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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF AVISTA CORPORATION FOR THE AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC AND NATURAL GAS SERVICE TO ELECTRIC AND NATURAL GAS CUSTOMERS IN THE STATE OF IDAHO)	CASE NO. AVU-E-10-01 CASE NO. AVU-G-10-01 DIRECT TESTIMONY OF WILLIAM E. AVERA

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

DIRECT TESTIMONY OF WILLIAM E. AVERA

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I. INTRODUCTION

Q. Please state your name and business address.

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

Q. In what capacity are you employed?

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

Q. Please describe your educational background and professional experience.

A. A description of my background and qualifications, including a resume containing the details of my experience, is attached as Schedule 1 of Exhibit No. 3.

A. Overview

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

A. The purpose of my testimony is to present to the Idaho Public Utilities Commission (the "Commission" or "IPUC") my independent evaluation of the fair rate of return on equity ("ROE") for the jurisdictional electric and gas utility operations of Avista Corp. ("Avista" or "the Company"). In addition, I also examined the reasonableness of Avista's capital structure, considering both the specific risks faced by the Company and other industry guidelines.

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

A. To prepare my testimony, I used information from a variety of sources that would normally be relied upon by a person in my capacity. I am familiar with the organization, finances, and operations of Avista from my participation in prior proceedings before the IPUC, the Washington Utilities and Transportation Commission, and the Oregon Public Utility Commission. In connection with the present filing, I considered and relied upon corporate disclosures, publicly available financial reports and filings, and other published information relating to Avista. I also reviewed information relating generally to current capital market conditions and specifically to current investor perceptions, requirements, and expectations for Avista's utility operations. These sources, coupled with my experience in the fields of finance and utility regulation, have given me a working knowledge of the issues relevant to investors' required return for Avista, and they form the basis of my analyses and conclusions.

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

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

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

A. I first reviewed the operations and finances of Avista and industry-specific risks and capital market uncertainties perceived by investors. With this as a background, I conducted various well-accepted quantitative analyses to estimate the current cost of equity, including alternative applications of the discounted cash flow

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[1] *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679 (1923).
[2] *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

("DCF") model and the Capital Asset Pricing Model ("CAPM"), as well as reference to expected earned rates of return for utilities. Based on the cost of equity estimates indicated by my analyses, the Company's ROE was evaluated taking into account the specific risks and potential challenges for Avista's utility operations in Idaho.

B. Summary of Conclusions

Q. What are your findings regarding the 10.9 percent ROE requested by Avista?

A. Based on the results of my analyses and the economic requirements necessary to support continuous access to capital under reasonable terms, I determined that 10.9 percent is a conservative estimate of investors' required ROE for Avista. The bases for my conclusion are summarized below:

- In order to reflect the risks and prospects associated with Avista's jurisdictional utility operations, my analyses focused on a proxy group of seventeen other utilities with comparable investment risks. Consistent with the fact that utilities must compete for capital with firms outside their own industry, I also referenced a proxy group of comparable risk companies in the non-utility sector of the economy;
- Because investors' required return on equity is unobservable and no single method should be viewed in isolation, I applied both the DCF and CAPM methods, as well as the comparable earnings approach, to estimate a fair ROE for Avista;
- Based on my evaluation of the strength of the various methods, I concluded that the cost of equity for the proxy groups of utilities and non-utility companies is in the **10.9 percent to 12.5**

percent range, or **11.1 percent to 12.7 percent** after incorporating an adjustment to account for the impact of common equity flotation costs;

- Because Avista's requested ROE of 10.9 percent falls at the very bottom of my "bare bones" cost of equity range, it represents a conservative estimate of investors' required rate of return.

Q. What other evidence did you consider in evaluating your ROE recommendation in this case?

A. My recommendation is reinforced by the following findings:

- The reasonableness of a 10.9 percent minimum ROE for Avista is supported by the need to consider the Company's credit standing, which remains relatively weak:
  - o The pressure of funding significant capital expenditures of $420 million[3] in the next two years, given that the Company's rate base is $2.1 billion, coupled with increased operating risks, heighten the uncertainties associated with Avista;
  - o Because of Avista's reliance on hydroelectric generation and increasing dependence on natural gas fueled capacity, the Company is exposed to relatively greater risks of power cost volatility, even with the Power Cost Adjustment Mechanism ("PCA");
  - o Given that Avista's credit ratings already fall at the very bottom of the investment grade scale, and considering the potential for continued regulatory lag, an inadequate rate of return imposed in this proceeding would further pressure the Company's financial flexibility and credit standing;
  - o My conclusion that a 10.9 percent ROE for Avista is a conservative estimate of investors' required return is also reinforced by the Company's relatively greater risks as compared with the proxy groups, the greater

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[3] Excluding investment for federal stimulus projects involving "smart grid".

uncertainties associated with Avista's relatively small size, and the economic reality that Avista's actual returns have fallen systematically short of the allowed ROE.

- Sensitivity to financial market and regulatory uncertainties has increased dramatically and investors recognize that constructive regulation is a key ingredient in supporting utility credit standing and financial integrity; and,
- Providing Avista with the opportunity to earn a return that reflects these realities is an essential ingredient to support the Company's financial position, which ultimately benefits customers by ensuring reliable service at lower long-run costs.
- Regulatory support, including a reasonable ROE, will be a key driver in securing additional progress towards continued improvement in the Company's financial health. Further strengthening Avista's financial integrity is imperative to ensure that the Company has the capability to maintain an investment grade rating while confronting potential challenges associated with funding infrastructure development necessary to meet the needs of its customers.

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

A. Based on my evaluation, I concluded that a common equity ratio of 50.0 percent represents a reasonable basis from which to calculate Avista's overall rate of return. This conclusion was based on the following findings:

- Avista's requested capitalization is consistent with the Company's need to strengthen its credit standing and financial flexibility as it seeks to raise additional capital to fund significant system investments and meet the requirements of its service territory;
- Avista's proposed common equity ratio is entirely consistent with the range of common equity ratios

maintained by the proxy group of utilities. It is also in-line with the 48.3 percent and 49.7 percent average equity ratios for the proxy utilities, based on year-end 2009 data and near-term expectations, respectively;

- My conclusion is reinforced by the investment community's focus on the need for a greater equity layer to accommodate higher operating risks and the pressures of funding significant capital investments. This is reinforced by the need to consider the impact of uncertain capital markets conditions, as well as off-balance sheet commitments such as purchased power agreements, which carry with them some level of imputed debt.

II. RISKS OF AVISTA

Q. What is the purpose of this section?

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

A. Operating Risks

Q. How does Avista's generating resource mix affect investors' risk perceptions?

A. Because over 40 percent of Avista's total energy requirements are provided by hydroelectric facilities, the Company is exposed to a level of uncertainty not faced by most utilities. While hydropower confers advantages in terms of fuel cost savings and diversity, reduced hydroelectric generation due to below-average water conditions forces Avista to rely more heavily on wholesale power markets or more costly thermal generating capacity to meet its resource needs. As Standard & Poor's Corporation ("S&P") has observed:

> A reduction in hydro generation typically increases an electric utility's costs by requiring it to buy replacement power or run more expensive generation to serve customer loads. Low hydro generation can also reduce utilities' opportunity to make off-system sales. At the same time, low hydro years increase regional wholesale power prices, creating potentially a double impact - companies have to buy more power than under normal conditions, paying higher prices.[4]

Investors recognize that volatile energy markets, unpredictable stream flows, and Avista's reliance on wholesale purchases to meet a significant portion of its resource needs can expose the Company to the risk of reduced cash flows and unrecovered power supply costs. S&P noted that Avista, along with Idaho Power Company, "face the most substantial risks despite their PCAs and cost-update mechanisms,"[5] and concluded that Avista's "chief risk is the electric utility's exposure to replacement power costs, particularly in low water years."[6] Fitch Ratings Ltd. ("Fitch") concluded, "Avista's earnings and cash flows are adversely affected when hydroelectric generation production falls below levels factored into

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[4] Standard & Poor's Corporation, "Pacific Northwest Hydrology And Its Impact On Investor-Owned Utilities' Credit Quality," *RatingsDirect* (Jan. 28, 2008).
[5] Id.
[6] Standard & Poor's Corporation, "Avista Corp.," *RatingsDirect* (Aug. 21, 2009).

commission -approved rates due to lower-than-projected streamflows."[7]

Additionally, Avista has become increasingly reliant on natural gas fired generating capacity to meet base-load needs. Given the significant price fluctuations experienced in energy markets discussed subsequently, increasing reliance on natural gas heightens Avista's exposure to fuel cost volatility.

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

A. Most definitely. Avista will require capital investment to meet customer growth, provide for necessary maintenance and replacements of its natural gas utility systems, as well as fund new investment in electric generation, transmission and distribution facilities. As discussed by Company witness Mr. Thies, planned capital additions for 2010-2011 alone total approximately $420 million, with $1.2 billion in expenditures being expected through 2014. This represents a substantial investment given Avista's rate base was $2.1 billion as of year-end 2009.

Continued support for Avista's financial integrity and flexibility will be instrumental in attracting the capital

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[7] Fitch Ratings, Ltd., "Avista Corp.," *Global Power U.S. Credit Analysis* (Jul. 31, 2009).

necessary to fund these projects in an effective manner. Avista's reliance on purchased power to meet shortfalls in hydroelectric generation magnifies the importance of strengthening financial flexibility, which is essential to guarantee access to the cash resources and interim financing required to cover inadequate operating cash flows, as well as fund required investments in the utility system.

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

A. Yes. In recent years utilities and their customers have had to contend with dramatic fluctuations in energy costs due to ongoing price volatility in the spot markets, and investors recognize the prospect of further turmoil in energy markets. Moody's Investors Service ("Moody's") has warned investors of ongoing exposure to "extremely volatile" energy commodity costs, including purchased power prices, which are heavily influenced by fuel costs,[8] and Fitch noted that rapidly rising energy costs created vulnerability in the utility industry.[9]

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[8] Moody's Investors Service, "Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector," *Special Comment* at 6 (Aug. 2007).

[9] Fitch Ratings Ltd., "Staying Afloat: Downstream Liquidity in the Energy and Power Sectors," *Oil & Gas / Global Power Special Report* (June 16, 2008).

For example, the utility industry and its customers have had to contend with dramatic fluctuations in gas costs due to ongoing price volatility in the spot markets. Fitch has highlighted the challenges that fluctuations in energy prices can have for utilities and noted that:

> The sharp run-up and subsequent collapse of natural gas prices in 2008 is emblematic of the extreme price volatility that characterizes the commodity and is likely to persist in the future.[10]

Moody's concluded that natural gas "remains highly volatile," and warned that such price fluctuations "could have a significant impact on a utility's liquidity profile."[11]

While expectations for significantly lower energy prices reflect weaker fundamentals affecting current load and fuel prices, investors recognize the potential that such trends could quickly reverse. As Fitch recently noted, "uncertainty regarding fuel prices, in particular natural gas costs, has made planning for the future even more problematic."[12] Besides discouraging potential customers from choosing natural gas, causing certain existing users to substitute alternative fuels, and leading

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[10] Fitch Ratings, Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North American Special Report* (Dec. 22, 2008).

[11] Moody's Investors Service, "Carbon Risks Becoming More Imminent for U.S. Electric Utility Sector," *Special Comment* (March 2009).

[12] Fitch Ratings, Ltd., "Electric Utility Capital Spending: The Show Will Go On," *Global Power U.S. and Canada Special Report* (Oct. 14, 2009).

to decreased customer usage, volatile natural gas prices have increased the risks of investing in natural gas distribution utilities and placed additional pressure on their bond ratings. The rapid rise in customers' bills that can result from higher wholesale energy prices has also heightened investor concerns over the implications for regulatory uncertainty. Moody's concluded that political risks associated with "growing consumer intolerance for steadily increasing rates" was a key longer-term challenge for utilities that would be intensified by prolonged unemployment.[13]

Q. What other financial pressures impact investors' risk assessment of Avista?

A. Investors are aware of the financial and regulatory pressures faced by utilities associated with rising costs and the need to undertake significant capital investments. As Moody's observed:

> Utilities remain exposed to large, long-term capital investment challenges, volatile commodity prices and legal judgments that can wreak havoc on even the strongest liquidity profiles.[14]

Similarly, S&P noted that cost increases and capital projects, along with uncertain load growth, were a

[13] Moody's Investors Service, "U.S. Electric Utilities Face Challenges Beyond Near-Term," *Industry Outlook* (Jan. 2010).
[14] Id.

significant challenge to the utility industry.[15] Fitch echoed this assessment, concluding:

> The combination of high capital expenditures and relatively weak electricity demand will continue to pressure credit quality and require base rate increases in 2010 and beyond.[16]

While providing the infrastructure necessary to meet the energy needs of customers is certainly desirable, it imposes additional financial responsibilities on Avista. As noted earlier, the Company's plans include electric utility capital expenditures of approximately $420 million just over the 2010-2011 period, and Moody's has noted that Avista "is continuing its high level of investment."[17] Investors are aware of the challenges posed by rising costs and burdensome capital expenditure requirements, especially in light of Avista's relatively weak credit standing and ongoing capital market and economic uncertainties.

Q. What other considerations affect investors' evaluation of Avista?

A. Utilities are confronting increased environmental pressures that could impose significant uncertainties and costs. In early 2007 S&P cited environmental mandates, including emissions, conservation, and renewable resources,

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[15] Standard & Poor's Corporation, "Industry Economic And Ratings Outlook," *RatingsDirect* (Feb. 2, 2010).
[16] Fitch Ratings Ltd., "U.S. Utilities, Power, and Gas 2010 Outlook," *Global Power North America Special Report* (Dec. 4, 2009).
[17] Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Research* (Aug. 13, 2009).

as one of the top ten credit issues facing U.S. utilities.[18] Similarly, Moody's noted that "the prospect for new environmental emission legislation - particularly concerning carbon dioxide - represents the biggest emerging issue for electric utilities,"[19] while Fitch observed that "the structure, timing and implementation is still uncertain."[20]

Compliance with evolving standards will undoubtedly require significant capital expenditures, with S&P recently concluding, "Although we expect the cap-and-trade program to be economywide and affect a variety of sectors, it will disproportionately affect the power sector."[21] S&P recently emphasized that because of uncertainty over the details and timing of future limits on CO_2 emissions, existing ratings do not fully reflect the impact of carbon risks.[22]

Q. Would investors consider Avista's relative size in their assessment of the Company's risks and prospects?

A. Yes. A firm's relative size has important implications for investors in their evaluation of alternative investments, and it is well established that

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[18] Standard & Poor's Corporation, "Top Ten Credit Issues Facing U.S. Utilities," *RatingsDirect* (Jan. 29, 2007).
[19] Moody's Investors Service, "U.S. Investor-Owned Electric Utilities," *Industry Outlook* (Jan. 2009).
[20] Fitch Ratings, Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22, 2008).
[21] Standard & Poor's Corporation, "The Potential Credit Impact Of Carbon Cap-And-Trade Legislation On U.S. Companies," *RatingsDirect* (Sep. 14, 2009).
[22] *Id.*

smaller firms are more risky than larger firms. With a market capitalization of approximately $1.1 billion, Avista is one of the smallest publicly traded electric utilities followed by Value Line, which have an average capitalization of approximately $6.7 billion.[23]

The magnitude of the size disparity between Avista and other firms in the utility industry has important practical implications with respect to the risks faced by investors. All else being equal, it is well accepted that smaller firms are more risky than their larger counterparts, due in part to their relative lack of diversification and lower financial resiliency.[24] These greater risks imply a higher required rate of return, and there is ample empirical evidence that investors in smaller firms realize higher rates of return than in larger firms.[25] Common sense and accepted financial doctrine hold that investors require higher returns from smaller companies, and unless that compensation is provided in the rate of return allowed for a utility, the legal tests embodied in the *Hope* and *Bluefield* cases cannot be met.

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[23] www.valueline.com (retrieved Mar. 5, 2010).
[24] It is well established in the financial literature that smaller firms are more risky than larger firms. See, *e.g.*, Eugene F. Fama and Kenneth R. French, "The Cross-Section of Expected Stock Returns", *The Journal of Finance* (June 1992); George E. Pinches, J. Clay Singleton, and Ali Jahankhani, "Fixed Coverage as a Determinant of Electric Utility Bond Ratings", *Financial Management* (Summer 1978).
[25] See for example Rolf W. Banz, "The Relationship Between Return and Market Value of Common Stocks", *Journal of Financial Economics* (September 1981) at 16.

B. <u>Implications of Attrition</u>

Q. What causes attrition?

A. Attrition is the deterioration of actual return below the allowed return that occurs when the relationships between revenues, costs, and rate base used to establish rates (e.g., using a historical test year without adequate adjustments) do not reflect the actual costs incurred to serve customers during the period that rates are in effect. For example, if external factors are driving costs to increase more than revenues, then the rate of return will fall short of the allowed return even if the utility is operating efficiently. Similarly, when growth in the utility's investment outstrips the rate base used for ratemaking, the earned rate of return will fall below the allowed return through no fault of the utility's management. These imbalances are exacerbated as the regulatory lag increases between the time when the data used to establish rates is measured and the date when the rates go into effect.

Q. Why is it necessary to address the impact of attrition?

A. Investors are concerned with what they can expect in the future, not what they might expect in theory if a historical test year were to repeat. To be fair to investors and to benefit customers, a regulated utility must have an <u>opportunity to actually earn</u> a return that will maintain financial integrity, facilitate capital attraction, and compensate for risk. In other words, it is the end result in the future that determines whether or not the *Hope* and *Bluefield* standards are met. S&P observed that its risk analysis focuses on the utility's ability to consistently <u>earn</u> a reasonable return:

> Notably, the analysis does not revolve around "authorized" returns, but rather on actual earned returns. We note the many examples of utilities with healthy authorized returns that, we believe, have no meaningful expectation of actually earning that return because of rate case lag, expense disallowances, etc.[26]

Similarly, Moody's concluded, "we evaluate the framework and mechanisms that allow a utility to recover its costs and investments and earn allowed returns. We are less concerned with the official allowed return on equity, instead focusing on the earned returns and cash flows."[27]

Q. Has the investment community recognized the risks associated with attrition and lag in its evaluation of Avista?

A. Yes. As discussed in the testimony of Mr. Thies, Avista is experiencing regulatory lag. S&P confirmed that attrition has acted as a drag on Avista's finances:

> Regulatory lag has been a consistent issue for Avista's utilities, with the utility operations …

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[26] Standard & Poor's Corporation, "Assessing U.S. Utility Regulatory Environments," *RatingsDirect* (Nov. 7, 2008).
[27] Moody's Investors Service, "Electric Utilities Face Challenges Beyond Near-Term," *Industry Outlook* (Jan. 2010).

> collectively unable to earn the company's authorized return on equity (ROE) on a consolidated basis. On a consolidated basis, average earned ROE over the past three years has been just under 7%, based on Standard & Poor's Ratings Services' calculations.[28]

Similarly, Value Line recently noted that the effects of regulatory lag were hampering Avista's ability to earn its allowed ROE, which is expected to be an ongoing issue for the Company.[29]

Q. What are the ways to deal with attrition?

A. For many utilities, the widespread adoption of pass-through clauses for fuel, purchased power, and other costs that were rising rapidly in the late 1970's and early 1980's helped to partially offset the impact of attrition. The use of future test years and other forward-looking adjustments and mechanisms is also useful in ameliorating the impact of attrition, as is accelerated depreciation and inclusion of CWIP in rate base, particularly where financing an expensive generating plant addition is undermining a utility's financial indicators. Many jurisdictions have developed methods to attenuate regulatory lag, such as allowing interim rates, putting rates into effect subject to refund, as well as

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[28] Standard & Poor's Corporation, "Summary: Avista Corp.," *RatingsDirect* (Feb. 18, 2010).
[29] The Value Line Investment Survey at 2232 (Feb. 5, 2010).

accelerating the administrative process to allow faster rate decisions.

