BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-08_____

DOCKET NO. UG-08_____

EXHIBIT NO._____(WEA-2)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

EXHIBIT NO.___(WEA-2)

QUALIFICATIONS OF WILLIAM E. AVERA

1   Q.   What is the purpose of this exhibit?

2   A.   This exhibit describes my background and experience and contains the details of my

3   qualifications.

4   Q.   What are your qualifications?

5   A.   I received a B.A. degree with a major in economics from Emory University. After

6   serving in the U.S. Navy, I entered the doctoral program in economics at the University of North

7   Carolina at Chapel Hill. Upon receiving my Ph.D., I joined the faculty at the University of North

8   Carolina and taught finance in the Graduate School of Business. I subsequently accepted a position

9   at the University of Texas at Austin where I taught courses in financial management and investment

10   analysis. I then went to work for International Paper Company in New York City as Manager of

11   Financial Education, a position in which I had responsibility for all corporate education programs in

12   finance, accounting, and economics.

13   In 1977, I joined the staff of the Public Utility Commission of Texas (PUCT) as Director of

14   the Economic Research Division. During my tenure at the PUCT, I managed a division responsible

15   for financial analysis, cost allocation and rate design, economic and financial research, and data

16   processing systems, and I testified in cases on a variety of financial and economic issues. Since

17   leaving the PUCT, I have been engaged as a consultant. I have participated in a wide range of

18   assignments involving utility-related matters on behalf of utilities, industrial customers,

19   municipalities, and regulatory commissions. I have previously testified before the Federal Energy

20   Regulatory Commission ("FERC"), as well as the Federal Communications Commission ("FCC"),

21   the Surface Transportation Board (and its predecessor, the Interstate Commerce Commission), the

1   Canadian Radio-Television and Telecommunications Commission, and regulatory agencies, courts,

2   and legislative committees in 39 states.

3   In 1995, I was appointed by the PUCT to the Synchronous Interconnection Committee to

4   advise the Texas legislature on the costs and benefits of connecting Texas to the national electric

5   transmission grid. In addition, I served as an outside director of Georgia System Operations

6   Corporation, the system operator for electric cooperatives in Georgia.

7   I have served as Lecturer in the Finance Department at the University of Texas at Austin and

8   taught in the evening graduate program at St. Edward's University for twenty years. In addition, I

9   have lectured on economic and regulatory topics in programs sponsored by universities and industry

10   groups. I have taught in hundreds of educational programs for financial analysts in programs

11   sponsored by the Association for Investment Management and Research, the Financial Analysts

12   Review, and local financial analysts societies. These programs have been presented in Asia, Europe,

13   and North America, including the Financial Analysts Seminar at Northwestern University. I hold the

14   Chartered Financial Analyst (CFA®) designation and have served as Vice President for Membership

15   of the Financial Management Association. I have also served on the Board of Directors of the North

16   Carolina Society of Financial Analysts. I was elected Vice Chairman of the National Association of

17   Regulatory Commissioners ("NARUC") Subcommittee on Economics and appointed to NARUC's

18   Technical Subcommittee on the National Energy Act. I have also served as an officer of various

19   other professional organizations and societies. A resume containing the details of my experience and

20   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 (over 150 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 in evening program at St. Edward's University in Austin from January 1979 through 1998.

Expert Witness Testimony

Testified in over 250 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, Kansas, Maryland, Michigan, Missouri, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Testified in 41 cases before federal and state courts, arbitration panels, and alternative dispute tribunals (86 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 Member, 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 Support Unit; Officer-in-charge of SWIFT patrol boat in Vietnam; Enlisted service as weather analyst (advanced to second class petty officer).

Bibliography

Monographs

Ethics and the Investment Professional (video, workbook, and instructor's guide) and *Ethics Challenge Today* (video), Association for Investment Management and Research (1995)

"Definition of Industry Ethics and Development of a Code" and "Applying Ethics in the Real World," in *Good Ethics: The Essential Element of a Firm's Success*, Association for Investment Management and Research (1994)

"On the Use of Security Analysts' Growth Projections in the DCF Model," with Bruce H. Fairchild in *Earnings Regulation Under Inflation*, J. R. Foster and S. R. Holmberg, eds. Institute for Study of Regulation (1982)

An Examination of the Concept of Using Relative Customer Class Risk to Set Target Rates of Return in Electric Cost-of-Service Studies, with Bruce H. Fairchild, Electricity Consumers Resource Council (ELCON) (1981); portions reprinted in *Public Utilities Fortnightly* (Nov. 11, 1982)

"Usefulness of Current Values to Investors and Creditors," *Research Study on Current-Value Accounting Measurements and Utility*, George M. Scott, ed., Touche Ross Foundation (1978)

"The Geometric Mean Strategy and Common Stock Investment Management," with Henry A. Latané in *Life Insurance Investment Policies*, David Cummins, ed. (1977)

Investment Companies: Analysis of Current Operations and Future Prospects, with J. Finley Lee and Glenn L. Wood, American College of Life Underwriters (1975)

Articles

"Should Analysts Own the Stocks they Cover?" *The Financial Journalist*, (March 2002)

"Liquidity, Exchange Listing, and Common Stock Performance," with John C. Groth and Kerry Cooper, *Journal of Economics and Business* (Spring 1985); reprinted by National Association of Security Dealers

"The Energy Crisis and the Homeowner: The Grief Process," *Texas Business Review* (Jan.–Feb. 1980); reprinted in *The Energy Picture: Problems and Prospects*, J. E. Pluta, ed., Bureau of Business Research (1980)

"Use of IFPS at the Public Utility Commission of Texas," *Proceedings of the IFPS Users Group Annual Meeting* (1979)

"Production Capacity Allocation: Conversion, CWIP, and One-Armed Economics," *Proceedings of the NARUC Biennial Regulatory Information Conference* (1978)

"Some Thoughts on the Rate of Return to Public Utility Companies," with Bruce H. Fairchild in *Proceedings of the NARUC Biennial Regulatory Information Conference* (1978)

"A New Capital Budgeting Measure: The Integration of Time, Liquidity, and Uncertainty," with David Cordell in *Proceedings of the Southwestern Finance Association* (1977)

"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

"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)

"Estimating the Cost of Capital During the 1990s: Issues and Directions," The National Society of Rate of Return Analysts, Washington, D.C. (May 1992)

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

"Can Regulation Compete for the Hearts and Minds of Industrial Customers," Emerging Issues of Competition in the Electric Utility Industry Conference, Austin (May 1988)

"The Role of Utilities in Fostering New Energy Technologies," Emerging Energy Technologies in Texas Conference, Austin (Mar. 1988)

"The Regulators' Perspective," Bellcore Economic Analysis Conference, San Antonio (Nov. 1987)

"Public Utility Commissions and the Nuclear Plant Contractor," Construction Litigation Superconference, Laguna Beach, California (Dec. 1986)

"Development of Cogeneration Policies in Texas," University of Georgia Fifth Annual Public Utilities Conference, Atlanta (Sep. 1985)

"Wheeling for Power Sales," Energy Bureau Cogeneration Conference, Houston (Nov. 1985).

"Asymmetric Discounting of Information and Relative Liquidity: Some Empirical Evidence for Common Stocks" (with John Groth and Kerry Cooper), Southern Finance Association, New Orleans (Nov. 1982)

"Used and Useful Planning Models," Planning Executive Institute, 27th Corporate Planning Conference, Los Angeles (Nov. 1979)

"Staff Input to Commission Rate of Return Decisions," The National Society of Rate of Return Analysts, New York (Oct. 1979)

"Electric Rate Design in Texas," Southwestern Economics Association, Fort Worth (Mar. 1979)

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

"The Relative Value of Statistics of Ex Post Common Stock Distributions to Explain Variance," with Charles G. Martin, Southern Finance Association, Atlanta (Nov. 1977)

"An ANOVA Representation of Common Stock Returns as a Framework for the Allocation of Portfolio Management Effort," with Charles G. Martin, Financial Management Association, Montreal (Oct. 1976)

"A Growth-Optimal Portfolio Selection Model with Finite Horizon," with Henry A. Latané, American Finance Association, San Francisco (Dec. 1974)

"An Optimal Approach to the Finance Decision," with Henry A. Latané, Southern Finance Association, Atlanta (Nov. 1974)

"A Pragmatic Approach to the Capital Structure Decision Based on Long-Run Growth," with Henry A. Latané, Financial Management Association, San Diego (Oct. 1974)

"Multi-period Wealth Distributions and Portfolio Theory," Southern Finance Association, Houston (Nov. 1973)

"Growth Rates, Expected Returns, and Variance in Portfolio Selection and Performance Evaluation," with Henry A. Latané, Econometric Society, Oslo, Norway (Aug. 1973)

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-08_____

DOCKET NO. UG-08_____

EXHIBIT NO._____(WEA-3)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

EXHIBIT NO.___(WEA-3)

QUANTITATIVE ANALYSES

1   Q.   **What is the purpose of this exhibit?**

2   A.   This exhibit presents capital market estimates of the cost of equity. First, I

3   examine the concept of the cost of equity, along with the risk-return tradeoff principle

4   fundamental to capital markets. Next, I describe DCF, CAPM, and expected earnings

5   analyses conducted to estimate the cost of equity for reference groups of comparable risk

6   firms.

