of \$1,058,000 in revenue from the late payment charge. Of this total, \$668,000 is estimated from electric service customers and \$390,000 from natural gas customers.<sup>71</sup>

**Q: What justification does Avista provide in support of its proposed late payment charge?**

A: None. Avista does not attempt to explain why a late payment charge would be beneficial or necessary. Nor does the Company offer any data or cost analysis to indicate that this is

<sup>70</sup> Direct Testimony of Brian J. Hirschorn, Exhibit No. \_\_\_\_ (BJH-1T), p. 19, ll. 7-9.

<sup>71</sup> Ibid, p. 19, ll. 13-18.

1 a necessary measure. The only portion of Avista's testimony that weakly hints at offering  
2 a rationale is its statement that the Company has a late payment charge in its Idaho and  
3 Oregon jurisdictions. Avista does not indicate why the Company now needs a late  
4 payment charge after providing service in Washington for nearly a century without one.

5 The Company does not argue that this is a cost-based mechanism through which it  
6 would collect costs attributed to bills that are paid late, nor does Avista argue that a late-  
7 payment charge will induce prompt payments from customers. These two arguments,  
8 both of which have serious flaws, are frequently employed by utilities in defense of late  
9 payment charges. However, Avista has not even bothered to offer one of these  
10 explanations. Instead, Avista merely offers this proposal as a new means by which to  
11 collect revenue.

12 **Q: Avista's testimony states that the fee will be 1 percent per month for bills that are**  
13 **approximately 30 days late. Does Avista provide any more details regarding its**  
14 **proposed late payment charge policies and procedures?**

15 A: No. The Company has not provided any information on a policy for the late charge. For  
16 example, Avista has not provided information on what portion of the bill could be subject  
17 to the fee, whether a customer could be disconnected for failing to pay the late fee, how  
18 the company would prevent erroneous late charges, or if any customers (such as LIRAP  
19 customers or customers with medical certificates) might be exempt.

20 **Q: Are there reasons to be concerned about this proposal?**

21 A: Yes. Aside from the obvious lack of evidence in support of and information about the late  
22 payment charge proposal, there are reasons for concern, especially for low-income

customers. Even without greater detail or rationale, the late payment proposal is  
troublesome.

**Q: How do late payment charges affect low-income customers?**

A: Late payment charges disproportionately affect low-income customers because of their inability to pay. While we do not know Avista's rationale for this policy, it might be assumed that the Company seeks prompter payment from its customers. In this case, it is reasonable to ask whether a late payment charge designed to induce prompt payment will in fact achieve its goal in those instances when non-payment occurs in households who are unable to pay.

Numerous studies have examined the priority in which residential customers pay various household bills. Their findings revealed that *all* residential customers overwhelmingly place the payment of their utility bills as their highest priority, even low-income customers.<sup>72</sup> Low-income households are not unwilling to pay; they do not pay because they cannot afford to pay. Increasing their bill will not provide an incentive to make prompter payments. Instead, late payment charges only make it more difficult for low-income customers to pay their bills.

**Q: Is there any evidence that the costs associated with late payments are related to the amounts that Avista would recover through a late payment charge?**

A: No. Avista offers no cost-analysis to prove this. It is not reasonable to assume that Avista needs a late payment charge in order to adequately recover costs. The Company has not demonstrated that there are related costs that would necessitate a fee that is equivalent to

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<sup>72</sup> Direct Testimony of Roger D. Colton on behalf of Community Action New Mexico, before the New Mexico Public Regulation Commission, Case No. 06-00210-UT, November 2006, p. 10, l. 2--p. 11, l. 6.

12 percent per year and that would generate over \$1 million in new revenue. Proponents  
of late payment charges will frequently argue that they are necessary in order to recover  
costs associated with bills that are paid late. In fact, utility companies are often unable to  
prove that the costs related to unpaid bills justify the terms or amounts of a late payment  
charge. Instead, the late payment charge serves as a source of revenue for companies, and  
that burden is disproportionately carried by low-income households, who are the  
customers least able to afford it.

**Q: Why should low-income customers be of specific concern in this case?**

A: As discussed by Public Counsel witness Hornby, Avista's service territory includes a  
considerable low-income population. Avista's LIRAP budget is approximately \$3 million  
per year, and undoubtedly, the low-income population is significantly underserved at that  
level. As a means of comparison, this late payment charge would cost customers the  
equivalent of roughly one-third of the  
current LIRAP budget. This program is in need of greater funding in order to address the  
need that already exists, not to mention the increased need if Avista's rate request were to  
go into effect. The late payment charge would have a harsh impact on Avista's customers  
who already face the staggering burden of persistent rate increases. Through this late  
payment charge Avista only adds additional strain on the households who already cannot  
afford to pay their bills.

**Q: Does this conclude your testimony?**

A: Yes.