Q. Is it reasonable to consider the impact of Avista's exposure to attrition?

A. Yes. Setting rates at a level that considers the impact of attrition and allows the utility an opportunity to actually earn its authorized ROE is consistent with fundamental regulatory principles. Central to the determination of reasonable rates for utility service is the notion that owners of public utility properties are protected from confiscation. The Supreme Court has reaffirmed that the end result test must be applied to the actual returns that investors expect if they put their money at risk to finance utilities.[30] This end result can only be achieved for Avista if the allowed return is sufficient to offset the impact of attrition. That end result would maintain the utility's financial integrity, ability to attract capital and offer investors fair compensation for the risk they bear. Attrition will continue to result in under-earning the allowed ROE if the

[30] *Verizon Communications, et al v. Federal Communications Commission, et al*, 535 U.S. 467 (2002). While I cannot comment on the legal significance of this case, I found the economic wisdom of looking to the reasonable expectations of actual investors compelling. Economic logic and common sense confirm that a utility cannot attract capital on reasonable terms if investors expect future returns to fall short of those offered by comparable investments.

impact of regulatory lag and rising capital requirements are ignored.

In real world capital markets, investors have many competing places to put their money. If the money that is dedicated to utility public service does not have an opportunity to earn a return commensurate with that available from alternatives of equivalent risk in the capital markets, investors are not being adequately compensated for the use of their money and bearing risk. Since the capital dedicated to utility service cannot be withdrawn from public service, its economic value to investors is reduced by the amount necessary to make the utility investment competitive with alternative investments on the open market. This reduction in economic value necessary to bring the rate of earnings on utility investment into line with market opportunities of commensurate risk constitutes a taking of investors' capital by the governmental authority setting rates.

C. Impact of Capital Market Conditions

Q. What are the implications of recent capital market conditions?

A. The financial and real estate crisis that accelerated during the third quarter of 2008 led to unprecedented price fluctuations in the capital markets as investors dramatically revised their risk perceptions and required returns. As a result of investors' trepidation to commit capital, stock prices declined sharply while the yields on corporate bonds experienced a dramatic increase.

With respect to utilities specifically, as of December 2009, the Dow Jones Utility Average stock index remained almost 30 percent below the level in June 2008. This sell-off in common stocks and sharp fluctuations in utility bond yields reflect the fact that the utility industry was not immune to the impact of financial market turmoil and the ongoing economic downturn. As the Edison Electric Institute ("EEI") noted in a letter to congressional representatives as the financial crisis intensified, capital market uncertainties have serious implications for utilities and their customers:

> In the wake of the continuing upheaval on Wall Street, capital markets are all but immobilized, and short-term borrowing costs to utilities have already increased substantially. If the financial crisis is not resolved quickly, financial pressures on utilities will intensify sharply, resulting in higher costs to our customers and, ultimately, could compromise service reliability.[31]

Similarly, an October 1, 2008, *Wall Street Journal* report confirmed that utilities had been forced to delay borrowing or pursue more costly alternatives to raise

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[31] *Letter to House of Representatives*, Thomas R. Kuhn, President, Edison Electric Institute (Sep. 24, 2008).

funds.[32] In December 2008, Fitch confirmed "sharp repricing of and aversion to risk in the investment community," and noted that the disruptions in financial markets and the fundamental shift in investors' risk perceptions had increased the cost of capital for utilities.[33]:

More recently, Fitch concluded, "While utilities maintained relatively good market access during the credit crisis, the cost of capital is higher than prior to the credit crisis, and bank credit remains relatively tight."[34] Similarly, S&P confirmed that utilities are expected to maintain access to credit in 2010, "albeit at more demanding terms than in the previous cycle,"[35] with Moody's noting that "costs associated with credit facilities have increased significantly."[36]

Q. How do current interest rates on long-term bonds compare with those projected for the next few of years?

A. Table WEA-1 below compares current interest rates on 30-year Treasury bonds, double-A rated utility bonds, and triple-A rated corporate bonds with those projected for

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[32] Smith, Rebecca, "Corporate News: Utilities' Plans Hit by Credit Markets," *Wall Street Journal* at B4 (Oct. 1, 2008).
[33] Fitch Ratings Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22. 2008).
[34] Fitch Ratings Ltd., "Electric Utility Capital Spending: The Show Will Go On," *Global Power U.S. and Canada Special Report* (Oct. 14, 2009).
[35] Standard & Poor's Corporation, "Industry Report Card: U.S. Regulated Electric Utilities Head Into 2010 With Familiar Concerns," *RatingsDirect* (Dec. 28, 2009).
[36] Moody's Investors Service, "U.S. Electric Utilities Face Challenges Beyond Near-Term," *Industry Outlook* (Jan. 2010).

2010 through 2014 by the Value Line Investment Survey ("Value Line"), IHS Global Insight, the Energy Information Administration ("EIA"), a statistical agency of the U.S. Department of Energy ("DOE"):

TABLE WEA-1
INTEREST RATE TRENDS

	2010	2011	2012	2013	2014	Feb. 2010 (a)
30-Yr. Treasury						
Value Line (a)	4.6%	4.9%	5.3%	5.8%	6.3%	4.6%
IHS Global	4.6%	4.6%	4.9%	5.2%	5.8%	4.6%
AAA Corporate						
Value Line (b)	5.8%	6.0%	6.4%	6.7%	7.0%	5.4%
IHS Global Insight (c)	5.3%	5.5%	5.9%	6.2%	6.7%	5.4%
S&P (d)	5.8%	6.8%	7.5%	7.6%	--	5.4%
AA Utility						
IHS Global	5.6%	5.8%	6.3%	6.6%	7.2%	5.7%
EIA (e)	6.7%	6.4%	6.5%	6.8%	7.2%	5.7%

(a) Based on monthly average bond yields for January 2010 reported at www.credittrends.moodys.com and http://www.federalreserve.gov/releases/h15/data.htm.
(b) The Value Line Investment Survey, *Forecast for the U.S. Economy* (Feb. 26, 2010).
(c) IHS Global Insight, *The U.S. Economy: The 30-Year Focus"* (Third-Quarter 2009) at Table 34.
(d) Standard & Poor's Corporation, "U.S. Economic Forecast: To A Prosperous New Year," *RatingsDirect* (Jan. 11, 2009).
(e) Energy Information Administration, *Annual Energy Outlook 2010, Early Release* (Dec. 5, 2009) at Table 20.

As evidenced above, there is a clear consensus that the cost of permanent capital will be higher in the 2010-2014 timeframe than it is currently. As a result, current cost of capital estimates are likely to understate investors' requirements at the time the outcome of this proceeding becomes effective and beyond.

Q. What do these events imply with respect to the ROE for Avista?

A. No one knows the future of our complex global economy. We know that the financial crisis had been building for a long time and few predicted that the economy would fall as rapidly as it has, or that corporate bond yields would fluctuate as dramatically as they did. While conditions in the economy and capital markets appear to have stabilized, investors are apt to react swiftly and negatively to any future signs of trouble in the financial system or economy. As the *Wall Street Journal* recently noted:

> Stocks pulled out of a 167-point hole with a late rally Friday, capping a wild week reminiscent of the most volatile days of the credit crisis. … It was a return to the unusual relationships, or correlations, seen at major flash points over the past two years when investors fled risky assets and jumped into safe havens. This market behavior, which has reasserted itself repeatedly since the financial crisis began, suggests that investment decisions are still being driven more by government support and liquidity concerns than market fundamentals.[37]

Given the importance of reliable electric and gas utility service for customers and the economy, it would be unwise

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[37] Gongloff, Mark, "Stock Rebound Is a Crisis Flashback - Late Surge Recalls Market's Volatility at Peak of Credit Difficulties; Unusual Correlations," *Wall Street Journal* at B1 (Feb. 6, 2010).

to ignore investors' increased sensitivity to risk in evaluating Avista's ROE.

D. Support For Avista's Credit Standing

Q. What credit ratings have been assigned to Avista?

A. Avista has been assigned a corporate credit rating of "BBB-" by S&P and an issuer default rating of "BBB-"by Fitch. Moody's has assigned the Company an issuer rating of "Baa3". S&P and Moody's have revised their credit outlook on Avista to "positive", indicating the potential for higher ratings going forward.[38] The current ratings assigned by S&P, Moody's, and Fitch represent the lowest rung on the ladder of the investment grade scale.

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

A. The past decade witnessed steady erosion in credit quality throughout the utility industry, both as a result of revised perceptions of the risks in the industry and the weakened finances of the utilities themselves. S&P recently reported that the majority of the companies in the

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[38] Standard & Poor's Corporation, "Research Update: Outlook On Avista Corp. Credit Rating Revised To Positive; Ratings Affirmed," *RatingsDirect* (Aug. 10, 2009); Moody's Investors Service, "Ratings Action: Avista Corp.," *Global Credit Research Ratings Action* (Aug. 12, 2009).

utility sector now fall in the triple-B rating category.[39] Going forward, S&P observed that:

> Looming costs associated with environmental compliance, slack demand caused by economic weakness, the potential for permanent demand destruction caused by changes in consumer behavior and closing of manufacturing facilities, and numerous regulatory filings seeking recovery of costs are some of the significant challenges the industry has to deal with.[40]

Q. How does Avista's relative credit standing compare with others in the utility industry?

A. Avista's credit ratings remain at the very bottom of the investment grade scale, and in a recent report by S&P ranking U.S. regulated utilities from strongest to weakest, Avista was ranked 145 out of the total 181 companies with investment grade credit ratings.[41] Meanwhile, in a ranking of electric and gas utility parent companies, Fitch placed Avista at 34th position out of 49 companies.[42]

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[39] Standard & Poor's Corporation, "Issuer Ranking: U.S. Regulated Electric Utilities, Strongest To Weakest," *RatingsDirect* (Mar. 2, 2010).
[40] Standard & Poor's Corporation, "U.S. Regulated Electric Utilities Head Into 2010 With Familiar Concerns," *RatingsDirect* (Dec. 28, 2009).
[41] Standard & Poor's Corporation, "Issuer Ranking: U.S. Regulated Electric Utilities, Strongest To Weakest," *RatingsDirect* (Mar. 2, 2010).
[42] Fitch Ratings Ltd., "U.S. Utilities, Power, and Gas 2010 Outlook," *Global Power North America Special Report* (Dec. 4, 2009).

Q. What are the implications of Avista's relative credit standing, given the potential for further dislocations in the capital markets?

A. As documented earlier and in the testimony of Mr. Mark Thies, investors' concerns are magnified by the fact that its credit standing remains relatively weak. The Company's efforts to regain investment grade credit ratings have been successful, but Avista's finances remain pressured.

Fitch observed that when credit market conditions are unsettled, "'flight to quality' is selective within the [utility] sector, favoring companies at higher rating levels."[43] Because Avista's ratings are at the very bottom of the investment grade barrel, there is no backstop in the event of a recurring capital market crisis and reduced flexibility to respond to other challenges, such as a continuation of poor hydro conditions or increased capital outlays. As Mr. Thies confirms in his testimony, regulatory support will be a key driver in securing additional progress towards restoring the Company's financial health. Further strengthening Avista's financial integrity and continued progress in raising the Company's credit standing is imperative to ensure the capability to

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[43] *Id.*

maintain an investment grade rating while confronting potential challenges.

Moreover, the negative impact of declining credit quality on a utility's capital costs and financial flexibility becomes more pronounced as debt ratings move down the scale from investment to non-investment grade. As the Chairman of the New York State Public Service Commission noted in his role as spokesman for the National Association of Regulatory Utility Commissioners:

> While there is a large difference between A and BBB, there is an even brighter line between Investment Grade (BBB-/Baa3 bond ratings by S&P/Moody's, and higher) and non-Investment Grade (Junk) (BB+/Ba1 and lower). The cost of issuing non-investment grade debt, assuming the market is receptive to it, has in some cases been hundreds of basis points over the yield on investment grade securities. To me this suggests that you do not want to be rated at the lower end of the BBB range because an unexpected shock could move you outside the investment grade range.[44]

The pressures of significant capital expenditure requirements reinforce the importance of supporting continued improvement in Avista's credit standing. Investors understand from past experience in the utility industry that large capital needs can lead to significant deterioration in financial integrity that can constrain access to capital, especially during times of unfavorable

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[44] Brown, George, "Credit and Capital Issues Affecting the Electric Power Industry," *Federal Energy Regulatory Commission Technical Conference* (Jan. 13, 2009).

capital market conditions. Considering the weakened state of financial markets, competition with other investment alternatives, and investors' sensitivity to the potential for market volatility, greater credit strength is a key ingredient in maintaining access to capital at reasonable cost. With Avista's credit ratings poised on the precipice between investment grade and junk bond status, the stakes associated with an inadequate rate of return are increased dramatically. In turn, the need for supportive regulation and an adequate ROE may never have been greater.

E. Capital Structure

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

A. Yes. Other things equal, a higher debt ratio, or lower common equity ratio, translates into increased financial risk for all investors. A greater amount of debt means more investors have a senior claim on available cash flow, thereby reducing the certainty that each will receive his contractual payments. This increases the risks to which lenders are exposed, and they require correspondingly higher rates of interest. From common shareholders' standpoint, a higher debt ratio means that there are proportionately more investors ahead of them, thereby increasing the uncertainty as to the amount of cash flow, if any, that will remain.

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

A. Avista's capital structure is presented in the testimony of Mr. Thies. As summarized in his testimony, the pro-forma common equity ratio used to compute Avista's overall rate of return was 50.0 percent in this filing.

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

A. As shown on Schedule 3, for the 17 firms in the utility proxy group, common equity ratios at December 31, 2009 ranged between 42.8 percent and 63.4 percent and averaged 48.3 percent.

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

A. As shown on Schedule 3, The Value Line Investment Survey ("Value Line") expects an average common equity ratio for the proxy group of utilities of 49.7 percent for its three-to-five year forecast horizon, with the individual common equity ratios ranging from 41.0 percent to 59.5 percent.

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

A. The 50.0 percent common equity ratio requested by Avista is entirely consistent with the range of equity ratios maintained by the firms in the Utility Proxy Group and is in-line with the 48.3 percent and 49.7 percent average equity ratios at year-end 2009 and based on Value Line's near-term expectations, respectively.

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

A. As discussed earlier, the average credit rating associated with firms in the electric industry has fallen to triple-B, with Avista's "BBB-" rating occupying the lowest rung on the ladder of the investment grade scale. At the same time, utilities are facing uncertainties on a number fronts, including the need to finance significant capital investment plans and ongoing regulatory risks. Coupled with the potential for further turmoil in capital markets, these considerations warrant a stronger balance sheet to deal with an increasingly uncertain environment. A more conservative financial profile, in the form of a higher common equity ratio, is consistent with increasing uncertainties and the need to maintain the continuous access to capital that is required to fund operations and necessary system investment, even during times of adverse capital market conditions.

Moody's has repeatedly warned investors of the risks associated with debt leverage and fixed obligations and advised utilities not to squander the opportunity to strengthen the balance sheet as a buffer against future uncertainties.[45] More recently, Moody's concluded:

> From a credit perspective, we believe a strong balance sheet coupled with abundant sources of liquidity represents one of the best defenses against business and operating risk and potential negative ratings actions.[46]

Similarly, S&P recently noted that, "we generally consider a debt to capital level of 50% or greater to be aggressive or highly leveraged for utilities."[47] Fitch affirmed that it expects regulated utilities "to extend their conservative balance sheet stance in 2010," and employ "a judicious mix of debt and equity to finance high levels of planned investments."[48] This is especially the case for Avista, which faces the dual challenge of financing significant capital expansion plans while at the same time endeavoring to improve its credit standing.

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

A. Depending on their specific attributes, contractual agreements or other obligations that require the utility to make specified payments may be treated as

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[45] Moody's Investors Service, "Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector," *Special Comment* (Aug. 2007); "U.S. Electric Utility Sector," *Industry Outlook* (Jan. 2008).
[46] Moody's Investors Service, "U.S. Electric Utilities Face Challenges Beyond Near-Term," *Industry Outlook* (Jan. 2010).
[47] Standard & Poor's Corporation, "Ratings Roundup: U.S. Electric Utility Sector Maintained Strong Credit Quality In A Gloomy 2009," *RatingsDirect* (Jan. 26, 2010).
[48] Fitch Ratings Ltd., "U.S. Utilities, Power, and Gas 2010 Outlook," *Global Power North America Special Report* (Dec. 4, 2009).

debt in evaluating Avista's financial risk. Power purchase agreements ("PPAs") and leases typically obligate the utility to make specified minimum contractual payments akin to those associated with traditional debt financing and investors consider a portion of these commitments as debt in evaluating total financial risks. Because investors consider the debt impact of such fixed obligations in assessing a utility's financial position, they imply greater risk and reduced financial flexibility. In order to offset the debt equivalent associated with off-balance sheet obligations, the utility must rebalance its capital structure by increasing its common equity in order to restore its effective capitalization ratios to previous levels. The capital structure ratios presented earlier do not include imputed debt associated with power purchase agreements or the impact of other off-balance sheet obligations.

These commitments have been repeatedly cited by major bond rating agencies in connection with assessments of utility financial risks.[49] For example, S&P'reported that it adjusts Avista's capitalization to include approximately

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[49] *See, e.g.*, Standard & Poor's Corporation, "Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements," *RatingsDirect* (May 7, 2007); Standard & Poor's Corporation, "Implications Of Operating Leases On Analysis Of U.S. Electric Utilities," *RatingsDirect* (Jan. 15, 2008); Standard & Poor's Corporation, "Top 10 Investor Questions: U.S. Regulated Electric Utilities," *RatingsDirect* (Jan. 22, 2010).

$195 million in imputed debt from PPAs, leases, and postretirement benefit obligations.[50] Unless Avista takes action to offset this additional financial risk by maintaining a higher equity ratio, the resulting leverage will weaken the Company's creditworthiness, implying a higher required rate of return to compensate investors for the greater risks.[51]

Q. What did you conclude with respect to the Company's capital structure?

A. Based on my evaluation, I concluded that Avista's requested capital structure represents a reasonable mix of capital sources from which to calculate the Company's overall rate of return. While industry averages provide one benchmark for comparison, each firm must select its capitalization based on the risks and prospects it faces, as well its specific needs to access the capital markets. A public utility with an obligation to serve must maintain ready access to capital under reasonable terms so that it can meet the service requirements of its customers.

Avista's capital structure reflects the challenges posed by its resource mix, the burden of significant

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[50] Standard & Poor's Corporation, "Avista Corp.," *RatingsDirect* (Aug. 21, 2009).

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

capital spending requirements, and the Company's ongoing efforts to strengthen its credit standing and support access to capital on reasonable terms. Moody's observed that its ratings for Avista anticipate "conservative financing strategies."[52] The need for access becomes even more important when the company has capital requirements over a period of years, and financing must be continuously available, even during unfavorable capital market conditions.

III. CAPITAL MARKET ESTIMATES

Q. What is the purpose of this section?

A. This section presents capital market estimates of the cost of equity. The details of my quantitative analyses are contained in Schedule 2 of Exhibit No. 3, with the results being summarized below.

A. Overview

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

A. The return on common equity is the cost of inducing and retaining investment in the utility's physical plant and assets. This investment is necessary to finance the asset base needed to provide utility service. Investors will commit money to a particular investment only

[52] Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Research* (Aug. 13, 2009).

if they expect it to produce a return commensurate with those from other investments with comparable risks. Moreover, the return on common equity is integral in achieving the sound regulatory objectives of rates that are sufficient to: 1) fairly compensate capital investment in the utility, 2) enable the utility to offer a return adequate to attract new capital on reasonable terms, and 3) maintain the utility's financial integrity. Meeting these objectives allows the utility to fulfill its obligation to provide reliable service while meeting the needs of customers through necessary system expansion.

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

A. No. In my opinion, no single method or model should be relied upon to determine a utility's cost of equity because no single approach can be regarded as wholly reliable. For example, a publication of the Society of Utility and Financial Analysts (formerly the National Society of Rate of Return Analysts), concluded that:

> Each model requires the exercise of judgment as to the reasonableness of the underlying assumptions of the methodology and on the reasonableness of the proxies used to validate the theory. Each model has its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different fundamental premises, most of which cannot be validated empirically. Investors clearly do not subscribe to any singular method, nor does the stock price

> reflect the application of any one single method by investors.[53]

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

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

A. Based on the results of my quantitative analyses, and my assessment of the relative strengths and weaknesses inherent in each method, I concluded that the cost of equity for the proxy companies is in the 10.9 percent to 12.5 percent range, or 11.1 percent to 12.7 percent after including a minimum adjustment for flotation costs.