A.   Overview

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

8   **rates?**

9   A.   The return on common equity is the cost of inducing and retaining investment

10   in the utility's physical plant and assets. This investment is necessary to finance the asset

11   base needed to provide utility service. Investors will commit money to a particular

12   investment only if they expect it to produce a return commensurate with those from other

13   investments with comparable risks. Moreover, the return on common equity is integral in

14   achieving the sound regulatory objectives of rates that are sufficient to: 1) fairly compensate

15   capital investment in the utility, 2) enable the utility to offer a return adequate to attract new

16   capital on reasonable terms, and 3) maintain the utility's financial integrity. Meeting these

17   objectives allows the utility to fulfill its obligation to provide reliable service while meeting

18   the needs of customers through necessary system expansion.

1   **Q.   What fundamental economic principle underlies any evaluation of**

2   **investors' required return on equity?**

3   A.   The fundamental economic principle underlying the cost of equity concept is

4   the notion that investors are risk averse. The required rate of return for a particular asset at

5   any point in time is a function of: 1) the yield on risk-free assets, and 2) its relative risk, with

6   investors demanding correspondingly larger risk premiums for assets bearing greater risk.

7   Given this risk-return tradeoff, the required rate of return (k) from an asset (i) can be

8   generally expressed as:

9    $$k_i = R_f + RP_i$$

10   where: R_f = Risk-free rate of return; and
11   RP_i = Risk premium required to hold risky asset i.

12   Thus, the required rate of return for a particular asset at any point in time is a function of: 1)

13   the yield on risk-free assets, and 2) its relative risk, with investors demanding

14   correspondingly larger risk premiums for assets bearing greater risk.

15   Because common shareholders have the lowest priority claim on a firm's cash flows,

16   they receive only the residual that remains after all other claimants (employees, suppliers,

17   governments, lenders) have been paid. As a result, the rate of return that investors require

18   from a utility's common stock, the most junior and riskiest of its securities, is considerably

19   higher than the yield on the utility's long-term debt.

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

21   A.   No.   Unlike debt capital, there is no contractually guaranteed return on

22   common equity capital since shareholders are the residual owners of the utility. Because it is

23   unobservable, the cost of equity for a particular utility must be estimated by analyzing

24   information about capital market conditions generally, assessing the relative risks of the

1   company specifically, and employing various quantitative methods that focus on investors'

2   current required rates of return. These various quantitative methods typically attempt to infer

3   investors' required rates of return from stock prices, interest rates, or other capital market

4   data.

A.   Discounted Cash Flow Analyses

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

6   A.   DCF models attempt to replicate the market valuation process that sets the

7   price investors are willing to pay for a share of a company's stock. The model rests on the

8   assumption that investors evaluate the risks and expected rates of return from all securities in

9   the capital markets. Given these expectations, the price of each stock is adjusted by the

10   market until investors are adequately compensated for the risks they bear. Therefore, we can

11   look to the market to determine what investors believe a share of common stock is worth. By

12   estimating the cash flows investors expect to receive from the stock in the way of future

13   dividends and capital gains, we can calculate their required rate of return. In other words, the

14   cash flows that investors expect from a stock are estimated, and given its current market

15   price, we can "back-into" the discount rate, or cost of equity, that investors implicitly used in

16   bidding the stock to that price.

17   **Q.   What market valuation process underlies DCF models?**

18   A.   DCF models assume that the price of a share of common stock is equal to the

19   present value of the expected cash flows (i.e., future dividends and stock price) that will be

20   received while holding the stock, discounted at investors' required rate of return. That is, the

21   cost of equity is the discount rate that equates the current price of a share of stock with the

22   present value of all expected cash flows from the stock.

1   **Q.   What form of the DCF model is customarily used to estimate the cost of**

2 **equity in rate cases?**

3   A.   Rather than developing annual estimates of cash flows into perpetuity, the

4 DCF model can be simplified to a "constant growth" form: [1]

5
$$P_0 = \frac{D_1}{k_e - g}$$

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

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

11
$$k_e = \frac{D_1}{P_0} + g$$

12 This constant growth form of the DCF model recognizes that the rate of return to

13 stockholders consists of two parts: 1) dividend yield (D_1/P_0), and 2) growth (g). In other

14 words, investors expect to receive a portion of their total return in the form of current

15 dividends and the remainder through price appreciation.

16   **Q.   How did you define the utility proxy group you used to implement the**

17 **DCF model?**

18   A.   As discussed in Exhibit No.___(WEA-1T), my utility proxy group was

19 composed of those dividend-paying companies included by Value Line in its Electric Utilities

20 Industry groups with: (1) S&P corporate credit ratings between "BBB-" and "BBB+," (2) a

21 Value Line Safety Rank of "2" or "3", and (3) a Value Line Financial Strength Rating of

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[1] The constant growth DCF model is dependent on a number of strict 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.

1   "B+" to "B++", and (4) published growth estimates from IBES, Value Line, Reuters, and

2   Zacks.   I excluded two companies that otherwise would have been in the proxy group

3   (Energy East Corporation and Puget Energy, Inc.) because they are in the process of being

4   acquired.

5   **Q.   Do these criteria provide objective evidence that investors would view the**

6   **firms in the utility proxy group as risk-comparable to Avista?**

7   A.   Yes.   Credit ratings are assigned by independent rating agencies to provide

8   investors with a broad assessment of the creditworthiness of a firm.   Because the rating

9   agencies' evaluation includes virtually all of the factors normally considered important in

10   assessing a firm's relative credit standing, corporate credit ratings provide a broad measure of

11   overall investment risk that is readily available to investors.   Widely cited in the investment

12   community and referenced by investors as an objective measure of risk, credit ratings are

13   also frequently used as a primary risk indicator in establishing proxy groups to estimate the

14   cost of equity.

15   Apart from the broad assessment of investment risk provided by credit ratings, other

16   quality rankings published by investment advisory services also provide relative assessments

17   of risk that are considered by investors in forming their expectations.   Given that Value Line

18   is perhaps the most widely available source of investment advisory information, its Safety

19   Rank and Financial Strength Rating provide useful guidance regarding the risk perceptions of

20   investors.

21   The Safety Rank is Value Line's primary risk indicator and ranges from "1" (Safest)

22   to "5" (Riskiest).   This overall risk measure is intended to capture the total risk of a stock,

23   and incorporates elements of stock price stability and financial strength.   The Financial

24   Strength Rating is designed as a guide to overall financial strength and creditworthiness, with

1   the key inputs including financial leverage, business volatility measures, and company size.

2   Value Line's Financial Strength Ratings range from "A++" (strongest) down to "C"

3   (weakest) in nine steps.

4   As discussed earlier, Avista is rated "BBB-" by S&P, which indicates slightly greater

5   risk than the "BBB" average rating for the firms in the utility proxy group. Meanwhile,

6   Value Line has assigned Avista a Safety Rank of "3" and a Financial Strength Rating of "B+"

7   versus averages of "3" and "B++", respectively for the utility proxy group. Based on my

8   screening criteria, which reflect objective, published indicators that incorporate consideration

9   of a broad spectrum of risks, including financial and business position, relative size, and

10   exposure to company specific factors, investors are likely to regard this group as having risks

11   and prospects generally comparable to Avista.

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

13   A.   The first step in implementing the constant growth DCF model is to determine

14   the expected dividend yield (D_1/P_0) for the firm in question. This is usually calculated based

15   on an estimate of dividends to be paid in the coming year divided by the current price of the

16   stock. The second, and more controversial, step is to estimate investors' long-term growth

17   expectations (g) for the firm. The final step is to sum the firm's dividend yield and estimated

18   growth rate to arrive at an estimate of its cost of equity.

19   **Q.   How was the dividend yield for the utility proxy group determined?**

20   A.   Estimates of dividends to be paid by each of these utilities over the next

21   twelve months, obtained from Value Line, served as D_1. This annual dividend was then

22   divided by the corresponding stock price for each utility to arrive at the expected dividend

23   yield. The expected dividends, stock prices, and resulting dividend yields for the firms in the

1   utility proxy group are presented on Schedule WEA-2. As shown there, dividend yields for

2   the twenty firms in the utility proxy group ranged from 2.4 percent to 6.0 percent.

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

4   A.   The next step is to evaluate long-term growth expectations, or "*g*", for the

5   firm in question. In constant growth DCF theory, earnings, dividends, book value, and

6   market price are all assumed to grow in lockstep, and the growth horizon of the DCF model

7   is infinite. But implementation of the DCF model is more than just a theoretical exercise; it

8   is an attempt to replicate the mechanism investors used to arrive at observable stock prices.

9   A wide variety of techniques can be used to derive growth rates, but the only "*g*" that matters

10   in applying the DCF model is the value that investors expect.

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

13   A.   No. If past trends in earnings, dividends, and book value are to be

14   representative of investors' expectations for the future, then the historical conditions giving

15   rise to these growth rates should be expected to continue. That is clearly not the case for

16   utilities, where structural and industry changes have led to declining dividends, earnings

17   pressure, and, in many cases, significant write-offs. While these conditions serve to depress

18   historical growth measures, they are not representative of long-term expectations for the

19   utility industry. Moreover, to the extent historical trends for utilities are meaningful, they are

20   also captured in projected growth rates, since securities analysts also routinely examine and

21   assess the impact and continued relevance (if any) of historical trends.

1   **Q.   What are investors most likely to consider in developing their long-term**

2   **growth expectations?**

3   A.   While the DCF model is technically concerned with growth in dividend cash

4   flows, implementation of this DCF model is solely concerned with replicating the forward-

5   looking evaluation of real-world investors. In the case of electric utilities, dividend growth

6   rates are not likely to provide a meaningful guide to investors' current growth expectations.

7   This is because utilities have significantly altered their dividend policies in response to more

8   accentuated business risks in the industry.[2] As a result of this trend towards a more

9   conservative payout ratio, dividend growth in the utility industry has remained largely

10   stagnant as utilities conserve financial resources to provide a hedge against heightened

11   uncertainties.

12   As payout ratios for firms in the utility industry trended downward, investors' focus

13   has increasingly shifted from dividends to earnings as a measure of long-term growth.

14   Future trends in earnings, which provide the source for future dividends and ultimately

15   support share prices, play a pivotal role in determining investors' long-term growth

16   expectations. The importance of earnings in evaluating investors' expectations and

17   requirements is well accepted in the investment community. As noted in *Finding Reality in*

18   *Reported Earnings* published by the Association for Investment Management and Research:

19   [E]arnings, presumably, are the basis for the investment benefits that we all
20   seek. "Healthy earnings equal healthy investment benefits" seems a logical
21   equation, but earnings are also a scorecard by which we compare companies, a
22   filter through which we assess management, and a crystal ball in which we try
23   to foretell future performance.[3]

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[2] For example, the payout ratio for electric utilities fell from approximately 80% historically to on the order of 60%. The Value Line Investment Survey (Sep. 15, 1995 at 161, Dec. 28, 2007 at 695).

[3] Association for Investment Management and Research, "Finding Reality in Reported Earnings: An Overview", p. 1 (Dec. 4, 1996).

1   Value Line's near-term projections and its Timeliness Rank, which is the principal

2   investment rating assigned to each individual stock, are also based primarily on various

3   quantitative analyses of earnings. As Value Line explained:

4   The future earnings rank accounts for 65% in the determination of relative
5   price change in the future; the other two variables (current earnings rank and
6   current price rank) explain 35%.[4]

7   The fact that investment advisory services, such as Value Line, Thompson, and Reuters,

8   focus on growth in earnings indicates that the investment community regards this as a

9   superior indicator of future long-term growth.   Indeed, "A Study of Financial Analysts:

10 Practice and Theory," published in the *Financial Analysts Journal*, reported the results of a

11 survey conducted to determine what analytical techniques investment analysts actually use.[5]

12 Respondents were asked to rank the relative importance of earnings, dividends, cash flow,

13 and book value in analyzing securities. Of the 297 analysts that responded, only 3 ranked

14 dividends first while 276 ranked it last. The article concluded:

15   Earnings and cash flow are considered far more important than book value
16   and dividends.[6]

17   More recently, the *Financial Analysts Journal* reported the results of a study of the

18 relationship between valuations based on alternative multiples and actual market prices,

19 which concluded, "In all cases studied, earnings dominated operating cash flows and

20 dividends."[7]

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[4] The Value Line Investment Survey, *Subscriber's Guide*, p. 53.
[5] Block, Stanley B., "A Study of Financial Analysts: Practice and Theory", *Financial Analysts Journal* (July/August 1999).
[6] *Id.* at 88.
[7] Liu, Jing, Nissim, Doron, & Thomas, Jacob, "Is Cash Flow King in Valuations?," *Financial Analysts Journal*, Vol. 63, No. 2 (March/April 2007) at 56.

1   **Q.   What are security analysts currently projecting in the way of growth for**

2   **the firms in the utility proxy group?**

3   A.   The IBES earnings growth projections for each of the firms in the utility

4   proxy group reported by Thomson Financial are displayed on Schedule WEA-2. Also

5   presented are the earnings per share ("EPS") growth projections reported by Value Line,

6   Reuters, and Zacks.

7   **Q.   How else are investors' expectations of future long-term growth prospects**

8   **often estimated for use in the constant growth DCF model?**

9   A.   Based on the assumptions underlying constant growth theory, conventional

10   applications of the constant growth DCF model often examine the relationship between

11   retained earnings and earned rates of return as an indication of the sustainable growth

12   investors might expect from the reinvestment of earnings within a firm. The sustainable

13   growth rate is calculated by the formula, $g = br + sv$, where "b" is the expected retention ratio,

14   "r" is the expected earned return on equity, "s" is the percent of common equity expected to

15   be issued annually as new common stock, and "v" is the equity accretion rate.

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

17   A.   Under DCF theory, the "sv" factor is a component of the growth rate designed

18   to capture the impact of issuing new common stock at a price above, or below, book value.

19   When a company's stock price is greater than its book value per share, the per-share

20   contribution in excess of book value associated with new stock issues will accrue to the

21   current shareholders. This increase to the book value of existing shareholders leads to higher

22   expected earnings and dividends, with the "sv" factor incorporating this additional growth

23   component.

1   **Q.   How did you apply the earnings retention method for the proxy group of**

2   **utilities?**

3   A.   The sustainable, "br+sv" growth rates for each firm in the proxy group are

4   summarized on Schedule WEA-2, with the underlying details being presented on Schedule

5   WEA-3. For each firm, the expected retention ratio (b) was calculated based on Value Line's

6   projected dividends and earnings per share. Likewise, each firm's expected earned rate of

7   return (r) was computed by dividing projected earnings per share by projected net book

8   value. Because Value Line reports end-of-year book values, an adjustment was incorporated

9   to compute an average rate of return over the year, consistent with the theory underlying this

10   approach to estimating investors' growth expectations. Meanwhile, the percent of common

11   equity expected to be issued annually as new common stock (s) was equal to the product of

12   the projected market-to-book ratio and growth in common shares outstanding, while the

13   equity accretion rate (v) was computed as 1 minus the inverse of the projected market-to-

14   book ratio.

15   **Q.   What cost of equity estimates were implied for the utility proxy group**

16   **using the DCF model?**

17   A.   After combining the dividend yields and respective growth projections for

18   each utility, the resulting cost of equity estimates are shown on Schedule WEA-2.

19   **Q.   In evaluating the results of the constant growth DCF model, is it**

20   **appropriate to eliminate cost of equity estimates that fail to meet threshold tests of**

21   **economic logic?**

22   A.   Yes. It is a basic economic principle that investors can be induced to hold

23   more risky assets only if they expect to earn a return to compensate them for their risk

24   bearing. As a result, the rate of return that investors require from a utility's common stock,

25   the most junior and riskiest of its securities, must be considerably higher than the yield

1   offered by senior, long-term debt. Consistent with this principle, the DCF range for the

2   proxy group of electric utilities must be adjusted to eliminate cost of equity estimates that fail

3   fundamental tests of economic logic.