B. <u>Results of Quantitative Analyses</u>

Q. What specific proxy group of utilities did you rely on for your analysis?

A. In estimating the cost of equity, the DCF model is typically applied to publicly traded firms engaged in similar business activities or with comparable investment

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[53] Parcell, David C., "The Cost of Capital - A Practitioner's Guide," *Society of Utility and Regulatory Financial Analysts* (1997) at Part 2, p. 4.

risks. As described in detail in Schedule 2, I applied the DCF model to a utility proxy group composed of those dividend-paying companies included by Value Line in its Electric Utilities Industry groups with: (1) S&P corporate credit ratings of "BBB-" or "BBB," (2) a Value Line Safety Rank of "2" or "3", and (3) a Value Line Financial Strength Rating of "B+" to "B++".[54] I refer to this group as the "Utility Proxy Group."

Q. What other proxy group did you consider in evaluating a fair ROE for Avista?

A. Under the regulatory standards established by *Hope* and *Bluefield*, the salient criteria in establishing a meaningful benchmark to evaluate a fair rate of return is relative risk, not the particular business activity or degree of regulation. As noted in *Regulatory Finance: Utilities' Cost of Capital*, "It should be emphasized that the definition of a comparable risk class of companies does not entail similarity of operation, product lines, or environmental conditions, but rather similarity of experienced business risk and financial risk."[55] Utilities must compete for capital, not just against firms in their own industry, but with other investment opportunities of

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[54] In addition, I excluded two firms that otherwise would have been in the proxy group, but are not appropriate for inclusion because Value Line indicated the potential that common dividends may be cut (Hawaiian Electric Industries, Inc.), and another (Allegheny Energy, Inc.) that is in the process of being acquired.
[55] Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports, Inc.* at 58 (1994).

comparable risk. With regulation taking the place of competitive market forces, required returns for utilities should be in line with those of non-utility firms of comparable risk operating under the constraints of free competition. Consistent with this accepted regulatory standard, I also applied the DCF model to a reference group of comparable risk companies in the non-utility sectors of the economy. I refer to this group as the "Non-Utility Proxy Group".

Q. What criteria did you apply to develop the Non-Utility Proxy Group?

A. My comparable risk proxy group was composed of those U.S. companies followed by Value Line that: (1) pay common dividends; (2) have a Safety Rank of "1"; (3) have investment grade credit ratings from S&P, and (4) have a Value Line Financial Strength Rating of "B++" or higher.

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

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

TABLE WEA-2
COMPARISON OF RISK INDICATORS

	S&P Credit Rating	Value Line Safety Rank	Value Line Financial Strength	Beta
Non-Utility Group	A	1	A+	0.79
Utility Proxy Group	BBB	3	B+	0.73
Avista Corp.	BBB-	3	B+	0.80

Considered together, a comparison of these objective measures indicates that Avista's investment risks exceed those of the two proxy groups. As a result, the cost of equity estimates indicated by my analyses provide a conservative estimate of investors' required rate of return for Avista.

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

A. My application of the DCF model, which is discussed in greater detail in Schedule 2, considered four alternative measures of expected earnings growth, as well as the sustainable growth rate based on the relationship between expected retained earnings and earned rates of return ("br + sv") and Value Line's projected growth in stock price. As shown on Schedule 4 and summarized below in Table WEA-3, after eliminating illogical low- and high-end values, application of the constant growth DCF model resulted in the following cost of equity estimates:

TABLE WEA-3
DCF RESULTS - UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.5%
IBES	11.1%
First Call	11.1%
Zacks	10.6%
br+sv	10.4%
Stock Price	11.2%

Q. What were the results of your DCF analysis for the Non-Utility Proxy Group?

A. As shown on Schedule 6, I applied the DCF model to the non-utility companies in exactly the same manner described earlier for the Utility Proxy Group. As summarized below in Table WEA-4, after eliminating illogical low- and high-end values, application of the constant growth DCF model resulted in the following cost of equity estimates:

TABLE WEA-4
DCF RESULTS - NON-UTILITY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.9%
IBES	12.6%
First Call	12.8%
Zacks	12.7%
br+sv	12.2%
Stock Price	13.7%

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

A. Like the DCF model, the CAPM is an *ex-ante*, or forward-looking model based on expectations of the future. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM is best applied using estimates that reflect the expectations of actual investors in the market, not with backward-looking, historical data. Accordingly, I applied the CAPM to the utility proxy group based on a forward-looking estimate for investors' required rate of return from common stocks. Because this forward-looking application of the CAPM looks directly at investors' expectations in the capital markets, it provides a more meaningful guide to the expected rate of return required to implement the CAPM.

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

A. As shown on Schedule 8, my forward-looking application of the CAPM model indicated an ROE of 9.5 percent for the utility proxy group. Applying the CAPM approach to the firms in the non-utility proxy group (Schedule 9) implied a cost of equity of 9.8 percent. As discussed in Schedule 2, however, applying the CAPM is complicated by the impact of the recent capital market turmoil and recession on investors' risk perceptions and required returns, which may cause CAPM cost of common equity estimates to understate investors' required returns for common stocks.

This is because relationships between risk-free Treasury bonds and the required returns on common stock have been distorted by heightened uncertainties. In addition, beta values, which are estimated based on historical stock prices, have been impacted by the unprecedented market volatility experienced since the third quarter of 2008. These distortions not only impact the absolute level of the CAPM cost of equity estimate, but they affect estimated risk premiums. As the Staff of the Florida Public Service Commission recently concluded:

> [R]ecognizing the impact the Federal Government's unprecedented intervention in the capital markets has had on the yields on long-term Treasury bonds, staff believes models that relate the investor-required return on equity to the yield on government securities, such as the CAPM approach, produce less reliable estimates of the ROE at this time.[56]

As a result, there is every indication that CAPM approaches fail to fully reflect the risk perceptions of real-world investors in today's capital markets, which would violate the standards underlying a fair rate of return by failing to provide an opportunity to earn a return commensurate with other investments of comparable risk.

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

A. As I noted earlier, I also evaluated the cost of equity using the comparable earnings approach. Reference

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[56] *Staff Recommendation for Docket No. 080677-E1 - Petition for increase in rates by Florida Power & Light Company*, at p. 280 (Dec. 23, 2009).

to rates of return available from alternative investments of comparable risk can provide an important benchmark in assessing the return necessary to assure confidence in the financial integrity of a firm and its ability to attract capital. This comparable earnings approach is consistent with the economic underpinnings for a fair rate of return established by the U.S. Supreme Court. Moreover, it avoids the complexities and limitations of capital market methods and instead focuses on the returns earned on book equity, which are readily available to investors.

Q. What rates of return on equity are indicated for utilities based on the comparable earnings approach?

A. Value Line reports that its analysts anticipate an average rate of return on common equity for the electric utility industry of 11.0 percent in 2010 and 11.5 percent over its 2012-2014 forecast horizon.[57] The capital structure corresponding with this expected return reflects an equity ratio of 49 percent. Meanwhile, for the gas utility industry Value Line expects returns on common equity of 10.5 percent in 2010 and 11.0 percent for the period 2012-2014.[58] As shown on Schedule 10, Value Line's projections for the utility proxy group suggested an

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[57] The Value Line Investment Survey at 2231 (Feb. 5, 2010).
[58] The Value Line Investment Survey at 444 (Dec. 11, 2009).

average ROE of 10.7 percent after eliminating potential outliers.

Q. What did you conclude with respect to the cost of equity implied by your analyses for the proxy groups?

A. The cost of equity estimates implied by my quantitative analyses are summarized in Table WEA-5, below:

TABLE WEA-5
SUMMARY OF QUANTITATIVE RESULTS

DCF	**Utility**	**Non-Utility**
Value Line	11.5%	11.9%
IBES	11.1%	12.6%
First Call	11.1%	12.8%
Zacks	10.6%	12.7%
br+sv	10.4%	12.2%
Stock Price	11.2%	13.7%
CAPM	9.5%	9.8%
Expected Earnings	**Electric**	**Gas**
2010	11.0%	10.5%
2012-14	11.5%	11.0%
Utility Proxy Group	10.7%	

As noted earlier, because the capital market crisis and ensuing recovery have created a number of problems in applying the CAPM, I largely disregarded the resulting cost of equity estimates. Based on my assessment of the relative strengths and weaknesses inherent in each method, and conservatively giving less emphasis to the upper- and lower-most boundaries of the range of results, I concluded that the cost of common equity indicated by my analyses is in the 10.9 percent to 12.5 percent range.

C. <u>Flotation Costs</u>

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

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

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

A. No. While debt flotation costs are recorded on the books of the utility, amortized over the life of the issue, and thus increase the effective cost of debt capital, there is no similar accounting treatment to ensure that equity flotation costs are recorded and ultimately recognized. No rate of return is authorized on flotation costs necessarily incurred to obtain a portion of the equity capital used to finance plant. In other words, equity flotation costs are not included in a utility's rate base because neither that portion of the gross proceeds from the sale of common stock used to pay flotation costs is available to invest in plant and equipment, nor are flotation costs capitalized as an intangible asset. Unless some provision is made to recognize these issuance costs, a utility's revenue requirements will not fully reflect all of the costs incurred for the use of investors' funds. Because there is no accounting convention to accumulate the flotation costs associated with equity issues, they must be accounted for indirectly, with an upward adjustment to the cost of equity being the most logical mechanism.

Q. What is the magnitude of the adjustment to the "bare bones" cost of equity to account for issuance costs?

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

> The flotation cost allowance requires an estimated adjustment to the return on equity of approximately 5% to 10%, depending on the size and risk of the issue.[59]

Alternatively, a study of data from Morgan Stanley regarding issuance costs associated with utility common stock issuances suggests an average flotation cost percentage of 3.6%.[60]

Issuance costs are a legitimate consideration in setting the return on equity for a utility, and applying these expense percentages to a representative dividend yield of 4.5 percent implies a flotation cost adjustment on the order of 16 to 45 basis points.

Q. Has the IPUC Staff previously considered flotation costs in estimating a fair ROE?

A. Yes. For example, in Case No. IPC-E-07-8, IPUC Staff witness Terri Carlock noted that she had adjusted her DCF analysis to incorporate an allowance for flotation costs.[61]

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[59] Roger A. Morin, *Regulatory Finance: Utilities' Cost of Capital*, 1994, at 166.
[60] *Application of Yankee Gas Services Company for a Rate Increase*, DPUC Docket No. 04-06-01, Direct Testimony of George J. Eckenroth (Jul. 2, 2004) at Exhibit GJE-11.1. Updating the results presented by Mr. Eckenroth through April 2005 also resulted in an average flotation cost percentage of 3.6%.
[61] Case No. IPC-E-07-8, *Direct Testimony of Terri Carlock* at 10 (Dec. 10, 2007).

Q. What then is your conclusion regarding a fair ROE based on your analyses for the companies in your proxy groups?

A. After incorporating an adjustment for flotation costs of 20 basis points to my "bare bones" cost of equity range, I concluded that my analyses indicate a fair ROE in the 11.1 percent to 12.7 percent range.

IV. RETURN ON EQUITY FOR AVISTA CORP.

Q. What is the purpose of this section?

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

A. Implications for Financial Integrity

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

A. Given the importance of the utility industry to the economy and society, it is essential to maintain reliable and economical service to all consumers. While Avista remains committed to provide reliable utility service, a utility's ability to fulfill its mandate can be compromised if it lacks the necessary financial wherewithal or is unable to earn a return sufficient to attract capital. Coupled with the ongoing potential for energy market volatility, Avista's exposure to variations in hydroelectric generation and natural gas price volatility, along with plans for significant infrastructure investment, pose a number of potential challenges that might require the relatively swift commitment of significant capital resources in order to maintain the high level of service that customers have come to expect. Investors' increased reticence to supply additional capital during times of crisis highlights the necessity of preserving the flexibility necessary during a period of uncertain economic and financial market conditions. These considerations heighten the importance of allowing Avista an adequate return on the fair value of its investment.

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

A. As documented earlier, the major rating agencies have warned of exposure to uncertainties associated with political and regulatory developments. Investors recognize that constructive regulation is a key ingredient in supporting utility credit ratings and financial integrity, particularly during times of adverse conditions.

With respect to Avista specifically, the major bond rating agencies have explicitly cited the potential that adverse regulatory rulings could compromise the Company's credit standing. Of particular concern to investors is the impact of regulatory lag and cost-recovery on Avista's ability to earn its authorized ROE and maintain its financial metrics, with Moody's concluding that:

> Failure to obtain adequate and timely support for recovery of and return on core utility investments through pending and expected future regulatory proceedings … could have negative ratings implications.[62]

S&P observed that rate relief will remain critical to Avista's credit outlook,[63] and concluded that, "regulatory lag will continue to be a drag on the company's ability to earn its authorized ROE."[64]

For Avista, these concerns are magnified by the fact that its credit standing is poised on the precipice between investment and speculative grade ratings. While the Company's efforts to regain an investment grade credit rating have been successful, Avista's financial metrics remain pressured. As Mr. Thies confirms in his testimony, regulatory support will be a key driver in securing additional improvement in the Company's financial health. Further strengthening Avista's financial integrity is

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[62] Moody's Investors Service, "Credit Opinion: Avista Corp.," *Global Credit Research* (Dec. 3, 2008).
[63] Standard & Poor's Corporation, "U.S. Electric Utility Credit Quality Remains Strong Amid Continuing Economic Downturn," *RatingsDirect* (Dec. 19, 2008).
[64] Standard & Poor's Corporation, "Avista Corp.'s Corporate Credit Rating Raised One Notch To 'BBB-'," *RatingsDirect* (Feb. 7, 2008).

imperative to ensure that the Company has the capability to maintain an investment grade rating while confronting potential challenges.

Q. Do customers benefit by enhancing the utility's financial flexibility?

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

> Inadequate attention to these challenges could conceivably push much of this sector into the non-investment grade category. For now, we think this unlikely, since most utility companies, regulators and politicians would prefer to see the industry remain financially healthy and investment-grade—especially because increasingly expensive and uncertain financing would have adverse consequences for customers. The recent

financial turmoil has underscored the benefits of strong credit ratings.[65]

B. Return on Equity Recommendation

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

A. As explained above, based on the capital market oriented analyses for the utility and non-utility proxy groups described in my testimony, I concluded that the "bare bones" cost of equity range was 10.9 percent to 12.5 percent, or 11.1 percent to 12.7 percent after incorporating an allowance for flotation costs. Considering capital market expectations, the potential exposures faced by Avista, and the economic requirements necessary to maintain financial integrity and support additional capital investment even under adverse circumstances, it is my opinion that this represents a fair and reasonable ROE range for Avista.

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

A. My evaluation indicates that Avista's requested ROE of 10.9 percent represents a conservative estimate of investors' required rate of return. Given the fact that the Company's requested ROE falls at the lower bound of

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[65] Moody's Investors Service, "Electric Utilities Face Challenges Beyond Near-Term," *Industry Outlook* (Jan. 2010).

"bare bones" cost of equity range, it should be viewed as an absolute floor in establishing rates for Avista. This conclusion is reinforced by the need to buttress the Company's credit standing, which remains relatively weak, as well as the pressures of funding significant capital expenditures and meeting increased operating risks, including those associated with Avista's reliance on hydroelectric generation and exposure to volatility in natural gas and wholesale power markets. The reasonableness of a minimum 10.9 percent ROE for Avista is also supported by the Company's relatively greater risks as compared with the proxy groups, the higher uncertainties associated with Avista's relatively small size, and the need to consider the implications of regulatory lag.

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

A. Yes.

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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	CASE NO. AVU-E-10-01
OF AVISTA CORPORATION FOR THE	)	CASE NO. AVU-G-10-01
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC AND	)	
NATURAL GAS SERVICE TO ELECTRIC	)	EXHIBIT NO. 3
AND NATURAL GAS CUSTOMERS IN THE	)	
STATE OF IDAHO	)	WILLIAM E. AVERA
	)	

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

EXHIBIT 3, SCHEDULE 1

QUALIFICATIONS OF WILLIAM E. AVERA

Q. Please describe your qualifications and experience.

A. I received a B.A. degree with a major in economics from Emory University. After serving in the U.S. Navy, I entered the doctoral program in economics at the University of North Carolina at Chapel Hill. Upon receiving my Ph.D., I joined the faculty at the University of North Carolina and taught finance in the Graduate School of Business. I subsequently accepted a position at the University of Texas at Austin where I taught courses in financial management and investment analysis. I then went to work for International Paper Company in New York City as Manager of Financial Education, a position in which I had responsibility for all corporate education programs in finance, accounting, and economics.

In 1977, I joined the staff of the Public Utility Commission of Texas ("PUCT") as Director of the Economic Research Division. During my tenure at the PUCT, I managed a division responsible for financial analysis, cost allocation and rate design, economic and financial research, and data processing systems, and I testified in cases on a variety of financial and economic issues. Since leaving the PUCT, I have been engaged as a consultant. I have participated in a wide range of assignments involving utility-related matters on behalf of utilities, industrial customers, municipalities, and regulatory commissions. I have previously testified before the Federal Energy Regulatory Commission ("FERC"), as well as the Federal Communications Commission, the Surface Transportation Board (and its predecessor, the Interstate Commerce Commission), the Canadian Radio-Television and Telecommunications Commission, and regulatory agencies, courts, and legislative committees in over 40 states, including the Public Service Commission of Maryland ("MPSC" or "the Commission").

In 1995, I was appointed by the PUCT to the Synchronous Interconnection Committee to advise the Texas legislature on the costs and benefits of connecting Texas to the national electric transmission grid. In addition, I served as an outside director of Georgia System Operations Corporation, the system operator for electric cooperatives in Georgia.

I have served as Lecturer in the Finance Department at the University of Texas at Austin and taught in the evening graduate program at St. Edward's University for twenty years. In addition, I have lectured on economic and regulatory topics in programs sponsored by universities and industry groups. I have taught in hundreds of educational programs for financial analysts in programs sponsored by the Association for Investment Management and Research, the Financial Analysts Review, and local financial analysts societies. These programs have been presented in Asia, Europe, and North America, including the Financial Analysts Seminar at Northwestern University. I hold the Chartered Financial Analyst (CFA®) designation and have served as Vice President for Membership of the Financial Management Association. I have also served on the Board of Directors of the North Carolina Society of Financial Analysts. I was elected Vice Chairman of the National Association of Regulatory Commissioners ("NARUC") Subcommittee on Economics and appointed to NARUC's Technical Subcommittee on the National Energy Act. I have also served as an officer of various other professional organizations and societies. A resume containing the details of my experience and qualifications is attached.

WILLIAM E. AVERA

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Summary of Qualifications

Ph.D. in economics and finance; Chartered Financial Analyst (CFA ®) designation; extensive expert witness testimony before courts, alternative dispute resolution panels, regulatory agencies and legislative committees; lectured in executive education programs around the world on ethics, investment analysis, and regulation; undergraduate and graduate teaching in business and economics; appointed to leadership positions in government, industry, academia, and the military.

Employment

Principal, FINCAP, Inc. (Sep. 1979 to present)	Financial, economic and policy consulting to business and government. Perform business and public policy research, cost/benefit analyses and financial modeling, valuation of businesses (almost 200 entities valued), estimation of damages, statistical and industry studies. Provide strategy advice and educational services in public and private sectors, and serve as expert witness before regulatory agencies, legislative committees, arbitration panels, and courts.
Director, Economic Research Division, Public Utility Commission of Texas (Dec. 1977 to Aug. 1979)	Responsible for research and testimony preparation on rate of return, rate structure, and econometric analysis dealing with energy, telecommunications, water and sewer utilities. Testified in major rate cases and appeared before legislative committees and served as Chief Economist for agency. Administered state and federal grant funds. Communicated frequently with political leaders and representatives from consumer groups, media, and investment community.
Manager, Financial Education, International Paper Company New York City (Feb. 1977 to Nov. 1977)	Directed corporate education programs in accounting, finance, and economics. Developed course materials, recruited and trained instructors, liaison within the company and with academic institutions. Prepared operating budget and designed financial controls for corporate professional development program.

Lecturer in Finance, The University of Texas at Austin (Sep. 1979 to May 1981) Assistant Professor of Finance, (Sep. 1975 to May 1977)	Taught graduate and undergraduate courses in financial management and investment theory. Conducted research in business and public policy. Named Outstanding Graduate Business Professor and received various administrative appointments.
Assistant Professor of Business, University of North Carolina at Chapel Hill (Sep. 1972 to Jul. 1975)	Taught in BBA, MBA, and Ph.D. programs. Created project course in finance, Financial Management for Women, and participated in developing Small Business Management sequence. Organized the North Carolina Institute for Investment Research, a group of financial institutions that supported academic research. Faculty advisor to the Media Board, which funds student publications and broadcast stations.