4   **Q.   Have similar tests been applied by regulators?**

5   A.   Yes. The FERC has noted that adjustments are justified where applications of

6   the DCF approach produce illogical results. FERC evaluates DCF results against observable

7   yields on long-term public utility debt and has recognized that it is appropriate to eliminate

8   cost of equity estimates that do not sufficiently exceed this threshold. In a 2002 opinion

9   establishing its current precedent for determining ROEs for electric utilities, for example,

10 FERC concluded:

11 An adjustment to this data is appropriate in the case of PG&E's low-end
12 return of 8.42 percent, which is comparable to the average Moody's "A" grade
13 public utility bond yield of 8.06 percent, for October 1999. Because investors
14 cannot be expected to purchase stock if debt, which has less risk than stock,
15 yields essentially the same return, this low-end return cannot be considered
16 reliable in this case.[8]

17 More recently, in its October 2006 decision in *Kern River Gas Transmission Company*,

18 FERC noted that:

19 [T]he 7.31 and 7.32 percent costs of equity for El Paso and Williams found by
20 the ALJ are only 110 and 122 basis points above that average yield for public
21 utility debt.[9]

22 FERC upheld the opinion of Staff and the Administrative Law Judge that cost of equity

23 estimates for these two proxy group companies "were too low to be credible."[10]

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[8] *Southern California Edison Company*, 92 FERC ¶ 61,070 (2000) at p. 22.
[9] *Kern River Gas Transmission Company*, Opinion No. 486, 117 FERC ¶ 61,077 at P 140 & n. 227 (2006).
[10] *Id.*

1   **Q.   What does this test of logic imply with respect to the DCF results for the**

2   **utility proxy group?**

3   A.   The average bond rating associated with the firms in the utility proxy group is

4   triple-B, with Moody's monthly yields on triple-B bonds averaging approximately 6.4

5   percent in January 2008.[11] As highlighted on Schedule WEA-2, six of the individual equity

6   estimates for the firms in the utility proxy group exceeded this threshold by 120 basis points

7   or less.[12] In light of the risk-return tradeoff principle and the test applied in *Kern River Gas*

8   *Transmission Company*, it is inconceivable that investors are not requiring a substantially

9   higher rate of return for holding common stock, which is the riskiest of a utility's securities.

10   As a result, these values provide little guidance as to the returns investors require from the

11   common stock of an electric utility.

12   **Q.   Do you also recommend excluding cost of equity estimates at the high end**

13   **of the range of DCF results?**

14   A.   Yes. As highlighted on Schedule WEA-2, I also eliminated cost of equity

15   estimates at the upper end of the range of DCF results.   Compared with the balance of the

16   remaining estimates, these values are extreme outliers and should also be excluded in

17   evaluating the results of the DCF model for the utility proxy group. This is also consistent

18   with the approach and threshold adopted by FERC, which established that a 17.7 percent

19   DCF estimate for an electric utility was "an extreme outlier" and should be disregarded.[13]

---

[11] Moody's Investors Service, *Credit Perspectives* (Feb. 11, 2008).

[12] As highlighted on Schedule WEA-2, these DCF estimates ranged from 5.7 percent to 7.5 percent.

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

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

2   **group?**

3   **A.**   As shown on Schedule WEA-2 and summarized in Table 1, below, after

4   eliminating illogical low- and high-end values, application of the constant growth DCF

5   model resulted in the following cost of equity estimates:

6   **TABLE 2**
7   **DCF RESULTS – UTILITY PROXY GROUP**

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

8   **Q.   What did you conclude based on the results of the DCF analyses for the**

9   **utility proxy group?**

10   **A.**   Taken together, and considering the relative strengths and weaknesses

11   associated with the alternative growth measures, I concluded that the constant growth DCF

12   results for the utility proxy group implied a cost of equity of 10.7 percent.

13   **Q.   How else can the DCF model be applied to estimate the ROE for Avista?**

14   **A.**   Under the regulatory standards established by *Hope* and *Bluefield*, the salient

15   criteria in establishing a meaningful benchmark to evaluate a fair rate of return is relative

16   risk, not the particular business activity or degree of regulation. Utilities must compete for

17   capital, not just against firms in their own industry, but with other investment opportunities of

18   comparable risk. With regulation taking the place of competitive market forces, required

19   returns for utilities should be in line with those of non-utility firms of comparable risk

20   operating under the constraints of free competition. Consistent with this accepted regulatory

1   standard, I also applied the DCF model to a reference group of comparable risk companies in

2   the non-utility sector of the economy.

3   **Q.   What criteria did you apply to evaluate investors' risk perceptions?**

4   A.   As discussed in Exhibit No.___(WEA-1T), my assessment of comparable risk

5   relied on three objective benchmarks for the risks associated with common stocks -- Value

6   Line's Safety Rank, Financial Strength rating, and beta. My comparable risk proxy group

7   was composed of those U.S. companies followed by Value Line that 1) pay common

8   dividends, 2) have a Safety Rank of "1", 2) have a Financial Strength Rating of "A" or

9   above, and 3) have beta values of 0.90 or less,[14] and (4) have published data from IBES,

10   Value Line, Reuters, and Zacks. Consistent with the development of my utility proxy group,

11   I also eliminated firms with below-investment grade credit ratings.

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

14   A.   As shown on Schedule WEA-4, I applied the DCF model to the non-utility

15   proxy group in exactly the same manner described earlier for the utility proxy group.[15] As

16   summarized in Table 3, below, after eliminating illogical low- and high-end values,

17   application of the constant growth DCF model resulted in the following cost of equity

18   estimates:

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[14] This threshold corresponds to the average beta of 0.89 for the utility proxy group discussed earlier.
[15] Schedule WEA-5 contains the details underlying the calculation of the br+sv growth rates for the non-utility proxy group.

1
2

TABLE 4
DCF RESULTS – NON-UTILITY PROXY GROUP

<u>Growth Rate</u>	<u>Average Cost of Equity</u>
I/B/E/S	12.9%
Value Line	12.2%
Reuters	12.5%
Zacks	12.7%
br+sv	13.0%

3   Taken together, I concluded that the constant growth DCF results for the non-utility proxy

4   group implied a cost of equity of 12.6 percent.

B.   Capital Asset Pricing Model

5   **Q   Please describe the CAPM.**

6   A.   The CAPM is a theory of market equilibrium that measures risk using the beta

7   coefficient. The CAPM assumes that investors are fully diversified, so the relevant risk of an

8   individual asset (*e.g.*, common stock) is its volatility relative to the market as a whole. Beta

9   reflects the tendency of a stock's price to follow changes in the market. A stock that tends to

10   respond relatively less to market movements has a beta less than 1.00, while stocks that tend

11   to move more than the market have betas greater than 1.00. The CAPM is mathematically

12   expressed as:

13
$$R_j = R_f + \beta_j(R_m - R_f)$$

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

18   Like the DCF model, the CAPM is an *ex-ante,* or forward-looking model based on

19   expectations of the future. As a result, in order to produce a meaningful estimate of

20   investors' required rate of return, the CAPM must be applied using estimates that reflect the

21   expectations of actual investors in the market, not with backward-looking, historical data.

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

2   A.   Application of the CAPM to the utility proxy group based on a forward-

3   looking estimate for investors' required rate of return from common stocks is presented on

4   Schedule WEA-6. In order to capture the expectations of today's investors in current capital

5   markets, the expected market rate of return was estimated by conducting a DCF analysis on

6   the dividend paying firms in the S&P 500.

7   The dividend yield for each firm was obtained from Value Line, with the growth rate

8   being equal to the average of the earnings growth projections for each firm compiled by

9   IBES and Value Line, with each firm's dividend yield and growth rate being weighted by its

10   proportionate share of total market value. Based on the weighted average of the projections

11   for the 354 individual firms, current estimates imply an average growth rate over the next

12   five years of 11.0 percent. Combining this average growth rate with a dividend yield of 2.2

13   percent results in a current cost of equity estimate for the market as a whole of approximately

14   13.2 percent. Subtracting a 4.4 percent risk-free rate based on the average yield on 20-year

15   Treasury bonds for January 2008 produced a market equity risk premium of 8.8 percent.

16   Multiplying this risk premium by the average Value Line beta of 0.89 for the utility proxy

17   group, and then adding the resulting 7.8 percent risk premium to the average long-term

18   Treasury bond yield, indicated an ROE of approximately 12.2 percent.

19   **Q.   What cost of equity was indicated for the non-utility proxy group based**
20   **on this forward-looking application of the CAPM?**

21   A.   As shown on Schedule WEA-7, applying the forward-looking CAPM

22   approach to the firms in the non-utility proxy group implied a cost of equity of 11.4 percent.

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

2   **equity?**

3   A.   I also applied the CAPM using risk premiums based on historical realized

4   rates of return. This approach to estimating investors' equity risk premiums is premised on

5   the notion that past experience heavily conditions future expectations. The essential

6   assumption of the historical risk premium when used in the CAPM approach is that, while

7   historical returns do not predict the future, investors form expectations of future stock returns

8   based on observable debt yields and the historical experience of returns from common stock

9   investments relative to debt investments.

10   While reference to historical data represents one way to apply the CAPM, these

11   realized rates of return reflect, at best, an indirect estimate of investors' current requirements.

12   The cost of capital is a forward-looking, or expectational concept that is focused on the

13   perceptions of today's capital market investors. Past investment returns are frequently

14   referenced and may provide a useful benchmark, but the only factors that actually determine

15   the current required rate of return are investors' expectations for the future. As a result,

16   forward-looking applications of the CAPM that look directly at investors' expectations in the

17   capital markets are apt to provide a more meaningful guide to investors' required rate of

18   return.

19   **Q.   What CAPM cost of equity is produced based on historical realized rates**

20   **of return for stocks and long-term government bonds?**

21   A.   I applied the CAPM using data published by Ibbotson Associates, which is

22   perhaps the most exhaustive and widely referenced annual study of realized rates of return.

23   Application of the CAPM based on historical realized rates of return is presented in Schedule

24   WEA-8. In their *2007 Yearbook, Valuation Edition*, Ibbotson Associates reported that, over

1   the period from 1926 through 2006, the arithmetic mean realized rate of return on the S&P

2   500 exceeded that on long-term government bonds by 7.1 percent.[16] Multiplying this

3   historical market risk premium by the average Value Line beta of 0.89 produced an

4   equity risk premium of 6.3 percent for the utility proxy group. As shown on Schedule

5   WEA-8, adding this equity risk premium to the January 2008 average yield on 20-

6   year Treasury bonds of 4.4 percent resulted in an implied cost of equity of 10.7

7   percent.

8   **Q.   What cost of equity was indicated for the non-utility proxy group based**

9   **on the historical CAPM approach?**

10   A.   As shown on Schedule WEA-9, applying the historical CAPM approach to the

11   firms in the non-utility proxy group implied a cost of equity of 10.0 percent.

C.   Expected Earnings Method

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

13   A.   As I noted earlier, I also evaluated the ROE using the expected earnings

14   method. Reference to rates of return available from alternative investments of comparable

15   risk can provide an important benchmark in assessing the return necessary to assure

16   confidence in the financial integrity of a firm and its ability to attract capital. This expected

17   earnings approach is consistent with the economic underpinnings for a fair rate of return

18   established by the Supreme Court in *Hope* and *Bluefield.* Moreover, it avoids the

19   complexities and limitations of capital market methods and instead focuses on expected

20   earned returns on book equity, which are more readily available to investors.

---

[16] Ibbotson Associates computes the equity risk premium by subtracting the income return (not the total return) on long-term Treasury bonds from the return on common stocks.

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

2   **A.**   With respect to expectations for electric utilities generally, the February 8,

3   2008 edition of Value Line reports that its analysts anticipate an average rate of return on

4   common equity for the electric utility industry of 11.5 percent in 2008 and over its three-to-

5   five year forecast horizon.[17] Meanwhile, Value Line expects that natural gas utilities will

6   earn an average rate of return on common equity of 11.5 percent in 2008 and 12.0 percent

7   over the years 2010 through 2012.[18]

8   For the firms in the utility proxy group specifically, the returns on common equity

9   projected by Value Line over its three-to-five year forecast horizon are shown on Schedule

10   WEA-10. Consistent with the rationale underlying the development of the br+sv growth

11   rates, these year-end values were converted to average returns using the same adjustment

12   factor discussed earlier. As shown on Schedule WEA-10, after eliminating potential outliers,

13   Value Line's projections suggested an average ROE of 10.5 percent for the utility proxy

14   group.

15   **Q.**   **What return on equity is indicated by the results of the expected earnings**

16   **approach?**

17   **A.**   Based on the results discussed above, I concluded that the comparable

18   earnings approach implies a fair rate of return on equity of 11.0 percent.

D.   Summary of Quantitative Results

19   **Q.**   **Please summarize the results of your quantitative analyses.**

20   **A.**   The cost of equity estimates implied by my quantitative analyses are

21   summarized in Table 4 below:

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[17] The Value Line Investment Survey, at 1776 (Feb. 8, 2008).
[18] The Value Line Investment Survey, at 445 (Dec. 14, 2007).

1
2

TABLE 4
SUMMARY OF QUANTITATIVE RESULTS

Method	Cost of Equity Estimates	
	Electric Utility Proxy Group	**Non-Utility Proxy Group**
DCF	10.7%	12.6%
CAPM		
Forward-looking	12.2%	11.4%
Historical	10.7%	10.0%
Expected Earnings	11.0%	--

WILLIAM E. AVERA

SCHEDULES:

CAPITAL STRUCTURE

UTILITY PROXY GROUP

	Company	At December 31, 2006 (a)			Value Line Projected (b)		
		Long-term Debt	Preferred	Common Equity	Long-term Debt	Other	Common Equity
1	American Elec Pwr	59.1%	0.3%	40.6%	56.5%	0.5%	43.0%
2	Avista Corp.	48.7%	5.7%	45.7%	50.5%	0.0%	49.5%
3	Black Hills Corp.	44.8%	0.0%	55.2%	39.5%	0.0%	60.5%
4	Cleco Corp.	42.8%	1.3%	56.0%	50.0%	0.0%	50.0%
5	DTE Energy Co.	57.1%	0.0%	42.9%	56.5%	0.0%	43.5%
6	Edison International	51.9%	5.0%	43.2%	47.0%	4.0%	49.0%
7	Hawaiian Elec.	50.1%	1.5%	48.4%	51.5%	1.5%	47.0%
8	IDACORP, Inc.	47.7%	0.0%	52.3%	50.0%	0.0%	50.0%
9	NiSource Inc.	51.1%	0.0%	48.9%	51.0%	0.0%	49.0%
10	Northeast Utilities	50.4%	2.0%	47.6%	56.5%	1.0%	42.5%
11	PG&E Corp.	46.4%	1.7%	51.9%	45.5%	1.5%	53.0%
12	PNM Resources	50.9%	0.3%	48.8%	48.5%	0.5%	51.0%
13	Portland General Elec.	45.0%	0.0%	55.0%	51.5%	0.0%	48.5%
14	PPL Corp.	58.6%	2.3%	39.2%	48.5%	2.0%	49.5%
15	Progress Energy	52.2%	0.5%	47.3%	49.5%	0.5%	50.0%
16	P S Enterprise Group	57.1%	1.6%	41.3%	46.0%	0.5%	53.5%
17	Westar Energy	50.0%	0.7%	49.3%	50.0%	0.5%	49.5%
18	Wisconsin Energy	53.6%	0.5%	45.9%	52.0%	0.5%	47.5%
19	Xcel Energy, Inc.	53.4%	0.8%	45.8%	54.5%	0.5%	45.0%
	Average	**51.1%**	**1.3%**	**47.6%**	**50.3%**	**0.7%**	**49.0%**

(a) Company Form 10-K and Annual Reports.
(b) The Value Line Investment Survey, (Nov. 30 & Dec. 28, 2007, Feb. 8, 2008).

CONSTANT GROWTH DCF MODEL

UTILITY PROXY GROUP

| | (a) Dividend Yield | | | Growth Rates | | | | | Cost of Equity Estimates | | | | |
| | (a) | (a) | | (b) | (c) | (d) | (e) | (f) | (g) | (g) | (g) | (g) | (g) |
Company	Price	Dividends	Yield	IBES	V Line	Reuters	Zacks	br+sv	IBES	V Line	Reuters	Zacks	br+sv
1 American Elec Pwr	$ 42.65	$ 1.67	3.9%	6.0%	6.5%	5.4%	5.0%	6.3%	9.9%	10.4%	9.3%	8.9%	10.2%
2 Avista Corp.	$ 19.64	$ 0.63	3.2%	4.5%	9.0%	4.5%	5.0%	3.4%	7.7%	12.2%	7.7%	8.2%	6.6%
3 Black Hills Corp.	$ 38.95	$ 1.40	3.6%	6.5%	5.5%	6.0%	6.5%	4.7%	10.1%	9.1%	9.6%	10.1%	8.3%
4 Cleco Corp.	$ 25.17	$ 0.90	3.6%	14.0%	6.5%	15.5%	9.5%	4.6%	17.6%	10.1%	19.1%	13.1%	8.1%
5 DTE Energy Co.	$ 41.58	$ 2.18	5.2%	5.8%	4.0%	6.4%	6.0%	2.2%	11.0%	9.2%	11.6%	11.2%	7.4%
6 Edison International	$ 49.70	$ 1.24	2.5%	8.8%	6.5%	8.0%	10.3%	6.6%	11.3%	9.0%	10.5%	12.8%	9.1%
7 Hawaiian Elec.	$ 21.85	$ 1.24	5.7%	8.5%	1.5%	3.1%	4.5%	2.6%	14.2%	7.2%	8.8%	10.2%	8.3%
8 IDACORP, Inc.	$ 32.20	$ 1.20	3.7%	6.0%	2.0%	6.0%	5.0%	3.5%	9.7%	5.7%	9.7%	8.7%	7.3%
9 NiSource Inc.	$ 17.51	$ 0.92	5.3%	2.8%	2.5%	2.7%	2.8%	2.5%	8.1%	7.8%	8.0%	8.1%	7.8%
10 Northeast Utilities	$ 28.26	$ 0.82	2.9%	10.4%	17.0%	10.0%	12.7%	7.6%	13.3%	19.9%	12.9%	15.6%	10.5%
11 PG&E Corp.	$ 41.39	$ 1.53	3.7%	9.5%	4.5%	8.5%	8.5%	5.0%	13.2%	8.2%	12.2%	12.2%	8.7%
12 PNM Resources	$ 18.90	$ 0.94	5.0%	9.0%	2.5%	10.3%	6.3%	3.4%	14.0%	7.5%	15.3%	11.3%	8.4%
13 Portland General Elec.	$ 24.26	$ 0.97	4.0%	7.9%	14.5%	7.9%	7.0%	4.1%	11.9%	18.5%	11.9%	11.0%	8.1%
14 PPL Corp.	$ 47.68	$ 1.31	2.7%	13.7%	14.0%	15.2%	10.3%	9.4%	16.4%	16.7%	17.9%	13.0%	12.1%
15 Progress Energy	$ 44.42	$ 2.46	5.5%	4.6%	3.5%	4.5%	5.2%	2.9%	10.1%	9.0%	10.0%	10.7%	8.4%
16 P S Enterprise Group	$ 91.20	$ 2.58	2.8%	19.7%	11.5%	14.3%	18.5%	9.2%	22.5%	14.3%	17.1%	21.3%	12.1%
17 Westar Energy	$ 23.03	$ 1.14	5.0%	5.6%	4.5%	4.6%	4.5%	4.0%	10.6%	9.5%	9.5%	9.5%	9.0%
18 Wisconsin Energy	$ 45.21	$ 1.08	2.4%	8.1%	8.0%	9.3%	9.4%	6.8%	10.5%	10.4%	11.7%	11.8%	9.1%
19 Xcel Energy, Inc.	$ 20.71	$ 0.94	4.5%	6.0%	5.5%	6.1%	5.2%	4.2%	10.5%	10.0%	10.7%	9.7%	8.7%
Average (h)									11.3%	10.4%	10.6%	10.9%	9.2%