Education

Ph.D., Economics and Finance, University of North Carolina at Chapel Hill (Jan. 1969 to Aug. 1972)	Elective courses included financial management, public finance, monetary theory, and econometrics. Awarded the Stonier Fellowship by the American Bankers' Association and University Teaching Fellowship. Taught statistics, macroeconomics, and microeconomics. Dissertation: *The Geometric Mean Strategy as a Theory of Multiperiod Portfolio Choice*
B.A., Economics, Emory University, Atlanta, Georgia (Sep. 1961 to Jun. 1965)	Active in extracurricular activities, president of the Barkley Forum (debate team), Emory Religious Association, and Delta Tau Delta chapter. Individual awards and team championships at national collegiate debate tournaments.

Professional Associations

Received Chartered Financial Analyst (CFA) designation in 1977; Vice President for Membership, Financial Management Association; President, Austin Chapter of Planning Executives Institute; Board of Directors, North Carolina Society of Financial Analysts; Candidate Curriculum Committee, Association for Investment Management and Research; Executive Committee of Southern Finance Association; Vice Chair, Staff Subcommittee on Economics and National Association of Regulatory Utility Commissioners (NARUC); Appointed to NARUC Technical Subcommittee on the National Energy Act.

Teaching in Executive Education Programs

University-Sponsored Programs: Central Michigan University, Duke University, Louisiana State University, National Defense University, National University of Singapore, Texas A&M University, University of Kansas, University of North Carolina, University of Texas.

Business and Government-Sponsored Programs: Advanced Seminar on Earnings Regulation, American Public Welfare Association, Association for Investment Management and Research, Congressional Fellows Program, Cost of Capital Workshop, Electricity Consumers Resource Council, Financial Analysts Association of Indonesia, Financial Analysts Review, Financial Analysts Seminar at Northwestern University, Governor's Executive Development Program of Texas, Louisiana Association of Business and Industry, National Association of Purchasing Management, National Association of Tire Dealers, Planning Executives Institute, School of Banking of the South, State of Wisconsin Investment Board, Stock Exchange of Thailand, Texas Association of State Sponsored Computer Centers, Texas Bankers' Association, Texas Bar Association, Texas Savings and Loan League, Texas Society of CPAs, Tokyo Association of Foreign Banks, Union Bank of Switzerland, U.S. Department of State, U.S. Navy, U.S. Veterans Administration, in addition to Texas state agencies and major corporations.

Presented papers for Mills B. Lane Lecture Series at the University of Georgia and Heubner Lectures at the University of Pennsylvania. Taught graduate courses in finance and economics for evening program at St. Edward's University in Austin from January 1979 through 1998.

Expert Witness Testimony

Testified in over 300 cases before regulatory agencies addressing cost of capital, regulatory policy, rate design, and other economic and financial issues.

Federal Agencies: Federal Communications Commission, Federal Energy Regulatory Commission, Surface Transportation Board, Interstate Commerce Commission, and the Canadian Radio-Television and Telecommunications Commission.

State Regulatory Agencies: Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Missouri, Nevada, New Mexico, Montana, Nebraska, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Testified in 42 cases before federal and state courts, arbitration panels, and alternative dispute tribunals (89 depositions given) regarding damages, valuation, antitrust liability, fiduciary duties, and other economic and financial issues.

Board Positions and Other Professional Activities

Audit Committee and Outside Director, Georgia System Operations Corporation (electric system operator for member-owned electric cooperatives in Georgia); Chairman, Board of Print Depot, Inc. and FINCAP, Inc.; Co-chair, Synchronous Interconnection Committee, appointed by Public Utility Commission of Texas and approved by governor; Appointed by Hays County Commission to Citizens Advisory Committee of Habitat Conservation Plan, Operator of AAA

Ranch, a certified organic producer of agricultural products; Appointed to Organic Livestock Advisory Committee by Texas Agricultural Commissioner Susan Combs; Appointed by Texas Railroad Commissioners to study group for *The UP/SP Merger: An Assessment of the Impacts on the State of Texas;* Appointed by Hawaii Public Utilities Commission to team reviewing affiliate relationships of Hawaiian Electric Industries; Chairman, Energy Task Force, Greater Austin-San Antonio Corridor Council; Consultant to Public Utility Commission of Texas on cogeneration policy and other matters; Consultant to Public Service Commission of New Mexico on cogeneration policy; Evaluator of Energy Research Grant Proposals for Texas Higher Education Coordinating Board.

Community Activities

Board of Directors, Sustainable Food Center; Chair, Board of Deacons, Finance Committee, and Elder, Central Presbyterian Church of Austin; Founding Member, Orange-Chatham County (N.C.) Legal Aid Screening Committee.

Military

Captain, U.S. Naval Reserve (retired after 28 years service); Commanding Officer, Naval Special Warfare Engineering (SEAL) Support Unit; Officer-in-Charge of SWIFT patrol boat in Vietnam; Enlisted service as weather analyst (advanced to second class petty officer).

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"Usefulness of Current Values to Investors and Creditors," in *Inflation Accounting/Indexing and Stock Behavior* (1977)

"Consumer Expectations and the Economy," *Texas Business Review* (Nov. 1976)

"Portfolio Performance Evaluation and Long-run Capital Growth," with Henry A. Latané in *Proceedings of the Eastern Finance Association* (1973)

Book reviews in *Journal of Finance* and *Financial Review*. Abstracts for *CFA Digest*. Articles in *Carolina Financial Times*.

Selected Papers and Presentations

"Economic Perspective on Water Marketing in Texas," 2009 Water Law Institute, The University of Texas School of Law, Austin, TX (Dec. 2009).

"Estimating Utility Cost of Equity in Financial Turmoil," SNL EXNET 15th Annual FERC Briefing, Washington, D.C. (Mar. 2009)

"The Who, What, When, How, and Why of Ethics," San Antonio Financial Analysts Society (Jan. 16, 2002). Similar presentation given to the Austin Society of Financial Analysts (Jan. 17, 2002)

"Ethics for Financial Analysts," Sponsored by Canadian Council of Financial Analysts: delivered in Calgary, Edmonton, Regina, and Winnipeg, June 1997. Similar presentations given to Austin Society of Financial Analysts (Mar. 1994), San Antonio Society of Financial Analysts (Nov. 1985), and St. Louis Society of Financial Analysts (Feb. 1986)

"Cost of Capital for Multi-Divisional Corporations," Financial Management Association, New Orleans, Louisiana (Oct. 1996)

"Ethics and the Treasury Function," Government Treasurers Organization of Texas, Corpus Christi, Texas (Jun. 1996)

"A Cooperative Future," Iowa Association of Electric Cooperatives, Des Moines (December 1995). Similar presentations given to National G & T Conference, Irving, Texas (June 1995), Kentucky Association of Electric Cooperatives Annual Meeting, Louisville (Nov. 1994), Virginia, Maryland, and Delaware Association of Electric Cooperatives Annual Meeting, Richmond (July 1994), and Carolina Electric Cooperatives Annual Meeting, Raleigh (Mar. 1994)

"Information Superhighway Warnings: Speed Bumps on Wall Street and Detours from the Economy," Texas Society of Certified Public Accountants Natural Gas, Telecommunications and Electric Industries Conference, Austin (Apr. 1995)

"Economic/Wall Street Outlook," Carolinas Council of the Institute of Management Accountants, Myrtle Beach, South Carolina (May 1994). Similar presentation given to Bell Operating Company Accounting Witness Conference, Santa Fe, New Mexico (Apr. 1993)

"Regulatory Developments in Telecommunications," Regional Holding Company Financial and Accounting Conference, San Antonio (Sep. 1993)

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"Making Utility Regulation Work at the Public Utility Commission of Texas," Center for Legal and Regulatory Studies, University of Texas, Austin (June 1991)

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""Discounted Cash Life: A New Measure of the Time Dimension in Capital Budgeting," with David Cordell, Southern Finance Association, New Orleans (Nov. 1978)

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EXHIBIT 3, SCHEDULE 2

DESCRIPTIONS OF QUANTITATIVE ANALYSES

Q. What is the purpose of this schedule?

A. Schedule 2 presents capital market estimates of the cost of equity. First, I examine the concept of the cost of equity, along with the risk-return tradeoff principle fundamental to capital markets. Next, I describe DCF, CAPM, and comparable earnings analyses conducted to estimate the cost of equity for reference groups of comparable risk firms.

A. Overview

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

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

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

A. The fundamental economic principle underlying the cost of equity concept is the notion that investors are risk averse. The required rate of return for a particular asset at any point in time is a function of: 1) the yield on risk-free assets, and 2) its relative risk, with investors demanding correspondingly larger risk premiums for assets bearing greater risk. Given this risk-return tradeoff, the required rate of return (k) from an asset (i) can be generally expressed as:

$$k_i = R_f + RP_i$$

where: R_f = Risk-free rate of return, and
RP_i = Risk premium required to hold riskier asset i.

Thus, the required rate of return for a particular asset at any point in time is a function of: 1) the yield on risk-free assets, and 2) its relative risk, with investors demanding correspondingly larger risk premiums for assets bearing greater risk.

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

A. No. Unlike debt capital, there is no contractually guaranteed return on common equity capital since shareholders are the residual owners of the utility. Because it is unobservable, the cost of equity for a particular utility must be estimated by analyzing information about capital market conditions generally, assessing the relative risks of the company specifically, and employing various quantitative methods that focus on investors' current required rates of return. These various quantitative methods typically attempt to infer investors' required rates of return from stock prices, interest rates, or other capital market data.

B. Comparable Risk Proxy Groups

Q. How did you implement these quantitative methods to estimate the cost of common equity for Avista?

A. Application of the DCF model and other quantitative methods to estimate the cost of equity requires observable capital market data, such as stock prices. Moreover, even for a firm with publicly traded stock, the cost of equity can only be estimated. As a result, applying quantitative models using observable market data only produces an estimate that inherently includes some degree of observation error. Thus, the accepted approach to increase confidence in the results is to apply the DCF model and other quantitative methods to a proxy group of publicly traded companies that investors regard as risk comparable.

Q. What specific proxy group did you rely on for your analysis?

A. In order to reflect the risks and prospects associated with Avista's jurisdictional utility operations, my DCF analyses focused on a reference group of other utilities composed of those companies included by The Value Line Investment Survey ("Value Line") in its Electric Utilities Industry groups with: (1) S&P corporate credit ratings of "BBB-" or "BBB," (2) a Value Line Safety Rank of "2" or "3", and (3) a Value Line Financial Strength Rating of "B+" to "B++". In addition, I excluded two firms that otherwise would have been in the proxy group, but are not appropriate for inclusion because Value Line indicated the potential that common dividends may be cut (Hawaiian Electric Industries, Inc.), and another (Allegheny Energy, Inc.) that is in the process of being acquired. I refer to this group as the "Utility Proxy Group."

Q. What other proxy group did you consider in evaluating a fair ROE for Avista?

A. Under the regulatory standards established by *Hope* and *Bluefield*, the salient criteria in establishing a meaningful benchmark to evaluate a fair rate of return is relative risk, not the particular business activity or degree of regulation. As noted in *Regulatory Finance: Utilities' Cost of Capital*, "It should be emphasized that the definition of a comparable risk class of companies does not entail similarity of operation, product lines, or environmental conditions, but rather similarity of experienced business risk and financial risk."[1] Utilities must compete for capital, not just against firms in their own industry, but with other investment opportunities of comparable risk. With regulation taking the place of competitive market forces, required returns for utilities should be in line with those of non-utility firms of comparable risk operating under the constraints of free

[1] Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports, Inc.* at 58 (1994).

competition. Consistent with this accepted regulatory standard, I also applied the DCF model to a reference group of comparable risk companies in the non-utility sectors of the economy. I refer to this group as the "Non-Utility Proxy Group".

Q. What criteria did you apply to develop the Non-Utility Proxy Group?

A. My comparable risk proxy group was composed of those U.S. companies followed by Value Line that: (1) pay common dividends; (2) have a Safety Rank of "1"; (3) have investment grade credit ratings from S&P, and (4) have a Value Line Financial Strength Rating of "B++" or higher.

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

A. As shown below, Table 1 compares the Non-Utility Proxy Group with the Utility Proxy Group and Avista across four key indicators of investment risk:

TABLE 1
COMPARISON OF RISK INDICATORS

	S&P Credit Rating	Value Line Safety Rank	Value Line Financial Strength	Value Line Beta
Non-Utility Group	A	1	A+	0.79
Utility Proxy Group	BBB	3	B++	0.73
Avista Corp.	BBB-	3	B+	0.80

Q. Do these criteria provide objective evidence to evaluate investors' risk perceptions?

A. Yes. Credit ratings are assigned by independent rating agencies for the purpose of providing investors with a broad assessment of the creditworthiness of a firm. Because the rating agencies' evaluation includes virtually all of the factors normally considered important in assessing a firm's relative credit standing, corporate credit ratings provide a broad, objective measure of overall investment risk that is readily available to investors. Widely cited in the investment community and referenced by investors, credit ratings are also frequently used as a primary risk indicator in establishing proxy groups to estimate the cost of equity.

While credit ratings provide the most widely referenced benchmark for investment risks, other quality rankings published by investment advisory services also provide relative assessments of risk that are considered by investors in forming their expectations. Value Line's primary risk indicator is its Safety Rank, which ranges from "1" (Safest) to "5" (Riskiest). This overall risk measure is intended to capture the total risk of a stock, and incorporates elements of stock price stability and financial strength. Given that Value Line is perhaps the most widely available source of investment advisory information, its Safety Rank provides a useful guide to the likely risk perceptions of investors.

The Financial Strength Rating is designed as a guide to overall financial strength and creditworthiness, with the key inputs including financial leverage, business volatility measures, and company size. Value Line's Financial Strength Ratings range from "A++" (strongest) down to "C" (weakest) in nine steps.

As discussed in my direct testimony, Avista is rated "BBB-" by S&P, with the average rating for the firms in the Utility Proxy Group being slightly higher at "BBB". Avista's Value Line Safety Rank and Financial Strength Rating are the same as the averages for the Utility Proxy Group, and while I did not reference beta as a selection criteria in identifying the Utility Proxy Group, Avista's beta of 0.80 is also higher than the average of 0.73 for the Utility Proxy Group, suggesting somewhat greater risk. Based on these criteria, which reflect objective, published indicators that incorporate consideration of a broad spectrum of risks, including financial and business position and exposure to company specific factors, investors are likely to regard the risks and prospects of the Utility Proxy Group as being comparable to, albeit somewhat lower than, those of Avista.

With respect to the Non-Utility Proxy Group, its average credit ratings, Safety Rank, and Financial Strength Rating suggest less risk than for Avista, with its 0.79 average beta being essentially equal to the 0.80 value for the Company. While any differences in investment risk attributable to regulation should already be reflected in these objective measures, my analyses nevertheless conservatively focus on a lower-risk group of non-utility firms.

C. Discounted Cash Flow Analyses

Q. How are DCF models used to estimate the cost of equity?

A. DCF models attempt to replicate the market valuation process that sets the price investors are willing to pay for a share of a company's stock. The model rests on the assumption that investors evaluate the risks and expected rates of return from all securities in the capital markets. Given these expectations, the price of each stock is adjusted by the market until investors are adequately compensated for the risks they bear. Therefore, we can look to the market to determine what investors believe a share of common stock is worth. By estimating the cash flows investors expect to receive from the stock in the way of future dividends and capital gains, we can calculate their required rate of return. In other words, the cash flows that investors expect from a stock are estimated, and given its current market price, we can "back-into" the discount rate, or cost of equity, that investors implicitly used in bidding the stock to that price.

Q. What market valuation process underlies DCF models?

A. DCF models assume that the price of a share of common stock is equal to the present value of the expected cash flows (i.e., future dividends and stock price) that will be received while holding the stock, discounted at investors' required rate of return. That is, the cost of equity is the discount rate that equates the current price of a share of stock with the present value of all expected cash flows from the stock.

Q. What form of the DCF model is customarily used to estimate the cost of equity in rate cases?

A. Rather than developing annual estimates of cash flows into perpetuity, the DCF model can be simplified to a "constant growth" form: [2]

[2] The constant growth DCF model is dependent on a number of assumptions, which in practice are never strictly met. These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (*i.e.*, no changes in risk or interest rate levels and a flat yield curve); and all of the above extend to infinity.

$$P_0 = \frac{D_1}{k_e - g}$$

where: P_0 = Current price per share;
D_1 = Expected dividend per share in the coming year;
k_e = Cost of equity;
g = Investors' long-term growth expectations.

The cost of equity (K_e) can be isolated by rearranging terms:

$$k_e = \frac{D_1}{P_0} + g$$

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: 1) dividend yield (D_1/P_0), and 2) growth (g). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation.

Q. What steps are required to apply the DCF model?

A. The first step in implementing the constant growth DCF model is to determine the expected dividend yield (D_1/P_0) for the firm in question. This is usually calculated based on an estimate of dividends to be paid in the coming year divided by the current price of the stock. The second, and more controversial, step is to estimate investors' long-term growth expectations (g) for the firm.

The final step is to sum the firm's dividend yield and estimated growth rate to arrive at an estimate of its cost of equity.

Q. How was the dividend yield for the Utility Proxy Group determined?

A. Estimates of dividends to be paid by each of these utilities over the next twelve months, obtained from Value Line, served as D_1. This annual dividend was then divided by the corresponding stock price for each utility to arrive at the expected dividend yield. The expected dividends, stock prices, and resulting dividend yields for the firms in the Utility Proxy Group are presented on Schedule 4.

Q. What is the next step in applying the constant growth DCF model?

A. The next step is to evaluate long-term growth expectations, or "*g*", for the firm in question. In constant growth DCF theory, earnings, dividends, book value, and market price are all assumed to grow in lockstep, and the growth horizon of the DCF model is infinite. But implementation of the DCF model is more than just a theoretical exercise; it is an attempt to replicate the mechanism investors used to arrive at observable stock prices. A wide variety of techniques can be used to derive growth rates, but the only "*g*" that matters in applying the DCF model is the value that investors expect.

Q. Are historical growth rates likely to be representative of investors' expectations for utilities?

A. No. If past trends in earnings, dividends, and book value are to be representative of investors' expectations for the future, then the historical conditions giving rise to these growth rates should be expected to continue. That is clearly not the case for utilities, where structural and industry changes have led to declining dividends, earnings pressure, and, in many cases, significant write-offs. While these conditions serve to depress historical growth measures, they are not representative of long-term expectations for the utility industry. Moreover, to the extent historical trends for utilities are meaningful, they are also captured in projected growth rates, since securities analysts also routinely examine and assess the impact and continued relevance (if any) of historical trends.

Q. What are investors most likely to consider in developing their long-term growth expectations?

A. While the DCF model is technically concerned with growth in dividend cash flows, implementation of this DCF model is solely concerned with replicating the forward-looking evaluation of real-world investors. In the case of electric utilities, dividend growth rates are not likely to provide a meaningful guide to investors' current growth expectations. This is because utilities have significantly altered their dividend policies in response to more accentuated business risks in the industry, with the payout ratio for electric utilities falling from approximately 80 percent historically to on the order of 60 to 70 percent.[3] As a result of this trend towards a more conservative payout ratio, dividend growth in the utility industry has remained largely stagnant as utilities conserve financial resources to provide a hedge against heightened uncertainties.

As payout ratios for firms in the utility industry trended downward, investors' focus has increasingly shifted from dividends to earnings as a measure of long-term growth. Future trends in earnings, which provide the

[3] The Value Line Investment Survey (Sep. 15, 1995 at 161, Dec. 26, 2008 at 687).

source for future dividends and ultimately support share prices, play a pivotal role in determining investors' long-term growth expectations. The importance of earnings in evaluating investors' expectations and requirements is well accepted in the investment community. As noted in *Finding Reality in Reported Earnings* published by the Association for Investment Management and Research:

> [E]arnings, presumably, are the basis for the investment benefits that we all seek. "Healthy earnings equal healthy investment benefits" seems a logical equation, but earnings are also a scorecard by which we compare companies, a filter through which we assess management, and a crystal ball in which we try to foretell future performance.[4]

Value Line's near-term projections and its Timeliness Rank, which is the principal investment rating assigned to each individual stock, are also based primarily on various quantitative analyses of earnings. As Value Line explained:

> The future earnings rank accounts for 65% in the determination of relative price change in the future; the other two variables (current earnings rank and current price rank) explain 35%.[5]

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[4] Association for Investment Management and Research, "Finding Reality in Reported Earnings: An Overview", p. 1 (Dec. 4, 1996).
[5] The Value Line Investment Survey, *Subscriber's Guide*, p. 53.

The fact that investment advisory services, such as Value Line, Thompson, and Reuters, focus on growth in earnings indicates that the investment community regards this as a superior indicator of future long-term growth. Indeed, "A Study of Financial Analysts: Practice and Theory," published in the *Financial Analysts Journal*, reported the results of a survey conducted to determine what analytical techniques investment analysts actually use.[6] Respondents were asked to rank the relative importance of earnings, dividends, cash flow, and book value in analyzing securities. Of the 297 analysts that responded, only 3 ranked dividends first while 276 ranked it last. The article concluded:

> Earnings and cash flow are considered far more important than book value and dividends.[7]

More recently, the *Financial Analysts Journal* reported the results of a study of the relationship between valuations based on alternative multiples and actual market prices, which concluded, "In all cases

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[6] Block, Stanley B., "A Study of Financial Analysts: Practice and Theory", *Financial Analysts Journal* (July/August 1999).
[7] *Id.* at 88.

studied, earnings dominated operating cash flows and dividends."[8]

Q. Do the growth rate projections of security analysts consider historical trends?

A. Yes. Professional security analysts study historical trends extensively in developing their projections of future earnings. Hence, to the extent there is any useful information in historical patterns, that information is incorporated into analysts' growth forecasts.

Q. What are security analysts currently projecting in the way of growth for the firms in the Utility Proxy Group?

A. The Value Line earnings growth projections for each of the firms in the Utility Proxy Group are displayed on Schedule 4. Also presented are the earnings per share ("EPS") growth projections reported by Thomson Reuters IBES ("IBES"), Thomson First Call Estimates ("First Call"), and Zacks Investment Research ("Zacks").[9]

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[8] Liu, Jing, Nissim, Doron, & Thomas, Jacob, "Is Cash Flow King in Valuations?," *Financial Analysts Journal*, Vol. 63, No. 2 (March/April 2007) at 56.

[9] Thomson Reuters separately compiles and publishes consensus securities analyst growth rates under the IBES (formerly Institutional Brokers Estimate System) and First Call brands.

Q. Some argue that analysts' assessments of growth rates are biased. Do you believe these projections are inappropriate for estimating investors' required return using the DCF model?

A. No. In applying the DCF model to estimate the cost of common equity, the only relevant growth rate is the forward-looking expectations of investors that are captured in current stock prices. Investors, just like securities analysts and others in the investment community, do not know how the future will actually turn out. They can only make investment decisions based on their best estimate of what the future holds in the way of long-term growth for a particular stock, and securities prices are constantly adjusting to reflect their assessment of available information.

Any claims that analysts' estimates are not relied upon by investors are illogical given the reality of a competitive market for investment advice. If financial analysts' forecasts do not add value to investors' decision making, then it is irrational for investors to pay for these estimates. Similarly, those financial analysts who fail to provide reliable forecasts will lose out in competitive markets relative to those analysts whose forecasts investors find more credible. The reality that analyst estimates are routinely referenced in the financial media and in investment advisory publications (e.g., Value Line) implies that investors use them as a basis for their expectations.

The continued success of investment services such as Thomson Reuters and Value Line, and the fact that projected growth rates from such sources are widely referenced, provides strong evidence that investors give considerable weight to analysts' earnings projections in forming their expectations for future growth. While the projections of securities analysts may be proven optimistic or pessimistic in hindsight, this is irrelevant in assessing the expected growth that investors have incorporated into current stock prices, and any bias in analysts' forecasts - whether pessimistic or optimistic - is irrelevant if investors share analysts' views. Earnings growth projections of security analysts provide the most frequently referenced guide to investors' views and are widely accepted in applying the DCF model. As explained in *Regulatory Finance: Utilities' Cost of Capital*:

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run

growth rates provide a sound basis for estimating required returns. Financial analysts also exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of *g* [growth].[10]

Q. How else are investors' expectations of future long-term growth prospects often estimated for use in the constant growth DCF model?

A. Based on the assumptions underlying constant growth theory, conventional applications of the constant growth DCF model often examine the relationship between retained earnings and earned rates of return as an indication of the sustainable growth investors might expect from the reinvestment of earnings within a firm. The sustainable growth rate is calculated by the formula, $g = br+sv$, where "b" is the expected retention ratio, "r" is the expected earned return on equity, "s" is the percent of common equity expected to be issued annually as new common stock, and "v" is the equity accretion rate.

Q. What is the purpose of the "sv" term?

A. Under DCF theory, the "sv" factor is a component of the growth rate designed to capture the impact of issuing new common stock at a price above, or below, book

[10] Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports, Inc.* at 154 (1994).

value. When a company's stock price is greater than its book value per share, the per-share contribution in excess of book value associated with new stock issues will accrue to the current shareholders. This increase to the book value of existing shareholders leads to higher expected earnings and dividends, with the "sv" factor incorporating this additional growth component.

Q. What growth rate does the earnings retention method suggest for the Utility Proxy Group?

A. The sustainable, "br+sv" growth rates for each firm in the Utility Proxy Group are summarized on Schedule 4, with the underlying details being presented on Schedule 5. For each firm, the expected retention ratio (b) was calculated based on Value Line's projected dividends and earnings per share. Likewise, each firm's expected earned rate of return (r) was computed by dividing projected earnings per share by projected net book value. Because Value Line reports end-of-year book values, an adjustment was incorporated to compute an average rate of return over the year, consistent with the theory underlying this approach to estimating investors' growth expectations. Meanwhile, the percent of common equity expected to be issued annually as new common stock (s) was equal to the product of the projected market-to-book ratio and growth in common shares outstanding, while the equity accretion rate (v) was computed as 1 minus the inverse of the projected market-to-book ratio.

Q. What other growth rate did you consider?

A. As noted earlier, the DCF model assumes that investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation. Consistent with this paradigm, I also examined expected growth in each utility's stock price based on Value Line's 2011-2014 projections.

Q. What cost of equity estimates were implied for the Utility Proxy Group using the DCF model?

A. After combining the dividend yields and respective growth projections for each utility, the resulting cost of equity estimates are shown on Schedule 4.

Q. In evaluating the results of the constant growth DCF model, is it appropriate to eliminate estimates that are extreme low or high outliers?

A. Yes. In applying quantitative methods to estimate the cost of equity, it is essential that the resulting values pass fundamental tests of reasonableness and economic logic. Accordingly, DCF estimates that are implausibly low or high should be eliminated when evaluating the results of this method.

Q. How did you evaluate DCF estimates at the low end of the range?

A. It is a basic economic principle that investors can be induced to hold more risky assets only if they expect to earn a return to compensate them for their risk bearing. As a result, the rate of return that investors require from a utility's common stock, the most junior and riskiest of its securities, must be considerably higher than the yield offered by senior, long-term debt. As noted earlier, the average corporate credit rating associated with the firms in the Utility Proxy Group is "BBB+". Companies rated "BBB-", "BBB", and "BBB+" are all considered part of the triple-B rating category, with Moody's monthly yields on triple-B bonds averaging approximately 6.3 percent in January 2010.[11] It is inconceivable that investors are not requiring a substantially higher rate of return for holding common stock. Consistent with this principle, the DCF results

[11] Moody's Investors Service, www.credittrends.com.

for the Utility Proxy Group must be adjusted to eliminate estimates that are determined to be extreme low outliers when compared against the yields available to investors from less risky utility bonds.

Q. Have similar tests been applied by regulators?

A. Yes. FERC has noted that adjustments are justified where applications of the DCF approach produce illogical results. FERC evaluates DCF results against observable yields on long-term public utility debt and has recognized that it is appropriate to eliminate estimates that do not sufficiently exceed this threshold. In a 2000 opinion establishing its current precedent for determining ROEs for electric utilities, for example, FERC noted:

> An adjustment to this data is appropriate in the case of PG&E's low-end return of 8.42 percent, which is comparable to the average Moody's "A" grade public utility bond yield of 8.06 percent, for October 1999. Because investors cannot be expected to purchase stock if debt, which has less risk than stock, yields essentially the same return, this low-end return cannot be considered reliable in this case.[12]

[12] *Southern California Edison Company*, 92 FERC ¶ 61,070 (2000) at p. 22.

More recently, in its March 27, 2009 decision in *Pioneer*, FERC concluded that it would exclude low-end ROEs "within about 100 basis points above the cost of debt."[13]

Q. What else should be considered in evaluating DCF estimates at the low end of the range?

A. As indicated earlier, while corporate bond yields have declined substantially as the worst of the financial crisis has abated, it is generally expected that long-term interest rates will rise as the recession ends and the economy returns to a more normal pattern of growth. As shown in Table 2 below, the most recent forecasts of IHS Global Insight and the EIA imply an average triple-B bond yield of 6.72 percent for 2010, or 7.12 percent over the 5-year period 2010-2014:

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[13] *Pioneer Transmission, LLC*, 126 FERC ¶ 61,281 at P 94 (2009) ("*Pioneer*").

TABLE 2
IMPLIED BBB BOND YIELD

Line No.		2010	2010-14
1	Projected AA Utility Yield		
2	IHS Global Insight (a)	5.55%	6.30%
3	EIA (b)	6.66%	6.71%
4	Average	6.11%	6.51%
5	BBB - AA Yield Spread (c)	0.61%	0.61%
6	**Implied BBB Utility Yield**	**6.72%**	**7.12%**

(a) IHS Global Insight, *The U.S. Economy: The 30-Year Focus"* (Third-Quarter 2009) at Table 34.

(b) Energy Information Administration, *Annual Energy Outlook 2010, Early Release* (Dec. 5, 2009) at Table 20.

(c) Based on monthly average bond yields for January 2010 reported in Moody's *Credit Perspectives*.

The increase in debt yields anticipated by IHS Global Insight and EIA is also supported by the widely-referenced Blue Chip Financial Forecasts, which projects that yields on corporate bonds will climb on the order of 70 basis points through the second quarter of 2011.[14] Consistent with these forecasts, Fitch recently concluded, "Interest

[14] Blue Chip Financial Forecasts, Vol. 29, No. 2 (Feb. 1, 2010).

rates are expected to rise over the course of the year from very low levels."[15]

Q. What does this test of logic imply with respect to the DCF results for the Utility Proxy Group?

A. As shown on Schedule 4, sixteen of the cost equity estimates for the firms in the Utility Proxy Group fell below 8.0 percent.[16] In light of the risk-return tradeoff principle and the test applied in *Pioneer*, it is inconceivable that investors are not requiring a substantially higher rate of return for holding common stock, which is the riskiest of a utility's securities. As a result, consistent with the test of economic logic applied by FERC and the upward trend expected for utility bond yields, these values provide little guidance as to the returns investors require from utility common stocks and should be excluded.

Q. What cost of equity is implied by your DCF results for the Utility Proxy Group?

A. As shown on Schedule 4 and summarized in Table 3, below, after eliminating illogical low- and high-end

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[15] Fitch Ratings Ltd., "U.S. Utilities, Power, and Gas 2010 Outlook," *Global Power North America Special Report* (Dec. 4, 2009).

[16] As highlighted on Schedule 4, these DCF estimates ranged from 5.0 percent to 7.9 percent.

values, application of the constant growth DCF model resulted in the following cost of equity estimates:

TABLE 3
DCF RESULTS - UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.5%
IBES	11.1%
First Call	11.1%
Zacks	10.6%
br+sv	10.4%
Stock Price	11.2%

Q. What were the results of your DCF analysis for the Non-Utility Proxy Group?

A. I applied the DCF model to the Non-Utility Proxy Group in exactly the same manner described earlier for the Utility Proxy Group. The results of my DCF analysis for the Non-Utility Proxy Group are presented in Schedule 6, with the sustainable, "br+sv" growth rates being developed on Schedule 7.

I noted earlier that values that are implausibly low or high should be eliminated when evaluating the results of any quantitative method used to estimate the cost of equity. As highlighted on Schedule 6, in addition to illogical low-end values, various DCF estimates for the firms in the Non-Utility Proxy Group exceeded 17.0 percent. I determined that, when compared with the balance of the remaining estimates, these values could be considered implausible and should be excluded. This is also consistent with the precedent adopted by FERC, which has established that estimates found to be "extreme outliers" should be disregarded in interpreting the results of quantitative methods used to estimate the cost of equity.[17]

As shown on Schedule 6 and summarized in Table 4, below, after eliminating illogical low- and high-end values, application of the constant growth DCF model resulted in cost of common equity estimates generally in the 12 percent to 13 percent range:

TABLE 4
DCF RESULTS - NON-UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.9%
IBES	12.6%
First Call	12.8%
Zacks	12.7%
br+sv	12.2%
Stock Price	13.7%

As discussed earlier, reference to the Non-Utility Proxy Group is consistent with established regulatory principles and required returns for utilities should be in line with

[17] See, e.g., *ISO New England, Inc.*, 109 FERC ¶ 61,147 at P 205 (2004).

those of non-utility firms of comparable risk operating under the constraints of free competition.

D. Capital Asset Pricing Model

Q. Please describe the CAPM.

A. The CAPM is a theory of market equilibrium that measures risk using the beta coefficient. Assuming investors are fully diversified, the relevant risk of an individual asset (*e.g.*, common stock) is its volatility relative to the market as a whole, with beta reflecting the tendency of a stock's price to follow changes in the market. The CAPM is mathematically expressed as:

$$R_j = R_f + \beta_j (R_m - R_f)$$

where: R_j = required rate of return for stock j;
R_f = risk-free rate;
R_m = expected return on the market portfolio; and,
β_j = beta, or systematic risk, for stock j.

Like the DCF model, the CAPM is an *ex-ante*, or forward-looking model based on expectations of the future. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using estimates that reflect the expectations of actual investors in the market, not with backward-looking, historical data.

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

A. Application of the CAPM to the Utility Proxy Group based on a forward-looking estimate for investors' required rate of return from common stocks is presented on Schedule 8. In order to capture the expectations of today's investors in current capital markets, the expected market rate of return was estimated by conducting a DCF analysis on the dividend paying firms in the S&P 500.

The dividend yield for each firm was calculated based on the annual indicated dividend payment obtained from Value Line, increased by one-half of the growth rate discussed subsequently (1 + 0.5*g*) to convert them to year-ahead dividend yields presumed by the constant growth DCF model. The growth rate was equal to the earnings growth projections for each firm published by IBES, with each firm's dividend yield and growth rate being weighted by its proportionate share of total market value. Based on the weighted average of the projections for the 352 individual firms, current estimates imply an average growth rate over the next five years of 8.8 percent. Combining this average growth rate with an adjusted dividend yield of 2.5 percent results in a current cost of common equity estimate for the market as a whole of approximately 11.3 percent. Subtracting a 4.5 percent risk-free rate based on the average yield on 20-year Treasury bonds produced a market equity risk premium of 6.8 percent.

Q. What was the source of the beta values you used to apply the CAPM?

A. I relied on the beta values reported by Value Line, which in my experience is the most widely referenced source for beta in regulatory proceedings. As noted in *Regulatory Finance: Utilities' Cost of Capital*:

> Value Line betas are computed on a theoretically sound basis using a broadly-based market index, and they are adjusted for the regression tendency of betas to converge to 1.00. . . . Value Line is the largest and most widely circulated independent investment advisory service, and exerts influence on a large number of institutional and individual investors and on the expectations of these investors.[18]

As shown on Schedule 8, multiplying the 6.8 percent market risk premium by the average Value Line beta for the firms in the Utility Proxy Group, and then adding the resulting risk premium to the average long-term Treasury bond yield, results in an average indicated cost of common equity of 9.5 percent.

[18] Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports* at 65 (1994).

Q. What cost of common equity was indicated for the Non-Utility Proxy Group based on this forward-looking application of the CAPM?

A. As shown on Schedule 9, applying the forward-looking CAPM approach to the firms in the Non-Utility Proxy Group results in an average implied cost of common equity of 9.8 percent.

Q. Do you have any observations regarding these CAPM results?

A. Yes. Applying the CAPM is complicated by the impact of the recent capital market turmoil and recession on investors' risk perceptions and required returns. The CAPM cost of common equity estimate is calibrated from investors' required risk premium between Treasury bonds and common stocks. In response to heightened uncertainties, investors have sought a safe haven in U.S. government bonds and this "flight to safety" has pushed Treasury yields significantly lower while yield spreads for corporate debt have widened. This distortion not only impacts the absolute level of the CAPM cost of equity estimate, but it affects estimated risk premiums. Economic logic would suggest that investors' required risk premium for common stocks over Treasury bonds has also increased. Thus, recent capital market conditions may cause CAPM cost of common equity estimates to understate investors' required returns for common stocks, particularly when historical data are used to calculate the market risk premium. As the Staff of the Florida Public Service Commission recently concluded:

> [R]ecognizing the impact the Federal Government's unprecedented intervention in the capital markets has had on the yields on long-term Treasury bonds, staff believes models that relate the investor-required return on equity to the yield on government securities, such as the CAPM approach, produce less reliable estimates of the ROE at this time.[19]

While my application of the CAPM makes every effort to incorporate investors' forward-looking expectations, the full effect of the "flight to safety" may not be captured in my market risk premium estimate.

Second, the beta in CAPM theory is a measure of the investors' expected relationship of a firm's stock price to the market as a whole. Because investors' expected beta for a firm is not known, reported betas are estimated based on historical relationships. The precipitous drop and subsequent partial recovery in stock prices over the last year or so have caused many firms' historical betas

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[19] *Staff Recommendation for Docket No. 080677-E1 - Petition for increase in rates by Florida Power & Light Company*, at p. 280 (Dec. 23, 2009).

to become unstable, so that reported betas may or may not reflect investors' expected beta. Because of this inherent mismatch between the historical circumstances underlying reported beta values and the current perceptions of investors, the CAPM may not accurately reflect investor's forward-looking rate of return requirements.

Meanwhile, forward-looking estimates of the market required rate of return may be distorted by the recent run-up in stock prices. It is not clear whether reported security analysts' dividend and growth projections have kept pace with the economic recovery expectations presumably pushing up stock prices; if not, there is a mismatch that under-estimates the market required rate of return. This incongruity between current measures of the market risk premium and historical beta values is particularly relevant during periods of heightened uncertainty and rapidly changing capital market conditions, such as those experienced recently. As a result, there is every indication that CAPM approaches fail to fully reflect the risk perceptions of real-world investors in today's capital markets, which would violate the standards underlying a fair rate of return by failing to provide an opportunity to earn a return commensurate with other investments of comparable risk.

E. Expected Earnings Approach

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

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

Q. What rates of return are indicated for utilities based on this approach?

A. Value Line reports that its analysts anticipate an average rate of return on common equity for the electric utility industry of 11.0 percent in 2010 and 11.5

percent over its 2012-2014 forecast horizon.[20] Meanwhile, for the gas utility industry Value Line expects returns on common equity of 10.5 percent in 2010 and 11.0 percent over the period 2012-2014.[21]

For the firms in the Utility Proxy Group specifically, the returns on common equity projected by Value Line over its three-to-five year forecast horizon are shown on Schedule 10. Consistent with the rationale underlying the development of the br+sv growth rates, these year-end values were converted to average returns using the same adjustment factor discussed earlier and developed on Schedule 5. As shown on Schedule 10, Value Line's projections for the utility proxy group suggested an average ROE of 10.7 percent.

F. Summary of Quantitative Results

Q. Please summarize the results of your quantitative analyses.

A. The cost of equity estimates implied by my quantitative analyses are summarized in Table 5 below:

[20] The Value Line Investment Survey at 2231 (Feb. 5, 2010).
[21] The Value Line Investment Survey at 444 (Dec. 11, 2009).