(a) Recent price and estimated dividend for next 12 mos. from The Value Line Investment Survey, Summary and Index (Feb. 1, 2008).

(b) Thompson Financial, Company in Context Report (Feb. 1, 2008).

(c) The Value Line Investment Survey (Nov. 30 & Dec. 28, 2007, Feb. 8, 2008).

(d) http://stocks.us.reuters.com (retrieved Feb. 4, 2008)

(e) http://www.zacks.com/research (retrieved Feb. 4, 2008)

(f) See Schedule WEA-3.

(g) Sum of dividend yield and respective growth rate

(h) Excludes highlighted figures

SUSTAINABLE GROWTH RATE

UTILITY PROXY GROUP

	(a)	(a)	(a)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Projections			Historical		Mid-Year		Adjusted			Sustainable
			Net Book	Net Book	Annual	Adjustment			"b x r"	"sv"	
Company	EPS	DPS	Value	Value	Change	Factor	"b"	"r"	growth	Factor	Growth
1 American Elec Pwr	$4.00	$2.20	$32.00	$23.73	6.2%	1.0299	45.0%	12.9%	5.8%	0.52%	6.3%
2 Avista Corp.	$1.75	$1.10	$20.75	$17.46	3.5%	1.0173	37.1%	8.6%	3.2%	0.19%	3.4%
3 Black Hills Corp.	$2.75	$1.53	$30.75	$23.68	5.4%	1.0261	44.4%	9.2%	4.1%	0.67%	4.7%
4 Cleco Corp.	$2.00	$1.30	$19.50	$15.22	5.1%	1.0248	35.0%	10.5%	3.7%	0.88%	4.6%
5 DTE Energy Co.	$3.50	$2.40	$38.00	$33.02	2.8%	1.0140	31.4%	9.3%	2.9%	-0.75%	2.2%
6 Edison International	$3.60	$1.42	$34.30	$23.66	7.7%	1.0371	60.6%	10.9%	6.6%	0.01%	6.6%
7 Hawaiian Elec.	$1.50	$1.24	$13.75	$13.44	0.5%	1.0023	17.3%	10.9%	1.9%	0.75%	2.6%
8 IDACORP, Inc.	$2.25	$1.20	$30.95	$25.76	3.7%	1.0184	46.7%	7.4%	3.5%	0.09%	3.5%
9 NiSource Inc.	$1.50	$1.00	$20.25	$18.32	2.0%	1.0100	33.3%	7.5%	2.5%	0.01%	2.5%
10 Northeast Utilities	$2.30	$0.98	$22.20	$18.14	4.1%	1.0202	57.4%	10.6%	6.1%	1.56%	7.6%
11 PG&E Corp.	$3.10	$1.92	$28.45	$20.95	6.3%	1.0306	38.1%	11.2%	4.3%	0.72%	5.0%
12 PNM Resources	$1.95	$1.07	$26.35	$22.09	3.6%	1.0176	45.1%	7.5%	3.4%	0.04%	3.4%
13 Portland General Elec.	$2.25	$1.30	$24.75	$19.58	4.8%	1.0234	42.2%	9.3%	3.9%	0.16%	4.1%
14 PPL Corp.	$4.50	$2.20	$19.75	$13.30	8.2%	1.0395	51.1%	23.7%	12.1%	-2.72%	9.4%
15 Progress Energy	$3.30	$2.53	$35.05	$32.37	1.6%	1.0080	23.3%	9.5%	2.2%	0.68%	2.9%
16 P S Enterprise Group	$6.20	$2.64	$43.15	$25.33	11.2%	1.0532	57.4%	15.1%	8.7%	0.55%	9.2%
17 Westar Energy	$2.00	$1.28	$22.35	$17.62	4.9%	1.0238	36.0%	9.2%	3.3%	0.74%	4.0%
18 Wisconsin Energy	$3.75	$1.60	$32.75	$24.70	5.8%	1.0282	57.3%	11.8%	6.8%	0.00%	6.8%
19 Xcel Energy, Inc.	$1.75	$1.10	$17.25	$14.28	3.9%	1.0189	37.1%	10.3%	3.8%	0.36%	4.2%

(a) The Value Line Investment Survey (Nov. 30 & Dec. 28, 2007, Feb. 8, 2008).
(b) Annual growth in book value per share from historical to projected period.
(c) Equal to 2(1+b)/(2+b), where b = annual change in net book value.
(d) (EPS-DPS)/EPS.
(e) (Projected EPS/Projected Net Book Value) x Mid-Year Adjustment Factor.
(f) (d) x (e).
(g) "s" equals projected market-to-book ratio x growth in common shares. "v" equals (1- 1/projected market-to-book ratio).
(h) (f) + (g).