TABLE 5
SUMMARY OF QUANTITATIVE RESULTS

DCF	**Utility**	**Non-Utility**
Value Line	11.5%	11.9%
IBES	11.1%	12.6%
First Call	11.1%	12.8%
Zacks	10.6%	12.7%
br+sv	10.4%	12.2%
Stock Price	11.2%	13.7%
CAPM	9.5%	9.8%
Expected Earnings	**Electric**	**Gas**
2010	11.0%	10.5%
2012-14	11.5%	11.0%
Utility Proxy Group	10.7%	

CAPITAL STRUCTURE

UTILITY PROXY GROUP

		At Fiscal Year-End 2009 (a)			Value Line Projected (b)		
	Company	Debt	Preferred	Common Equity	Debt	Other	Common Equity
1	Ameren Corp.	47.6%	0.0%	52.4%	45.0%	1.0%	54.0%
2	American Elec Pwr	57.0%	0.2%	42.8%	52.0%	0.0%	48.0%
3	Avista Corp.	49.3%	2.4%	48.3%	51.5%	0.0%	48.5%
4	Black Hills Corp.	49.2%	0.0%	50.8%	40.5%	0.0%	59.5%
5	Cleco Corp.	54.4%	0.0%	45.6%	53.0%	0.0%	47.0%
6	Constellation Energy	35.2%	1.4%	63.4%	45.5%	1.5%	53.0%
7	DTE Energy Co.	51.1%	2.1%	46.7%	55.0%	0.0%	45.0%
8	Edison International	49.6%	4.2%	46.3%	50.5%	3.5%	46.0%
9	Empire District Elec	49.7%	3.9%	46.5%	51.0%	0.0%	49.0%
10	Great Plains Energy	53.2%	0.6%	46.2%	51.5%	0.5%	48.0%
11	IDACORP, Inc.	50.3%	0.0%	49.7%	49.0%	0.0%	51.0%
12	Northeast Utilities	55.2%	1.4%	43.4%	58.0%	1.0%	41.0%
13	Pinnacle West Capital	52.2%	0.0%	47.8%	48.0%	0.0%	52.0%
14	PPL Corp.	55.1%	0.0%	44.9%	52.5%	2.0%	45.5%
15	P S Enterprise Group	44.1%	0.5%	55.4%	43.0%	0.0%	57.0%
16	UIL Holdings	56.0%	0.0%	44.0%	52.0%	0.0%	48.0%
17	Westar Energy	52.3%	0.5%	47.2%	47.5%	0.0%	52.5%
	Average	**50.7%**	**1.0%**	**48.3%**	**49.7%**	**0.6%**	**49.7%**

(a) Company Form 10-K and Annual Reports.

(b) The Value Line Investment Survey (Nov. 27 & Dec. 25, 2009, Feb. 5, 2010).

DCF MODEL

UTILITY PROXY GROUP

		(a)	(a)		(b)	(c)	(d)	(e)	(f)	(b)	(g)	(g)	(g)	(g)	(g)	(g)
		Dividend Yield			Growth Rates						Cost of Equity Estimates					
	Company	Price	Dividends	Yield	V Line	IBES	First Call	Zacks	br+sv	Price	V Line	IBES	First Call	Zacks	br+sv	Price
1	Ameren Corp.	$ 25.98	$ 1.54	5.9%	1.0%	3.0%	3.0%	3.5%	3.6%	9.6%	6.9%	8.9%	8.9%	9.4%	9.5%	15.5%
2	American Elec Pwr	$ 35.61	$ 1.66	4.7%	3.0%	3.5%	3.5%	3.6%	6.1%	4.5%	7.7%	8.2%	8.2%	8.3%	10.8%	9.2%
3	Avista Corp.	$ 20.89	$ 0.96	4.6%	6.5%	5.0%	5.0%	5.0%	2.8%	4.1%	11.1%	9.6%	9.6%	9.6%	7.4%	8.7%
4	Black Hills Corp.	$ 26.27	$ 1.44	5.5%	8.5%	NA	NA	6.0%	4.0%	5.5%	14.0%	NMF	NMF	11.5%	9.5%	10.9%
5	Cleco Corp.	$ 26.21	$ 1.00	3.8%	9.5%	9.0%	9.0%	9.0%	5.1%	5.5%	13.3%	12.8%	12.8%	12.8%	8.9%	9.3%
6	Constellation Energy	$ 32.95	$ 0.96	2.9%	3.5%	9.9%	9.9%	5.0%	7.7%	5.0%	6.4%	12.8%	12.8%	7.9%	10.6%	7.9%
7	DTE Energy Co.	$ 43.04	$ 2.12	4.9%	8.5%	3.0%	3.0%	5.0%	4.5%	3.8%	13.4%	7.9%	7.9%	9.9%	9.5%	8.7%
8	Edison International	$ 34.20	$ 1.28	3.7%	3.5%	2.0%	3.0%	5.0%	7.2%	10.0%	7.2%	5.7%	6.7%	8.7%	10.9%	13.7%
9	Empire District Elec	$ 18.46	$ 1.28	6.9%	6.0%	NA	NA	NA	4.3%	7.9%	12.9%	NMF	NMF	NMF	11.3%	14.8%
10	Great Plains Energy	$ 18.25	$ 0.83	4.5%	0.5%	6.3%	8.0%	5.0%	1.8%	2.3%	5.0%	10.8%	12.5%	9.5%	6.4%	6.9%
11	IDACORP, Inc.	$ 31.72	$ 1.20	3.8%	4.5%	5.0%	5.0%	5.0%	4.0%	4.3%	8.3%	8.8%	8.8%	8.8%	7.8%	8.1%
12	Northeast Utilities	$ 25.46	$ 1.00	3.9%	8.0%	8.6%	8.4%	8.9%	5.9%	6.3%	11.9%	12.5%	12.3%	12.8%	9.9%	10.2%
13	Pinnacle West Capital	$ 36.93	$ 2.10	5.7%	3.0%	7.0%	8.0%	7.0%	3.1%	2.0%	8.7%	12.7%	13.7%	12.7%	8.8%	7.7%
14	PPL Corp.	$ 30.62	$ 1.55	5.1%	7.5%	11.5%	11.5%	11.4%	9.5%	10.1%	12.6%	16.6%	16.6%	16.5%	14.6%	15.2%
15	P S Enterprise Group	$ 31.29	$ 1.40	4.5%	7.5%	5.3%	4.0%	3.5%	8.3%	9.5%	12.0%	9.8%	8.5%	8.0%	12.8%	14.0%
16	UIL Holdings	$ 27.38	$ 1.73	6.3%	3.5%	4.5%	4.4%	4.0%	4.3%	2.3%	9.8%	10.8%	10.7%	10.3%	10.6%	8.6%
17	Westar Energy	$ 21.59	$ 1.22	5.7%	4.0%	3.7%	3.0%	5.0%	2.6%	3.7%	9.7%	9.4%	8.7%	10.7%	8.2%	9.4%
	Average (h)										11.5%	11.1%	11.1%	10.6%	10.4%	11.2%

(a) Recent price and estimated dividend for next 12 mos. from The Value Line Investment Survey*Summary and Index* (Feb. 5, 2010).
(b) The Value Line Investment Survey (Nov. 27 & Dec. 25, 2009, Feb. 5, 2010).
(c) *Thomson ReutersCompany in Context Report* (Feb. 3, 2010).
(d) *First Call Earnings Valuation Report* (Feb. 4, 2010).
(e) www.zacks.com (retrieved Feb. 4, 2010)
(f) See Schedule 5.
(g) Sum of dividend yield and respective growth rat
(h) Excludes highlighted figures

Exhibit No. 3
Case Nos. AVU-E-10-01 AVU-G-10-01
W. Avera, Avista
Schedule 4, p. 1 of 1

SUSTAINABLE GROWTH RATE

UTILITY PROXY GROUP

		(a)	(a)	(b)	(a)	(a)	(a)	(c)	(d)
		2012-14 Market Price			2012-14 Projections				
	Company	High	Low	Avg.	EPS	DPS	BVPS	b	r
1	Ameren Corp.	45.00	30.00	$37.50	$3.00	$1.70	$37.25	43.3%	8.1%
2	American Elec Pwr	50.00	35.00	$42.50	$3.50	$1.90	$33.25	45.7%	10.5%
3	Avista Corp.	30.00	19.00	$24.50	$1.75	$1.20	$21.50	31.4%	8.1%
4	Black Hills Corp.	40.00	25.00	$32.50	$2.75	$1.56	$30.75	43.3%	8.9%
5	Cleco Corp.	40.00	25.00	$32.50	$2.50	$1.60	$21.50	36.0%	11.6%
6	Constellation Energy	50.00	30.00	$40.00	$3.50	$1.00	$36.25	71.4%	9.7%
7	DTE Energy Co.	60.00	40.00	$50.00	$4.25	$2.50	$42.50	41.2%	10.0%
8	Edison International	60.00	40.00	$50.00	$4.25	$1.50	$39.50	64.7%	10.8%
9	Empire District Elec	30.00	20.00	$25.00	$1.75	$1.35	$17.25	22.9%	10.1%
10	Great Plains Energy	25.00	15.00	$20.00	$1.60	$1.10	$22.00	31.3%	7.3%
11	IDACORP, Inc.	45.00	30.00	$37.50	$2.75	$1.40	$36.00	49.1%	7.6%
12	Northeast Utilities	40.00	25.00	$32.50	$2.25	$1.15	$24.50	48.9%	9.2%
13	Pinnacle West Capital	50.00	30.00	$40.00	$3.25	$2.20	$37.25	32.3%	8.7%
14	PPL Corp.	55.00	35.00	$45.00	$3.75	$1.90	$19.50	49.3%	19.2%
15	P S Enterprise Group	55.00	35.00	$45.00	$3.75	$1.70	$24.00	54.7%	15.6%
16	UIL Holdings	35.00	25.00	$30.00	$2.30	$1.73	$21.75	24.8%	10.6%
17	Westar Energy	30.00	20.00	$25.00	$2.10	$1.40	$27.20	33.3%	7.7%

SUSTAINABLE GROWTH RATE

UTILITY PROXY GROUP

		(a)	(a)	(e)	(a)	(a)	(e)	(f)	(g)	(h)
		2008			2012-14			Adjusted "r"		
	Company	BVPS	No. Shares	Common Equity	BVPS	No. Shares	Common Equity	Chg in Equity	Adj. Factor	Adj. r
1	Ameren Corp.	$32.80	212.30	$6,963	$37.25	252.00	$9,387	6.2%	1.0299	8.3%
2	American Elec Pwr	$26.33	406.07	$10,692	$33.25	495.00	$16,459	9.0%	1.0431	11.0%
3	Avista Corp.	$18.30	54.49	$997	$21.50	58.50	$1,258	4.8%	1.0232	8.3%
4	Black Hills Corp.	$27.19	38.64	$1,051	$30.75	40.00	$1,230	3.2%	1.0158	9.1%
5	Cleco Corp.	$17.65	60.04	$1,060	$21.50	65.00	$1,398	5.7%	1.0277	11.9%
6	Constellation Energy	$15.98	199.13	$3,182	$36.25	215.00	$7,794	19.6%	1.0893	10.5%
7	DTE Energy Co.	$36.77	163.02	$5,994	$42.50	178.00	$7,565	4.8%	1.0233	10.2%
8	Edison International	$29.21	325.81	$9,517	$39.50	325.81	$12,869	6.2%	1.0302	11.1%
9	Empire District Elec	$15.56	33.98	$529	$17.25	42.00	$725	6.5%	1.0315	10.5%
10	Great Plains Energy	$21.39	119.26	$2,551	$22.00	158.00	$3,476	6.4%	1.0309	7.5%
11	IDACORP, Inc.	$27.76	46.92	$1,302	$36.00	52.00	$1,872	7.5%	1.0363	7.9%
12	Northeast Utilities	$19.38	155.83	$3,020	$24.50	188.00	$4,606	8.8%	1.0422	9.6%
13	Pinnacle West Capital	$34.16	100.89	$3,446	$37.25	118.00	$4,396	5.0%	1.0243	8.9%
14	PPL Corp.	$13.55	374.58	$5,076	$19.50	370.00	$7,215	7.3%	1.0352	19.9%
15	P S Enterprise Group	$15.36	506.02	$7,772	$24.00	490.00	$11,760	8.6%	1.0414	16.3%
16	UIL Holdings	$18.85	25.17	$474	$21.75	30.80	$670	7.1%	1.0345	10.9%
17	Westar Energy	$20.18	108.31	$2,186	$27.20	114.00	$3,101	7.2%	1.0350	8.0%

SUSTAINABLE GROWTH RATE

UTILITY PROXY GROUP

		(a)	(a)	(f)	(i)	(j)	(k)	(l)	(m)
		Common Shares Outstanding			M/B	"sv" Factor			
	Company	2008	2012-14	Change	Ratio	s	v	sv	br + sv
1	Ameren Corp.	212.3	252.0	3.49%	1.01	0.0351	0.0067	0.02%	3.6%
2	American Elec Pwr	406.1	495.0	4.04%	1.28	0.0516	0.2176	1.12%	6.1%
3	Avista Corp.	54.5	58.5	1.43%	1.14	0.0163	0.1224	0.20%	2.8%
4	Black Hills Corp.	38.6	40.0	0.69%	1.06	0.0073	0.0538	0.04%	4.0%
5	Cleco Corp.	60.0	65.0	1.60%	1.51	0.0242	0.3385	0.82%	5.1%
6	Constellation Energy	199.1	215.0	1.55%	1.10	0.0171	0.0938	0.16%	7.7%
7	DTE Energy Co.	163.0	178.0	1.77%	1.18	0.0209	0.1500	0.31%	4.5%
8	Edison International	325.8	325.8	0.00%	1.27	-	0.2100	0.00%	7.2%
9	Empire District Elec	34.0	42.0	4.33%	1.45	0.0627	0.3100	1.94%	4.3%
10	Great Plains Energy	119.3	158.0	5.79%	0.91	0.0526	(0.1000)	-0.53%	1.8%
11	IDACORP, Inc.	46.9	52.0	2.08%	1.04	0.0216	0.0400	0.09%	4.0%
12	Northeast Utilities	155.8	188.0	3.82%	1.33	0.0507	0.2462	1.25%	5.9%
13	Pinnacle West Capital	100.9	118.0	3.18%	1.07	0.0342	0.0688	0.23%	3.1%
14	PPL Corp.	374.6	370.0	-0.25%	2.31	(0.0057)	0.5667	-0.32%	9.5%
15	P S Enterprise Group	506.0	490.0	-0.64%	1.88	(0.0120)	0.4667	-0.56%	8.3%
16	UIL Holdings	25.2	30.8	4.12%	1.38	0.0568	0.2750	1.56%	4.3%
17	Westar Energy	108.3	114.0	1.03%	0.92	0.0095	(0.0880)	-0.08%	2.6%

(a) The Value Line Investment Survey (Nov. 27 & Dec. 25, 2009, Feb. 5, 2010).
(b) Average of High and Low expected market prices.
(c) Computed at (EPS - DPS) / EPS.
(d) Computed as EPS / BVPS.
(e) Product of BVPS and No. Shares Outstanding.
(f) Five-year rate of change.
(g) Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity)
(h) Product of year-end "r" for 2012-14 and Adjustment Factor.
(i) Average of High and Low expected market prices divided by 2012-14 BVPS.
(j) Product of change in common shares outstanding and M/B Ratio
(k) Computed as 1 - B/M Ratio.
(l) Product of "s" and "v".
(m) Product of average "b" and adjusted "r", plus "sv".

DCF MODEL

NON-UTILITY PROXY GROUP

		(a)	(a)	(b)	(c)	(d)	(e)	(a)	(f)	(f)	(f)	(f)	(f)	(f)
		Dividend	Growth Rates						Cost of Equity Estimates					
	Company	Yield	V Line	IBES	First Call	Zacks	br+sv	Price	V Line	IBES	First Call	Zacks	br+sv	Price
1	3M Company	2.54%	5.0%	12.1%	12.5%	11.6%	15.8%	10.4%	7.5%	14.6%	15.0%	14.1%	18.4%	12.9%
2	Abbott Labs.	2.99%	10.0%	11.5%	12.0%	10.8%	13.6%	15.7%	13.0%	14.5%	15.0%	13.8%	16.6%	18.7%
3	Alberto-Culver	1.19%	14.5%	11.7%	12.5%	12.5%	8.0%	7.6%	15.7%	12.9%	13.7%	13.7%	9.2%	8.8%
4	Allergan, Inc.	0.33%	14.0%	13.0%	13.3%	15.2%	19.2%	15.6%	14.3%	13.3%	13.6%	15.5%	19.5%	16.0%
5	AT&T Inc.	6.17%	5.0%	5.9%	5.0%	5.9%	5.9%	13.0%	11.2%	12.1%	11.2%	12.1%	12.0%	19.2%
6	Automatic Data Proc.	3.22%	9.0%	11.8%	12.0%	11.4%	9.8%	15.8%	12.2%	15.0%	15.2%	14.6%	13.1%	19.0%
7	Bard (C.R.)	0.81%	12.5%	13.6%	13.9%	13.4%	13.4%	14.4%	13.3%	14.4%	14.7%	14.2%	14.3%	15.2%
8	Baxter Int'l Inc.	2.00%	14.0%	11.5%	11.5%	11.5%	15.1%	15.4%	16.0%	13.5%	13.5%	13.5%	17.1%	17.4%
9	Becton, Dickinson	1.96%	11.5%	11.3%	11.0%	11.4%	12.1%	12.3%	13.5%	13.3%	13.0%	13.4%	14.0%	14.3%
10	Bemis Co.	2.95%	4.5%	7.0%	7.0%	8.0%	9.3%	8.9%	7.5%	10.0%	10.0%	11.0%	12.3%	11.9%
11	Bristol-Myers Squibb	4.81%	9.0%	2.5%	3.0%	7.1%	5.5%	11.7%	13.8%	7.3%	7.8%	11.9%	10.3%	16.5%
12	Brown-Forman 'B'	2.29%	7.0%	13.0%	13.0%	NA	12.2%	9.2%	9.3%	15.3%	15.3%	NA	14.5%	11.4%
13	Cardinal Health	2.26%	-2.5%	6.6%	10.0%	10.1%	7.6%	10.8%	-0.2%	8.9%	12.3%	12.4%	9.8%	13.1%
14	Chevron Corp.	3.54%	5.0%	NA	NA	9.0%	17.5%	12.1%	8.5%	NA	NA	12.5%	21.0%	15.7%
15	Chubb Corp.	2.91%	3.0%	8.0%	8.5%	7.7%	9.1%	12.4%	5.9%	10.9%	11.4%	10.6%	12.0%	15.3%
16	Coca-Cola	3.09%	6.5%	9.0%	9.0%	8.9%	11.1%	11.1%	9.6%	12.1%	12.1%	12.0%	14.2%	14.2%
17	Colgate-Palmolive	2.22%	11.5%	9.0%	10.0%	9.8%	19.5%	13.9%	13.7%	11.2%	12.2%	12.0%	21.7%	16.2%
18	Commerce Bancshs.	2.37%	5.0%	6.5%	6.5%	6.5%	8.2%	3.5%	7.4%	8.9%	8.9%	8.9%	10.5%	5.9%
19	ConAgra Foods	3.61%	11.5%	8.6%	9.0%	9.0%	5.9%	12.2%	15.1%	12.2%	12.6%	12.6%	9.5%	15.8%
20	ConocoPhillips	3.98%	3.0%	-8.8%	-5.6%	3.1%	17.4%	21.1%	7.0%	-4.8%	-1.6%	7.1%	21.3%	25.1%
21	Costco Wholesale	1.25%	6.0%	13.2%	13.0%	13.5%	8.8%	6.1%	7.3%	14.5%	14.3%	14.8%	10.1%	7.4%
22	CVS Caremark Corp.	0.96%	10.5%	11.8%	14.0%	13.1%	7.7%	19.6%	11.5%	12.8%	15.0%	14.1%	8.7%	20.6%
23	Disney (Walt)	1.16%	12.0%	6.3%	6.5%	9.0%	9.6%	20.1%	13.2%	7.5%	7.7%	10.2%	10.8%	21.3%
24	Du Pont	5.19%	0.0%	5.5%	5.5%	9.3%	4.7%	14.6%	5.2%	10.7%	10.7%	14.5%	9.9%	19.8%
25	Eaton Corp.	3.12%	-1.5%	10.1%	11.3%	9.7%	7.6%	11.1%	1.6%	13.2%	14.4%	12.8%	10.7%	14.2%
26	Ecolab Inc.	1.39%	11.5%	13.2%	13.0%	13.3%	22.9%	7.2%	12.9%	14.6%	14.4%	14.7%	24.2%	8.6%
27	Emerson Electric	3.28%	4.5%	11.5%	10.0%	10.8%	7.8%	10.6%	7.8%	14.8%	13.3%	14.1%	11.1%	13.9%
28	Everest Re Group Ltd.	2.26%	5.0%	7.5%	7.5%	10.0%	10.7%	13.1%	7.3%	9.8%	9.8%	12.3%	13.0%	15.4%
29	Exxon Mobil Corp.	2.49%	3.5%	2.8%	3.5%	6.7%	14.6%	10.3%	6.0%	5.3%	6.0%	9.2%	17.1%	12.8%
30	Gen'l Dynamics	2.35%	11.0%	7.8%	8.0%	10.1%	12.9%	18.2%	13.4%	10.2%	10.4%	12.5%	15.2%	20.6%
31	Gen'l Mills	2.84%	9.0%	9.1%	8.5%	7.7%	6.2%	9.4%	11.8%	11.9%	11.3%	10.5%	9.0%	12.2%
32	Grainger (W.W.)	1.98%	6.5%	11.0%	12.0%	11.0%	6.9%	9.2%	8.5%	13.0%	14.0%	13.0%	8.9%	11.2%
33	Heinz (H.J.)	4.10%	6.5%	6.9%	8.0%	8.0%	15.9%	12.2%	10.6%	11.0%	12.1%	12.1%	20.0%	16.3%
34	Hewlett-Packard	0.63%	9.0%	10.0%	10.0%	15.5%	10.6%	11.2%	9.6%	10.6%	10.6%	16.1%	11.2%	11.8%
35	Home Depot	3.13%	1.5%	9.6%	9.5%	11.2%	9.9%	9.7%	4.6%	12.7%	12.6%	14.3%	13.0%	12.8%
36	Honeywell Int'l	3.06%	4.0%	8.9%	10.0%	9.2%	11.6%	13.0%	7.1%	12.0%	13.1%	12.3%	14.7%	16.0%
37	Hormel Foods	2.24%	10.5%	10.0%	10.0%	9.3%	10.1%	16.5%	12.7%	12.2%	12.2%	11.5%	12.4%	18.8%
38	Illinois Tool Works	2.60%	3.0%	3.3%	2.6%	9.0%	9.9%	7.1%	5.6%	5.9%	5.2%	11.6%	12.5%	9.7%
39	Int'l Business Mach.	1.81%	10.5%	9.4%	10.0%	13.6%	10.6%	13.9%	12.3%	11.2%	11.8%	15.4%	12.4%	15.7%
40	Intel Corp.	3.30%	10.0%	11.1%	10.0%	11.2%	15.1%	15.8%	13.3%	14.4%	13.3%	14.5%	18.4%	19.1%

DCF MODEL

NON-UTILITY PROXY GROUP

		(a)	(a)	(b)	(c)	(d)	(e)	(a)	(f)	(f)	(f)	(f)	(f)	(f)
		Dividend	Growth Rates						Cost of Equity Estimates					
	Company	Yield	V Line	IBES	First Call	Zacks	br+sv	Price	V Line	IBES	First Call	Zacks	br+sv	Price
41	ITT Corp.	1.66%	7.5%	6.8%	5.0%	10.0%	13.4%	12.5%	9.2%	8.5%	$\boxed{6.7\%}$	11.7%	15.1%	14.2%
42	Johnson & Johnson	3.13%	7.5%	7.4%	7.0%	7.4%	10.8%	12.6%	10.6%	10.5%	10.1%	10.5%	13.9%	15.7%
43	Kellogg	2.88%	9.0%	10.4%	9.0%	9.1%	21.3%	11.2%	11.9%	13.3%	11.9%	12.0%	$\boxed{24.2\%}$	14.1%
44	Kimberly-Clark	3.75%	6.0%	11.0%	11.0%	9.5%	23.2%	11.0%	9.8%	14.8%	14.8%	13.3%	$\boxed{26.9\%}$	14.8%
45	Kraft Foods	4.32%	6.5%	9.1%	9.1%	14.1%	4.7%	13.4%	10.8%	13.4%	13.4%	$\boxed{18.4\%}$	9.0%	$\boxed{17.7\%}$
46	Lilly (Eli)	5.70%	5.0%	1.3%	2.2%	3.8%	17.6%	19.6%	10.7%	$\boxed{7.0\%}$	$\boxed{7.9\%}$	9.5%	$\boxed{23.3\%}$	$\boxed{25.3\%}$
47	Lockheed Martin	3.34%	11.5%	9.1%	9.5%	9.1%	19.8%	25.9%	14.8%	12.4%	12.8%	12.4%	$\boxed{23.1\%}$	$\boxed{29.2\%}$
48	McCormick & Co.	2.91%	8.5%	10.0%	20.0%	10.0%	13.2%	11.9%	11.4%	12.9%	$\boxed{22.9\%}$	12.9%	16.1%	14.8%
49	McDonald's Corp.	3.55%	10.0%	9.4%	9.0%	9.1%	6.2%	8.9%	13.6%	13.0%	12.6%	12.7%	9.8%	12.5%
50	McKesson Corp.	0.75%	9.0%	11.3%	13.0%	12.0%	12.2%	5.8%	9.8%	12.1%	13.8%	12.8%	12.9%	$\boxed{6.6\%}$
51	Medtronic, Inc.	1.94%	10.5%	11.0%	11.0%	11.2%	11.7%	22.3%	12.4%	12.9%	12.9%	13.1%	13.7%	$\boxed{24.3\%}$
52	Microsoft Corp.	1.96%	10.0%	11.0%	11.0%	11.2%	5.0%	13.1%	12.0%	13.0%	13.0%	13.2%	$\boxed{6.9\%}$	15.1%
53	NIKE, Inc. 'B'	1.71%	9.5%	12.6%	15.0%	11.9%	11.8%	9.6%	11.2%	14.3%	16.7%	13.6%	13.6%	11.3%
54	Northrop Grumman	3.27%	9.5%	9.2%	10.0%	9.2%	9.6%	21.5%	12.8%	12.5%	13.3%	12.5%	12.9%	$\boxed{24.8\%}$
55	Oracle Corp.	0.87%	11.5%	12.8%	12.5%	13.1%	8.8%	18.2%	12.4%	13.7%	13.4%	14.0%	9.7%	$\boxed{19.0\%}$
56	PepsiCo, Inc.	3.00%	8.5%	10.8%	10.8%	10.0%	14.0%	14.3%	11.5%	13.8%	13.8%	13.0%	$\boxed{17.0\%}$	$\boxed{17.3\%}$
57	Pfizer, Inc.	3.95%	-4.0%	1.5%	1.9%	-0.7%	5.9%	1.8%	$\boxed{-0.1\%}$	$\boxed{5.5\%}$	$\boxed{5.9\%}$	$\boxed{3.3\%}$	9.8%	$\boxed{5.7\%}$
58	Procter & Gamble	2.86%	7.0%	9.3%	10.0%	8.0%	8.5%	13.5%	9.9%	12.2%	12.9%	10.9%	11.4%	16.4%
59	Raytheon Co.	2.51%	13.0%	9.0%	9.0%	9.3%	9.3%	17.6%	15.5%	11.5%	11.5%	11.8%	11.8%	$\boxed{20.1\%}$
60	Sigma-Aldrich	1.13%	10.0%	9.0%	9.0%	8.0%	18.1%	8.7%	11.1%	10.1%	10.1%	9.1%	$\boxed{19.2\%}$	9.8%
61	Stryker Corp.	1.18%	12.0%	10.7%	10.4%	11.7%	13.7%	20.8%	13.2%	11.9%	11.6%	12.9%	14.9%	$\boxed{22.0\%}$
62	Sysco Corp.	3.77%	7.0%	15.0%	15.0%	15.0%	9.4%	9.9%	10.8%	18.8%	$\boxed{18.8\%}$	$\boxed{18.8\%}$	13.1%	13.7%
63	TJX Companies	1.31%	13.5%	12.4%	12.0%	12.5%	14.3%	11.4%	14.8%	13.7%	13.3%	13.8%	15.6%	12.7%
64	United Parcel Serv.	3.09%	1.5%	7.9%	12.0%	11.7%	16.2%	12.3%	$\boxed{4.6\%}$	11.0%	15.1%	14.8%	$\boxed{19.3\%}$	15.4%
65	United Technologies	2.21%	8.0%	10.2%	10.0%	8.7%	14.5%	14.8%	10.2%	12.4%	12.2%	10.9%	16.7%	$\boxed{17.0\%}$
66	Verizon Communic.	5.79%	4.0%	4.6%	4.0%	5.3%	5.9%	13.6%	9.8%	10.4%	9.8%	11.1%	11.7%	$\boxed{19.4\%}$
67	Wal-Mart Stores	2.18%	9.5%	11.8%	11.0%	11.5%	8.6%	14.3%	11.7%	14.0%	13.2%	13.7%	10.8%	16.4%
68	Walgreen Co.	1.47%	10.0%	14.2%	15.0%	14.3%	10.9%	12.2%	11.5%	15.7%	16.5%	15.8%	12.3%	13.7%
69	Waste Management	3.73%	5.5%	9.8%	10.1%	11.0%	6.4%	6.3%	9.2%	13.5%	13.8%	14.7%	10.1%	10.0%
	Average (g)								**11.9%**	**12.6%**	**12.8%**	**12.7%**	**12.2%**	**13.7%**

(a) www.valueline.com (retrieved Dec. 24, 2009).
(b) Thomson Reuters, *Company in Context Report* (Dec. 23, 2009).
(c) *First Call Earnings Valuation Report* (Dec. 24, 2009).
(d) www.zacks.com (retrieved Dec. 24, 2009).
(e) See Schedule 7.
(f) Sum of dividend yield and respective growth rate.
(g) Excludes highlighted figures.

SUSTAINABLE GROWTH RATE

NON-UTILITY PROXY GROUP

		(a)	(a)	(b)	(a)	(a)	(a)	(c)	(d)
		2012-14 Market Price			2012-14 Projections				
	Company	High	Low	Avg.	EPS	DPS	BVPS	b	r
1	3M Company	$120.00	$100.00	$110.00	$6.90	$2.26	$29.35	67.2%	23.5%
2	Abbott Labs.	$100.00	$80.00	$90.00	$5.00	$2.18	$21.95	56.4%	22.8%
3	Alberto-Culver	$45.00	$35.00	$40.00	$2.00	$0.45	$16.30	77.5%	12.3%
4	Allergan, Inc.	$110.00	$90.00	$100.00	$4.35	$0.25	$24.20	94.3%	18.0%
5	AT&T Inc.	$50.00	$40.00	$45.00	$3.25	$2.00	$22.05	38.5%	14.7%
6	Automatic Data Proc.	$85.00	$70.00	$77.50	$3.30	$1.60	$20.75	51.5%	15.9%
7	Bard (C.R.)	$155.00	$125.00	$140.00	$7.80	$0.94	$39.25	87.9%	19.9%
8	Baxter Int'l Inc.	$105.00	$90.00	$97.50	$6.10	$1.60	$20.00	73.8%	30.5%
9	Becton, Dickinson	$130.00	$105.00	$117.50	$7.35	$1.90	$38.85	74.1%	18.9%
10	Bemis Co.	$40.00	$35.00	$37.50	$2.25	$1.04	$16.90	53.8%	13.3%
11	Bristol-Myers Squibb	$40.00	$30.00	$35.00	$1.95	$1.40	$10.25	28.2%	19.0%
12	Brown-Forman 'B'	$75.00	$65.00	$70.00	$4.10	$1.24	$22.05	69.8%	18.6%
13	Cardinal Health	$50.00	$45.00	$47.50	$2.80	$1.00	$23.65	64.3%	11.8%
14	Chevron Corp.	$140.00	$110.00	$125.00	$12.50	$3.00	$53.15	76.0%	23.5%
15	Chubb Corp.	$85.00	$70.00	$77.50	$7.00	$1.60	$57.85	77.1%	12.1%
16	Coca-Cola	$90.00	$75.00	$82.50	$3.85	$2.12	$16.40	44.9%	23.5%
17	Colgate-Palmolive	$140.00	$115.00	$127.50	$6.30	$2.50	$17.70	60.3%	35.6%
18	Commerce Bancshs.	$50.00	$40.00	$45.00	$3.40	$1.10	$31.75	67.6%	10.7%
19	ConAgra Foods	$40.00	$30.00	$35.00	$2.25	$0.88	$14.95	60.9%	15.1%
20	ConocoPhillips	$125.00	$100.00	$112.50	$11.85	$2.20	$59.05	81.4%	20.1%
21	Costco Wholesale	$80.00	$65.00	$72.50	$3.75	$0.80	$29.00	78.7%	12.9%
22	CVS Caremark Corp.	$70.00	$60.00	$65.00	$3.60	$0.48	$35.45	86.7%	10.2%
23	Disney (Walt)	$65.00	$50.00	$57.50	$3.85	$0.60	$27.05	84.4%	14.2%
24	Du Pont	$60.00	$50.00	$55.00	$3.00	$1.92	$13.55	36.0%	22.1%
25	Eaton Corp.	$110.00	$90.00	$100.00	$6.15	$2.50	$53.55	59.3%	11.5%
26	Ecolab Inc.	$65.00	$55.00	$60.00	$3.15	$0.85	$12.25	73.0%	25.7%
27	Emerson Electric	$65.00	$55.00	$60.00	$3.50	$1.55	$13.65	55.7%	25.6%
28	Everest Re Group Ltd.	$165.00	$135.00	$150.00	$15.00	$2.35	$116.65	84.3%	12.9%
29	Exxon Mobil Corp.	$125.00	$100.00	$112.50	$9.35	$1.85	$38.70	80.2%	24.2%
30	Gen'l Dynamics	$145.00	$120.00	$132.50	$9.50	$2.50	$50.25	73.7%	18.9%
31	Gen'l Mills	$105.00	$85.00	$95.00	$5.50	$2.45	$22.60	55.5%	24.3%
32	Grainger (W.W.)	$140.00	$115.00	$127.50	$7.40	$2.26	$42.30	69.5%	17.5%
33	Heinz (H.J.)	$70.00	$60.00	$65.00	$3.90	$2.20	$10.65	43.6%	36.6%
34	Hewlett-Packard	$80.00	$65.00	$72.50	$4.50	$0.45	$28.55	90.0%	15.8%
35	Home Depot	$45.00	$35.00	$40.00	$2.50	$1.05	$14.85	58.0%	16.8%
36	Honeywell Int'l	$65.00	$55.00	$60.00	$3.95	$1.75	$18.15	55.7%	21.8%
37	Hormel Foods	$75.00	$60.00	$67.50	$3.80	$1.20	$23.85	68.4%	15.9%
38	Illinois Tool Works	$70.00	$55.00	$62.50	$3.80	$1.36	$21.30	64.2%	17.8%
39	Int'l Business Mach.	$220.00	$180.00	$200.00	$13.25	$3.00	$23.90	77.4%	55.4%
40	Intel Corp.	$40.00	$30.00	$35.00	$1.75	$0.80	$9.15	54.3%	19.1%
41	ITT Corp.	$95.00	$75.00	$85.00	$5.30	$1.24	$33.80	76.6%	15.7%
42	Johnson & Johnson	$110.00	$90.00	$100.00	$6.50	$2.50	$25.85	61.5%	25.1%
43	Kellogg	$85.00	$70.00	$77.50	$4.60	$1.80	$13.70	60.9%	33.6%
44	Kimberly-Clark	$95.00	$80.00	$87.50	$5.85	$2.55	$15.15	56.4%	38.6%
45	Kraft Foods	$50.00	$40.00	$45.00	$2.75	$1.40	$26.20	49.1%	10.5%
46	Lilly (Eli)	$75.00	$60.00	$67.50	$4.75	$2.30	$16.05	51.6%	29.6%
47	Lockheed Martin	$215.00	$175.00	$195.00	$13.00	$3.50	$22.75	73.1%	57.1%
48	McCormick & Co.	$60.00	$50.00	$55.00	$3.15	$1.28	$17.40	59.4%	18.1%
49	McDonald's Corp.	$100.00	$80.00	$90.00	$5.25	$2.85	$18.25	45.7%	28.8%
50	McKesson Corp.	$90.00	$70.00	$80.00	$5.90	$0.48	$43.25	91.9%	13.6%
51	Medtronic, Inc.	$100.00	$80.00	$90.00	$4.80	$0.98	$20.15	79.6%	23.8%
52	Microsoft Corp.	$50.00	$45.00	$47.50	$2.65	$0.80	$7.70	69.8%	34.4%
53	NIKE, Inc. 'B'	$100.00	$85.00	$92.50	$5.10	$1.50	$23.90	70.6%	21.3%
54	Northrop Grumman	$130.00	$110.00	$120.00	$8.60	$2.25	$57.35	73.8%	15.0%
55	Oracle Corp.	$45.00	$40.00	$42.50	$2.15	$0.30	$7.90	86.0%	27.2%
56	PepsiCo, Inc.	$115.00	$95.00	$105.00	$5.15	$2.10	$19.45	59.2%	26.5%
57	Pfizer, Inc.	$20.00	$16.00	$18.00	$1.40	$0.64	$13.45	54.3%	10.4%
58	Procter & Gamble	$105.00	$85.00	$95.00	$4.75	$1.95	$26.00	58.9%	18.3%
59	Raytheon Co.	$110.00	$90.00	$100.00	$6.80	$1.75	$39.60	74.3%	17.2%
60	Sigma-Aldrich	$85.00	$65.00	$75.00	$4.15	$0.70	$18.95	83.1%	21.9%
61	Stryker Corp.	$115.00	$95.00	$105.00	$4.75	$0.72	$27.10	84.8%	17.5%
62	Sysco Corp.	$45.00	$35.00	$40.00	$2.40	$1.20	$8.50	50.0%	28.2%
63	TJX Companies	$65.00	$55.00	$60.00	$4.00	$0.75	$10.90	81.3%	36.7%
64	United Parcel Serv.	$100.00	$85.00	$92.50	$4.20	$2.30	$11.85	45.2%	35.4%
65	United Technologies	$120.00	$95.00	$107.50	$6.75	$2.20	$27.75	67.4%	24.3%
66	Verizon Communic.	$60.00	$50.00	$55.00	$3.10	$1.96	$18.85	36.8%	16.4%
67	Wal-Mart Stores	$95.00	$75.00	$85.00	$5.45	$1.55	$31.90	71.6%	17.1%
68	Walgreen Co.	$65.00	$55.00	$60.00	$3.35	$0.76	$22.20	77.3%	15.1%
69	Waste Management	$45.00	$40.00	$42.50	$2.80	$1.50	$16.55	46.4%	16.9%