CONSTANT GROWTH DCF MODEL

NON-UTILITY PROXY GROUP

	(a)	(b)	(a)	(c)	(d)	(e)	(f)	(f)	(f)	(f)	(f)
				Growth Rates			Cost of Equity Estimates				
	Dividend		VL					VL			
Company	Yield	IBES	EPS	Reuters	Zacks	br+sv	IBES	EPS	Reuters	Zacks	br+sv
1 3M Company	2.41%	11.3%	5.0%	11.1%	10.7%	12.7%	13.7%	7.4%	13.5%	13.1%	15.1%
2 Abbott Labs.	2.31%	11.9%	10.0%	10.4%	9.7%	14.4%	14.2%	12.3%	12.7%	12.0%	16.7%
3 Aflac Inc.	1.57%	14.6%	14.0%	13.8%	14.0%	13.1%	16.2%	15.6%	15.4%	15.6%	14.6%
4 Anheuser-Busch	2.84%	8.2%	7.5%	8.5%	8.7%	25.3%	11.0%	10.3%	11.3%	11.5%	28.2%
5 Automatic Data Proc.	2.88%	14.2%	10.5%	13.3%	13.0%	12.8%	17.1%	13.4%	16.2%	15.9%	15.7%
6 Bank of America	5.80%	9.3%	7.0%	7.6%	8.4%	7.8%	15.1%	12.8%	13.4%	14.2%	13.6%
7 Bard (C.R.)	0.62%	14.3%	14.0%	14.5%	14.1%	11.6%	14.9%	14.6%	15.1%	14.7%	12.3%
8 Becton, Dickinson	1.32%	13.2%	12.0%	12.8%	13.1%	13.4%	14.5%	13.3%	14.1%	14.4%	14.7%
9 Chevron Corp.	2.79%	8.7%	5.0%	6.5%	3.5%	6.9%	11.5%	7.8%	9.3%	6.3%	9.7%
10 Coca-Cola	2.31%	10.1%	9.0%	10.1%	9.0%	11.9%	12.4%	11.3%	12.4%	11.3%	14.2%
11 Colgate-Palmolive	1.88%	10.9%	12.0%	10.9%	10.9%	21.0%	12.8%	13.9%	12.8%	12.8%	22.9%
12 Commerce Bancshs.	2.25%	6.3%	4.5%	6.3%	6.5%	8.2%	8.6%	6.8%	8.5%	8.8%	10.5%
13 ConocoPhillips	2.05%	10.9%	2.5%	6.2%	5.8%	8.9%	13.0%	4.6%	8.3%	7.9%	11.0%
14 Ecolab Inc.	1.08%	14.0%	13.0%	14.3%	14.3%	17.0%	15.1%	14.1%	15.4%	15.4%	18.1%
15 Exxon Mobil Corp.	1.62%	8.3%	7.0%	6.7%	5.0%	12.3%	9.9%	8.6%	8.3%	6.6%	13.9%
16 Fortune Brands	2.40%	9.4%	6.0%	9.0%	10.2%	10.5%	11.8%	8.4%	11.4%	12.6%	12.9%
17 Gannett Co.	4.33%	2.5%	4.0%	3.3%	3.6%	7.8%	6.8%	8.3%	7.7%	7.9%	12.1%
18 Gen'l Mills	2.86%	8.6%	8.5%	8.7%	8.6%	7.1%	11.5%	11.4%	11.5%	11.5%	9.9%
18 Genuine Parts	3.32%	8.9%	9.0%	8.9%	8.6%	9.3%	12.2%	12.3%	12.3%	11.9%	12.7%
18 Heinz (H.J.)	3.57%	7.9%	8.0%	7.9%	8.2%	11.7%	11.5%	11.6%	11.5%	11.8%	15.3%
18 Hormel Foods	1.91%	8.9%	11.5%	9.0%	8.7%	11.2%	10.8%	13.4%	10.9%	10.6%	13.1%
18 Johnson & Johnson	2.63%	7.6%	8.0%	9.4%	9.8%	10.3%	10.2%	10.6%	12.1%	12.4%	12.9%
18 Kimberly-Clark	3.23%	7.4%	6.5%	7.5%	8.0%	7.5%	10.6%	9.7%	10.7%	11.2%	10.8%
18 Kraft Foods	3.69%	7.1%	5.5%	7.3%	6.9%	3.8%	10.8%	9.2%	11.0%	10.6%	7.4%
18 Lilly (Eli)	3.66%	8.0%	7.0%	9.6%	8.8%	10.8%	11.7%	10.7%	13.3%	12.5%	14.5%
18 Medtronic, Inc.	1.08%	13.5%	12.0%	14.2%	13.8%	12.2%	14.6%	13.1%	15.3%	14.9%	13.3%
18 Meredith Corp.	1.58%	11.8%	11.5%	12.3%	12.7%	9.7%	13.4%	13.1%	13.9%	14.3%	11.3%
21 NIKE, Inc. 'B'	1.50%	13.4%	13.0%	10.2%	13.9%	8.5%	14.9%	14.5%	11.7%	15.4%	10.0%
22 Northrop Grumman	1.87%	14.0%	13.0%	10.2%	9.6%	7.5%	15.9%	14.9%	12.1%	11.5%	9.3%
23 PepsiCo, Inc.	2.20%	10.9%	10.5%	10.8%	11.0%	9.4%	13.1%	12.7%	13.0%	13.2%	11.6%
24 Pfizer, Inc.	5.48%	5.1%	2.0%	7.8%	5.8%	0.9%	10.6%	7.5%	13.3%	11.3%	6.4%
25 Procter & Gamble	2.14%	13.3%	11.5%	12.8%	11.6%	6.0%	15.4%	13.6%	15.0%	13.7%	8.1%

CONSTANT GROWTH DCF MODEL

NON-UTILITY PROXY GROUP

	(a)	(b)	(a)	(c)	(d)	(e)	(f)	(f)	(f)	(f)	(f)
				Growth Rates					Cost of Equity Estimates		
	Dividend Yield	IBES	VL EPS	Reuters	Zacks	br+sv	IBES	VL EPS	Reuters	Zacks	br+sv
Company											
26 Regions Financial	6.04%	6.8%	6.5%	6.7%	6.7%	4.9%	12.8%	12.5%	12.7%	12.7%	11.0%
27 Reinsurance Group	0.62%	10.3%	11.5%	10.0%	11.5%	11.3%	10.9%	12.1%	10.6%	12.1%	11.9%
28 Sigma-Aldrich	0.93%	9.8%	11.5%	10.3%	10.5%	18.5%	10.7%	12.4%	11.2%	11.4%	19.4%
29 Sysco Corp.	3.03%	13.1%	13.0%	13.1%	12.6%	10.1%	16.1%	16.0%	16.1%	15.6%	13.2%
30 United Parcel Serv.	2.30%	13.1%	8.0%	12.8%	12.7%	12.9%	15.4%	10.3%	15.1%	15.0%	15.2%
31 Wal-Mart Stores	1.73%	12.0%	10.0%	12.3%	11.8%	8.8%	13.7%	11.7%	14.0%	13.5%	10.5%
32 Walgreen Co.	1.08%	13.4%	13.0%	13.4%	13.7%	13.1%	14.5%	14.1%	14.5%	14.8%	14.2%
33 Washington Federal	3.44%	7.7%	9.5%	7.3%	6.5%	9.0%	11.1%	12.9%	10.7%	9.9%	12.5%
34 Wells Fargo	3.64%	10.6%	9.5%	10.1%	10.9%	10.7%	14.2%	13.1%	13.8%	14.5%	14.3%
35 Wrigley (Wm.) Jr.	2.02%	10.7%	9.5%	10.4%	10.1%	10.9%	12.7%	11.5%	12.4%	12.1%	12.9%
Average (g)							**12.9%**	**12.2%**	**12.5%**	**12.7%**	**13.0%**

(a) www.valueline.com (retrieved Feb. 6, 2008).

(b) Thompson Financial *Company in Context* (Feb. 5, 2008).

(c) http://stocks.us.reuters.com (retrieved Feb. 5, 2008).

(d) http://www.zacks.com/research (retrieved Feb. 4, 2008).

(e) See Schedule WEA-4.

(f) Sum of dividend yield and respective growth rate.

(g) Excludes highlighted figures.

SUSTAINABLE GROWTH RATE

NON-UTILITY PROXY GROUP

		(a) Projections			(a) Historical	(b)	(c)	(d)	(e) Adjusted	(f)	(g)	(h)
	Company	EPS	DPS	Net Book Value	Net Book Value	Annual Change	Mid-Year Adjustment Factor	"b"	"r"	"b x r" growth	"sv" Factor	Sustainable Growth
1	3M Company	$5.80	$2.28	$22.65	$13.56	10.8%	1.0513	60.7%	26.9%	16.3%	-3.68%	12.7%
2	Abbott Labs.	$4.35	$1.60	$18.05	$9.14	14.6%	1.0679	63.2%	25.7%	16.3%	-1.88%	14.4%
3	Aflac Inc.	$5.60	$1.52	$26.90	$16.93	9.7%	1.0463	72.9%	21.8%	15.9%	-2.79%	13.1%
4	Anheuser-Busch	$3.95	$1.46	$6.90	$5.11	6.2%	1.0300	63.0%	59.0%	37.2%	-11.84%	25.3%
5	Automatic Data Proc.	$3.00	$1.25	$17.20	$9.61	15.7%	1.0726	58.3%	18.7%	10.9%	1.92%	12.8%
6	Bank of America	$6.10	$3.00	$40.80	$29.70	6.6%	1.0317	50.8%	15.4%	7.8%	-0.03%	7.8%
7	Bard (C.R.)	$6.35	$0.86	$32.85	$16.46	14.8%	1.0690	86.5%	20.7%	17.9%	-6.22%	11.6%
8	Becton, Dickinson	$5.75	$1.60	$30.15	$15.63	14.0%	1.0656	72.2%	20.3%	14.7%	-1.27%	13.4%
9	Chevron Corp.	$9.15	$2.50	$47.55	$28.22	11.0%	1.0521	72.7%	20.2%	14.7%	-7.78%	6.9%
10	Coca-Cola	$3.65	$1.84	$15.00	$7.30	15.5%	1.0719	49.6%	26.1%	12.9%	-1.01%	11.9%
11	Colgate-Palmolive	$5.25	$2.16	$10.40	$2.32	35.0%	1.1489	58.9%	58.0%	34.1%	-13.15%	21.0%
12	Commerce Bancshs.	$3.70	$1.15	$30.00	$19.61	8.9%	1.0425	68.9%	12.9%	8.9%	-0.66%	8.2%
13	ConocoPhillips	$9.60	$1.75	$94.65	$50.21	13.5%	1.0633	81.8%	10.8%	8.8%	0.11%	8.9%
14	Ecolab Inc.	$2.65	$0.65	$11.00	$6.69	10.5%	1.0497	75.5%	25.3%	19.1%	-2.04%	17.0%
15	Exxon Mobil Corp.	$8.00	$1.75	$35.50	$19.87	12.3%	1.0580	78.1%	23.8%	18.6%	-6.32%	12.3%
16	Fortune Brands	$7.15	$1.76	$54.05	$31.08	11.7%	1.0553	75.4%	14.0%	10.5%	0.01%	10.5%
17	Gannett Co.	$6.15	$1.96	$53.80	$35.71	8.5%	1.0410	68.1%	11.9%	8.1%	-0.35%	7.8%
18	Gen'l Mills	$4.40	$2.00	$18.95	$15.64	4.9%	1.0240	54.5%	23.8%	13.0%	-5.90%	7.1%
18	Genuine Parts	$4.25	$1.90	$23.55	$14.95	9.5%	1.0454	55.3%	18.9%	10.4%	-1.09%	9.3%
18	Heinz (H.J.)	$3.70	$1.90	$10.30	$5.72	12.5%	1.0587	48.6%	38.0%	18.5%	-6.79%	11.7%
18	Hormel Foods	$3.50	$1.00	$21.80	$13.89	11.9%	1.0563	71.4%	17.0%	12.1%	-0.93%	11.2%
18	Johnson & Johnson	$5.50	$2.04	$25.95	$13.59	13.8%	1.0646	62.9%	22.6%	14.2%	-3.92%	10.3%
18	Kimberly-Clark	$5.50	$2.76	$19.00	$13.38	7.3%	1.0351	49.8%	30.0%	14.9%	-7.40%	7.5%
18	Kraft Foods	$2.60	$1.20	$24.65	$17.45	7.2%	1.0345	53.8%	10.9%	5.9%	-2.12%	3.8%
18	Lilly (Eli)	$4.40	$2.12	$18.35	$9.70	13.6%	1.0637	51.8%	25.5%	13.2%	-2.41%	10.8%
18	Medtronic, Inc.	$4.30	$0.83	$18.45	$9.60	14.0%	1.0652	80.7%	24.8%	20.0%	-7.79%	12.2%
18	Meredith Corp.	$4.80	$0.90	$29.45	$17.28	14.3%	1.0665	81.3%	17.4%	14.1%	-4.41%	9.7%
21	NIKE, Inc. 'B'	$4.70	$1.50	$23.30	$13.94	13.7%	1.0641	68.1%	21.5%	14.6%	-6.10%	8.5%
22	Northrop Grumman	$7.65	$2.00	$68.75	$48.03	7.4%	1.0358	73.9%	11.5%	8.5%	-1.04%	7.5%
23	PepsiCo, Inc.	$4.85	$1.96	$13.15	$9.36	7.0%	1.0340	59.6%	38.1%	22.7%	-13.33%	9.4%
24	Pfizer, Inc.	$2.30	$1.36	$12.25	$9.98	4.2%	1.0205	40.9%	19.2%	7.8%	-6.96%	0.9%
25	Procter & Gamble	$4.75	$1.90	$32.30	$20.87	11.5%	1.0545	60.0%	15.5%	9.3%	-3.34%	6.0%