SUSTAINABLE GROWTH RATE

NON-UTILITY PROXY GROUP

		(a)	(a)	(e)	(a)	(a)	(e)	(f)	(g)	(h)
		2008			2012-14			Adjusted "r"		
			No.	Common		No.	Common	Chg in	Adj.	Adj.
	Company	BVPS	Shares	Equity	BVPS	Shares	Equity	Equity	Factor	r
1	3M Company	$14.24	693.54	$9,876	$29.35	680.00	$19,958	15.1%	1.0702	25.2%
2	Abbott Labs.	$11.48	1522.40	$17,477	$21.95	1520.00	$33,364	13.8%	1.0646	24.2%
3	Alberto-Culver	$11.35	97.86	$1,111	$16.30	92.00	$1,500	6.2%	1.0300	12.6%
4	Allergan, Inc.	$13.19	304.09	$4,011	$24.20	310.00	$7,502	13.3%	1.0625	19.1%
5	AT&T Inc.	$16.35	5893.00	$96,351	$22.05	5900.00	$130,095	6.2%	1.0300	15.2%
6	Automatic Data Proc.	$9.97	510.30	$5,088	$20.75	520.00	$10,790	16.2%	1.0750	17.1%
7	Bard (C.R.)	$19.89	99.39	$1,977	$39.25	90.00	$3,533	12.3%	1.0580	21.0%
8	Baxter Int'l Inc.	$10.11	615.99	$6,228	$20.00	550.00	$11,000	12.1%	1.0568	32.2%
9	Becton, Dickinson	$20.30	243.08	$4,935	$38.85	227.00	$8,819	12.3%	1.0580	20.0%
10	Bemis Co.	$13.50	99.71	$1,346	$16.90	108.00	$1,825	6.3%	1.0304	13.7%
11	Bristol-Myers Squibb	$6.20	1974.30	$12,241	$10.25	1970.00	$20,193	10.5%	1.0500	20.0%
12	Brown-Forman 'B'	$12.10	150.13	$1,817	$22.05	145.00	$3,197	12.0%	1.0565	19.6%
13	Cardinal Health	$21.70	357.10	$7,749	$23.65	355.00	$8,396	1.6%	1.0080	11.9%
14	Chevron Corp.	$43.23	2004.20	$86,642	$53.15	1950.00	$103,643	3.6%	1.0179	23.9%
15	Chubb Corp.	$38.13	352.30	$13,433	$57.85	325.00	$18,801	7.0%	1.0336	12.5%
16	Coca-Cola	$8.85	2312.00	$20,461	$16.40	2310.00	$37,884	13.1%	1.0615	24.9%
17	Colgate-Palmolive	$3.47	501.41	$1,740	$17.70	480.00	$8,496	37.3%	1.1573	41.2%
18	Commerce Bancshs.	$19.79	79.68	$1,577	$31.75	85.00	$2,699	11.3%	1.0537	11.3%
19	ConAgra Foods	$11.02	484.37	$5,338	$14.95	425.00	$6,354	3.5%	1.0174	15.3%
20	ConocoPhillips	$37.27	1480.20	$55,167	$59.05	1500.00	$88,575	9.9%	1.0473	21.0%
21	Costco Wholesale	$21.25	432.51	$9,191	$29.00	410.00	$11,890	5.3%	1.0257	13.3%
22	CVS Caremark Corp.	$23.90	1438.80	$34,387	$35.45	1325.00	$46,971	6.4%	1.0312	10.5%
23	Disney (Walt)	$17.73	1822.90	$32,320	$27.05	1610.00	$43,551	6.1%	1.0298	14.7%
24	Du Pont	$7.63	902.37	$6,885	$13.55	850.00	$11,518	10.8%	1.0514	23.3%
25	Eaton Corp.	$38.28	165.00	$6,316	$53.55	170.00	$9,104	7.6%	1.0365	11.9%
26	Ecolab Inc.	$6.65	236.20	$1,571	$12.25	245.00	$3,001	13.8%	1.0647	27.4%
27	Emerson Electric	$11.82	771.22	$9,116	$13.65	700.00	$9,555	0.9%	1.0047	25.8%
28	Everest Re Group Ltd.	$75.62	65.60	$4,961	$116.65	60.00	$6,999	7.1%	1.0344	13.3%
29	Exxon Mobil Corp.	$22.70	4976.00	$112,955	$38.70	4300.00	$166,410	8.1%	1.0387	25.1%
30	Gen'l Dynamics	$26.00	386.71	$10,054	$50.25	365.00	$18,341	12.8%	1.0600	20.0%
31	Gen'l Mills	$18.42	337.50	$6,217	$22.60	300.00	$6,780	1.7%	1.0087	24.5%
32	Grainger (W.W.)	$27.20	74.78	$2,034	$42.30	65.00	$2,750	6.2%	1.0301	18.0%
33	Heinz (H.J.)	$3.87	315.04	$1,219	$10.65	310.00	$3,302	22.0%	1.0993	40.3%
34	Hewlett-Packard	$16.13	2415.00	$38,954	$28.55	2100.00	$59,955	9.0%	1.0431	16.4%
35	Home Depot	$10.48	1696.00	$17,774	$14.85	1685.00	$25,022	7.1%	1.0342	17.4%
36	Honeywell Int'l	$9.78	734.59	$7,184	$18.15	715.00	$12,977	12.6%	1.0591	23.0%
37	Hormel Foods	$14.92	134.52	$2,007	$23.85	130.00	$3,101	9.1%	1.0435	16.6%
38	Illinois Tool Works	$14.41	499.12	$7,192	$21.30	475.00	$10,118	7.1%	1.0341	18.4%
39	Int'l Business Mach.	$10.06	1339.10	$13,471	$23.90	1050.00	$25,095	13.2%	1.0621	58.9%
40	Intel Corp.	$7.03	5562.00	$39,101	$9.15	6000.00	$54,900	7.0%	1.0339	19.8%
41	ITT Corp.	$16.83	181.80	$3,060	$33.80	185.00	$6,253	15.4%	1.0714	16.8%
42	Johnson & Johnson	$15.35	2769.20	$42,507	$25.85	2520.00	$65,142	8.9%	1.0427	26.2%
43	Kellogg	$3.79	381.86	$1,447	$13.70	375.00	$5,138	28.8%	1.1260	37.8%
44	Kimberly-Clark	$9.38	413.60	$3,880	$15.15	415.00	$6,287	10.1%	1.0482	40.5%
45	Kraft Foods	$15.11	1469.30	$22,201	$26.20	1400.00	$36,680	10.6%	1.0502	11.0%
46	Lilly (Eli;	$5.93	1136.10	$6,737	$16.05	1150.00	$18,458	22.3%	1.1004	32.6%
47	Lockheed Martin	$7.29	393.00	$2,865	$22.75	330.00	$7,508	21.2%	1.0960	62.6%
48	McCormick & Co.	$8.11	130.10	$1,055	$17.40	135.00	$2,349	17.4%	1.0799	19.5%
49	McDonald's Corp.	$12.00	1115.30	$13,384	$18.25	1015.00	$18,524	6.7%	1.0325	29.7%
50	McKesson Corp.	$22.85	271.00	$6,192	$43.25	254.00	$10,986	12.1%	1.0573	14.4%
51	Medtronic, Inc.	$11.42	1124.90	$12,846	$20.15	1000.00	$20,150	9.4%	1.0450	24.9%
52	Microsoft Corp.	$3.97	9151.00	$36,329	$7.70	7500.00	$57,750	9.7%	1.0463	36.0%
53	NIKE, Inc. 'B'	$15.93	491.10	$7,823	$23.90	460.00	$10,994	7.0%	1.0340	22.1%
54	Northrop Grumman	$36.45	327.01	$11,920	$57.35	300.00	$17,205	7.6%	1.0367	15.5%
55	Oracle Corp.	$4.47	5150.00	$23,021	$7.90	4300.00	$33,970	8.1%	1.0389	28.3%
56	PepsiCo, Inc.	$7.77	1553.00	$12,067	$19.45	1500.00	$29,175	19.3%	1.0881	28.8%
57	Pfizer, Inc.	$8.52	6746.00	$57,476	$13.45	6700.00	$90,115	9.4%	1.0449	10.9%
58	Procter & Gamble	$22.46	3032.70	$68,114	$26.00	2900.00	$75,400	2.1%	1.0102	18.5%
59	Raytheon Co.	$22.71	400.10	$9,086	$39.60	350.00	$13,860	8.8%	1.0422	17.9%
60	Sigma-Aldrich	$11.29	122.13	$1,379	$18.95	120.00	$2,274	10.5%	1.0500	23.0%
61	Stryker Corp.	$13.64	396.40	$5,407	$27.10	382.00	$10,352	13.9%	1.0649	18.7%
62	Sysco Corp.	$5.67	601.23	$3,409	$8.50	560.00	$4,760	6.9%	1.0334	29.2%
63	TJX Companies	$5.17	412.82	$2,134	$10.90	340.00	$3,706	11.7%	1.0551	38.7%
64	United Parcel Serv.	$6.81	995.44	$6,779	$11.85	990.00	$11,732	11.6%	1.0548	37.4%
65	United Technologies	$16.89	942.29	$15,915	$27.75	900.00	$24,975	9.4%	1.0450	25.4%
66	Verizon Communic.	$14.68	2840.60	$41,700	$18.85	2820.00	$53,157	5.0%	1.0243	16.8%
67	Wal-Mart Stores	$16.63	3925.00	$65,273	$31.90	3450.00	$110,055	11.0%	1.0522	18.0%
68	Walgreen Co.	$13.01	989.18	$12,869	$22.20	950.00	$21,090	10.4%	1.0494	15.8%
69	Waste Management	$12.03	490.74	$5,904	$16.55	465.00	$7,696	5.4%	1.0265	17.4%

SUSTAINABLE GROWTH RATE

NON-UTILITY PROXY GROUP

		(a)	(a)	(f)	(i)	(j)	(k)	(l)	(m)
		Common Shares Outstanding			M/B	"sv" Factor			
	Company	2008	2012-14	Change	Ratio	s	v	sv	br + sv
1	3M Company	693.54	680.00	-0.39%	3.75	(0.0147)	0.7332	-1.08%	15.8%
2	Abbott Labs.	1522.40	1520.00	-0.03%	4.10	(0.0013)	0.7561	-0.10%	13.6%
3	Alberto-Culver	97.86	92.00	-1.23%	2.45	(0.0301)	0.5925	-1.78%	8.0%
4	Allergan, Inc.	304.09	310.00	0.39%	4.13	0.0159	0.7580	1.21%	19.2%
5	AT&T Inc.	5893.00	5900.00	0.02%	2.04	0.0005	0.5100	0.02%	5.9%
6	Automatic Data Proc.	510.30	520.00	0.38%	3.73	0.0141	0.7323	1.03%	9.8%
7	Bard (C.R.)	99.39	90.00	-1.97%	3.57	(0.0701)	0.7196	-5.04%	13.4%
8	Baxter Int'l Inc.	615.99	550.00	-2.24%	4.88	(0.1092)	0.7949	-8.68%	15.1%
9	Becton, Dickinson	243.08	227.00	-1.36%	3.02	(0.0411)	0.6694	-2.75%	12.1%
10	Bemis Co.	99.71	108.00	1.61%	2.22	0.0357	0.5493	1.96%	9.3%
11	Bristol-Myers Squibb	1974.30	1970.00	-0.04%	3.41	(0.0015)	0.7071	-0.11%	5.5%
12	Brown-Forman 'B'	150.13	145.00	-0.69%	3.17	(0.0220)	0.6850	-1.51%	12.2%
13	Cardinal Health	357.10	355.00	-0.12%	2.01	(0.0024)	0.5021	-0.12%	7.6%
14	Chevron Corp.	2004.20	1950.00	-0.55%	2.35	(0.0129)	0.5748	-0.74%	17.5%
15	Chubb Corp.	352.30	325.00	-1.60%	1.34	(0.0214)	0.2535	-0.54%	9.1%
16	Coca-Cola	2312.00	2310.00	-0.02%	5.03	(0.0009)	0.8012	-0.07%	11.1%
17	Colgate-Palmolive	501.41	480.00	-0.87%	7.20	(0.0626)	0.8612	-5.39%	19.5%
18	Commerce Bancshs.	79.68	85.00	1.30%	1.42	0.0184	0.2944	0.54%	8.2%
19	ConAgra Foods	484.37	425.00	-2.58%	2.34	(0.0604)	0.5729	-3.46%	5.9%
20	ConocoPhillips	1480.20	1500.00	0.27%	1.91	0.0051	0.4751	0.24%	17.4%
21	Costco Wholesale	432.51	410.00	-1.06%	2.50	(0.0266)	0.6000	-1.59%	8.8%
22	CVS Caremark Corp.	1438.80	1325.00	-1.63%	1.83	(0.0300)	0.4546	-1.36%	7.7%
23	Disney (Walt)	1822.90	1610.00	-2.45%	2.13	(0.0521)	0.5296	-2.76%	9.6%
24	Du Pont	902.37	850.00	-1.19%	4.06	(0.0482)	0.7536	-3.64%	4.7%
25	Eaton Corp.	165.00	170.00	0.60%	1.87	0.0112	0.4645	0.52%	7.6%
26	Ecolab Inc.	236.20	245.00	0.73%	4.90	0.0360	0.7958	2.86%	22.9%
27	Emerson Electric	771.22	700.00	-1.92%	4.40	(0.0844)	0.7725	-6.52%	7.8%
28	Everest Re Group Ltd.	65.60	60.00	-1.77%	1.29	(0.0227)	0.2223	-0.51%	10.7%
29	Exxon Mobil Corp.	4976.00	4300.00	-2.88%	2.91	(0.0837)	0.6560	-5.49%	14.6%
30	Gen'l Dynamics	386.71	365.00	-1.15%	2.64	(0.0303)	0.6208	-1.88%	12.9%
31	Gen'l Mills	337.50	300.00	-2.33%	4.20	(0.0979)	0.7621	-7.46%	6.2%
32	Grainger (W.W.)	74.78	65.00	-2.76%	3.01	(0.0833)	0.6682	-5.57%	6.9%
33	Heinz (H.J.)	315.04	310.00	-0.32%	6.10	(0.0197)	0.8362	-1.64%	15.9%
34	Hewlett-Packard	2415.00	2100.00	-2.76%	2.54	(0.0700)	0.6062	-4.24%	10.6%
35	Home Depot	1696.00	1685.00	-0.13%	2.69	(0.0035)	0.6288	-0.22%	9.9%
36	Honeywell Int'l	734.59	715.00	-0.54%	3.31	(0.0178)	0.6975	-1.24%	11.6%
37	Hormel Foods	134.52	130.00	-0.68%	2.83	(0.0193)	0.6467	-1.25%	10.1%
38	Illinois Tool Works	499.12	475.00	-0.99%	2.93	(0.0289)	0.6592	-1.91%	9.9%
39	Int'l Business Mach.	1339.10	1050.00	-4.75%	8.37	(0.3973)	0.8805	-34.98%	10.6%
40	Intel Corp.	5562.00	6000.00	1.53%	3.83	0.0584	0.7386	4.32%	15.1%
41	ITT Corp.	181.80	185.00	0.35%	2.51	0.0088	0.6024	0.53%	13.4%
42	Johnson & Johnson	2769.20	2520.00	-1.87%	3.87	(0.0723)	0.7415	-5.36%	10.8%
43	Kellogg	381.86	375.00	-0.36%	5.66	(0.0205)	0.8232	-1.69%	21.3%
44	Kimberly-Clark	413.60	415.00	0.07%	5.78	0.0039	0.8269	0.32%	23.2%
45	Kraft Foods	1469.30	1400.00	-0.96%	1.72	(0.0165)	0.4178	-0.69%	4.7%
46	Lilly (Eli)	1136.10	1150.00	0.24%	4.21	0.0102	0.7622	0.78%	17.6%
47	Lockheed Martin	393.00	330.00	-3.43%	8.57	(0.2943)	0.8833	-26.00%	19.8%
48	McCormick & Co.	130.10	135.00	0.74%	3.16	0.0235	0.6836	1.60%	13.2%
49	McDonald's Corp.	1115.30	1015.00	-1.87%	4.93	(0.0921)	0.7972	-7.34%	6.2%
50	McKesson Corp.	271.00	254.00	-1.29%	1.85	(0.0238)	0.4594	-1.09%	12.2%
51	Medtronic, Inc.	1124.90	1000.00	-2.33%	4.47	(0.1039)	0.7761	-8.06%	11.7%
52	Microsoft Corp.	9151.00	7500.00	-3.90%	6.17	(0.2407)	0.8379	-20.16%	5.0%
53	NIKE, Inc. 'B'	491.10	460.00	-1.30%	3.87	(0.0503)	0.7416	-3.73%	11.8%
54	Northrop Grumman	327.01	300.00	-1.71%	2.09	(0.0358)	0.5221	-1.87%	9.6%
55	Oracle Corp.	5150.00	4300.00	-3.54%	5.38	(0.1906)	0.8141	-15.52%	8.8%
56	PepsiCo, Inc.	1553.00	1500.00	-0.69%	5.40	(0.0374)	0.8148	-3.04%	14.0%
57	Pfizer, Inc.	6746.00	6700.00	-0.14%	1.34	(0.0018)	0.2528	-0.05%	5.9%
58	Procter & Gamble	3032.70	2900.00	-0.89%	3.65	(0.0326)	0.7263	-2.36%	8.5%
59	Raytheon Co.	400.10	350.00	-2.64%	2.53	(0.0667)	0.6040	-4.03%	9.3%
60	Sigma-Aldrich	122.13	120.00	-0.35%	3.96	(0.0139)	0.7473	-1.04%	18.1%
61	Stryker Corp.	396.40	382.00	-0.74%	3.87	(0.0286)	0.7419	-2.12%	13.7%
62	Sysco Corp.	601.23	560.00	-1.41%	4.71	(0.0664)	0.7875	-5.23%	9.4%
63	TJX Companies	412.82	340.00	-3.81%	5.50	(0.2096)	0.8183	-17.15%	14.3%
64	United Parcel Serv.	995.44	990.00	-0.11%	7.81	(0.0086)	0.8719	-0.75%	16.2%
65	United Technologies	942.29	900.00	-0.91%	3.87	(0.0354)	0.7419	-2.63%	14.5%
66	Verizon Communic.	2840.60	2820.00	-0.15%	2.92	(0.0042)	0.6573	-0.28%	5.9%
67	Wal-Mart Stores	3925.00	3450.00	-2.55%	2.66	(0.0679)	0.6247	-4.24%	8.6%
68	Walgreen Co.	989.18	950.00	-0.81%	2.70	(0.0218)	0.6300	-1.37%	10.9%
69	Waste Management	490.74	465.00	-1.07%	2.57	(0.0275)	0.6106	-1.68%	6.4%

(a) www.valueline.com (retrieved Dec. 24, 2009).
(b) Average of High and Low expected market prices.
(c) Computed at (EPS - DPS) / EPS.
(d) Computed as EPS / BVPS.
(e) Product of BVPS and No. Shares Outstanding.
(f) Five-year rate of change.
(g) Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity).
(h) Product of year-end "r" for 2012-14 and Adjustment Factor.
(i) Average of High and Low expected market prices divided by 2012-14 BVPS.
(j) Product of change in common shares outstanding and M/B Ratio.
(k) Computed as 1 - B/M Ratio.
(l) Product of "s" and "v".
(m) Product of average "b" and adjusted "r", plus "sv".

CAPITAL ASSET PRICING MODEL

UTILITY PROXY GROUP

Market Rate of Return		
Dividend Yield (a)	2.5%	
Growth Rate (b)	8.8%	
Market Return (c)		11.3%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield		4.5%
Market Risk Premium (e)		6.8%
Utility Proxy Group Beta (f)		0.73
Utility Proxy Group Risk Premium (g)		5.0%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield		4.5%
Implied Cost of Equity (h)		9.5%

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 27, 2010).
(b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 based on data from *Thomson Reuters Company in Context Report* (Jan. 27, 2010).
(c) (a) + (b)
(d) Average yield on 20-year Treasury bonds for January 2010 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_Y20.txt.
(e) (c) - (d).
(f) The Value Line Investment Survey (Nov. 27 & Dec. 25, 2009, Feb. 5, 2010).
(g) (e) x (f).
(h) (d) + (g).

CAPITAL ASSET PRICING MODEL

NON-UTILITY PROXY GROUP

Market Rate of Return		
Dividend Yield (a)	2.5%	
Growth Rate (b)	8.8%	
Market Return (c)		11.3%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield		4.5%
Market Risk Premium (e)		6.8%
Non-Utility Proxy Group Beta (f)		0.79
Utility Proxy Group Risk Premium (g)		5.3%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield		4.5%
Implied Cost of Equity (h)		9.8%

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 27, 2010).
(b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 based on data from *Thomson Reuters Company in Context Report* (Jan. 27, 2010).
(c) (a) + (b)
(d) Average yield on 20-year Treasury bonds for January 2010 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_Y20.txt.
(e) (c) - (d).
(f) www.valueline.com (retrieved Dec. 24, 2009).
(g) (e) x (f).
(h) (d) + (g).

EXPECTED EARNINGS APPROACH

UTILITY PROXY GROUP

	Company	(a) Expected Return on Common Equity	(b) Adjustment Factor	(c) Adjusted Return on Common Equity
1	Ameren Corp.	8.0%	1.0299	8.2%
2	American Elec Pwr	10.5%	1.0431	11.0%
3	Avista Corp.	8.5%	1.0232	8.7%
4	Black Hills Corp.	9.5%	1.0158	9.6%
5	Cleco Corp.	11.5%	1.0277	11.8%
6	Constellation Energy	9.5%	1.0893	10.3%
7	DTE Energy Co.	10.0%	1.0233	10.2%
8	Edison International	11.5%	1.0302	11.8%
9	Empire District Elec	10.5%	1.0315	10.8%
10	Great Plains Energy	7.0%	1.0309	$\boxed{7.2\%}$
11	IDACORP, Inc.	7.5%	1.0363	$\boxed{7.8\%}$
12	Northeast Utilities	9.5%	1.0422	9.9%
13	Pinnacle West Capital	9.0%	1.0243	9.2%
14	PPL Corp.	19.5%	1.0352	$\boxed{20.2\%}$
15	P S Enterprise Group	15.5%	1.0414	16.1%
16	UIL Holdings	10.5%	1.0345	10.9%
17	Westar Energy	7.5%	1.0350	$\boxed{7.8\%}$
	Average (d)			**10.7%**

(a) 3-5 year projections from The Value Line Investment Survey (Nov. 27 & Dec. 25, 2009, Feb. 5, 2010).
(b) Adjustment to convert year-end "r" to an average rate of return from Schedule 5.
(c) (a) x (b).
(d) Excludes highlighted figures.