SUSTAINABLE GROWTH RATE

NON-UTILITY PROXY GROUP

	(a) Projections			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
			Net Book	Historical Net Book	Annual	Mid-Year Adjustment		Adjusted	"b x r"	"sv"	Sustainable
Company	EPS	DPS	Value	Value	Change	Factor	"b"	"r"	growth	Factor	Growth
26 Regions Financial	$3.50	$1.60	$34.45	$28.36	4.0%	1.0195	54.3%	10.4%	5.6%	-0.70%	4.9%
27 Reinsurance Group	$7.60	$0.50	$65.65	$45.85	7.4%	1.0359	93.4%	12.0%	11.2%	0.05%	11.3%
28 Sigma-Aldrich	$3.60	$0.62	$16.15	$10.56	8.9%	1.0425	82.8%	23.2%	19.2%	-0.76%	18.5%
29 Sysco Corp.	$2.70	$1.25	$7.80	$5.36	9.8%	1.0469	53.7%	36.2%	19.5%	-9.32%	10.1%
30 United Parcel Serv.	$5.40	$2.10	$22.45	$14.47	9.2%	1.0439	61.1%	25.1%	15.3%	-2.40%	12.9%
31 Wal-Mart Stores	$4.65	$1.20	$22.30	$14.91	8.4%	1.0402	74.2%	21.7%	16.1%	-7.34%	8.8%
32 Walgreen Co.	$3.15	$0.56	$19.50	$11.20	14.9%	1.0692	82.2%	17.3%	14.2%	-1.11%	13.1%
33 Washington Federal	$2.75	$1.00	$19.40	$15.07	6.5%	1.0316	63.6%	14.6%	9.3%	-0.29%	9.0%
34 Wells Fargo	$3.90	$1.44	$22.90	$13.58	11.0%	1.0522	63.1%	17.9%	11.3%	-0.65%	10.7%
35 Wrigley (Wm.) Jr.	$3.25	$1.38	$15.05	$8.65	11.7%	1.0553	57.5%	22.8%	13.1%	-2.23%	10.9%

(a) www.valueline.com (retrieved Feb. 6, 2008).

(b) Annual growth in book value per share from historical to projected period.

(c) Equal to 2(1+b)/(2+b), where b = annual change in net book value.

(d) (EPS-DPS)/EPS.

(e) (Projected EPS/Projected Net Book Value) x Mid-Year Adjustment Factor.

(f) (d) x (e).

(g) "s" equals projected market-to-book ratio x growth in common shares. "v" equals (1- 1/projected market-to-book ratio).

(h) (f) + (g).

UTILITY PROXY GROUP

Market Rate of Return

Dividend Yield (a)	2.2%	
Growth Rate (b)	11.0%	
Market Return (c)		13.2%

Less: Risk-Free Rate (d)

Long-term Treasury Bond Yield	4.4%

Market Risk Premium (e)	8.8%
Proxy Group Beta (f)	0.89
Proxy Group Risk Premium (g)	7.8%

Plus: Risk-free Rate (d)

Long-term Treasury Bond Yield	4.4%

Implied Cost of Equity (h)	**12.2%**

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (Retreived Dec. 11, 2007).

(b) Weighted average of IBES and Value Line growth rates for the dividend paying firms in the S&P 500 based on data from Standard & Poor's Earnings Guide (Nov. 2007) and www.valueline.com (Retreived Dec. 11, 2007).

(c) (a) + (b)

(d)

    Average yield on 20-year Treasury bonds for January 2008 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. 30 & Dec. 28, 2007, Feb. 8, 2008).

(g) (e) x (f).

(h) (d) + (g).

NON-UTILITY PROXY GROUP

Market Rate of Return

Dividend Yield (a)	2.2%	
Growth Rate (b)	11.0%	
Market Return (c)		13.2%

Less: Risk-Free Rate (d)

Long-term Treasury Bond Yield	4.4%
Market Risk Premium (e)	8.8%
Proxy Group Beta (f)	0.80
Proxy Group Risk Premium (g)	7.0%

Plus: Risk-free Rate (d)

Long-term Treasury Bond Yield	4.4%
Implied Cost of Equity (h)	**11.4%**

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (Retreived Dec. 11, 2007).

(b) Weighted average of IBES and Value Line growth rates for the dividend paying firms in the S&P 500 based on data from Standard & Poor's Earnings Guide (Nov. 2007) and www.valueline.com (Retreived Dec. 11, 2007).

(c) (a) + (b)

(d)
Average yield on 20-year Treasury bonds for January 2008 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 Feb. 6, 2008).

(g) (e) x (f).

(h) (d) + (g).

Market Risk Premium	
Long-Horizon Equity Risk Premium (a)	7.1%
Proxy Group Beta (b)	0.89
Proxy Group Risk Premium (c)	6.3%
Plus: Risk-free Rate (d)	
Long-term Treasury Bond Yield	4.4%
Implied Cost of Equity (e)	**10.7%**

(a) Arithmetic mean risk premium on Large Company Stocks from 1926-2006 reported by Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, Valuation Edition, 2007 Yearbook*, at Appendix C, Table C-1, p. 262.

(b) The Value Line Investment Survey (Nov. 30 & Dec. 28, 2007, Feb. 8, 2008).

(c) (a) x (b).

(d)

    Average yield on 20-year Treasury bonds for January 2008 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_ Y20.txt.

(e) (c) + (d).

NON-UTILITY PROXY GROUP

<u>Market Risk Premium</u>

    Long-Horizon Equity Risk Premium (a)   7.1%

<u>Proxy Group Beta (b)</u>   0.80

<u>Proxy Group Risk Premium (c)</u>   5.6%

<u>Plus: Risk-free Rate (d)</u>
    Long-term Treasury Bond Yield   4.4%

Implied Cost of Equity (e)   **10.0%**

(a) Arithmetic mean risk premium on Large Company Stocks from 1926-2006 reported by
     Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, Valuation Edition, 2007 Yearbook*, at
     Appendix C, Table C-1, p. 262.
(b) www.valueline.com (retrieved Feb. 6, 2008).
(c) (a) x (b).
(d)
     Average yield on 20-year Treasury bonds for January 2008 from the Federal Reserve Board at
     http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_ Y20.txt.
(e) (c) + (d).

EXPECTED EARNINGS APPROACH

UTILITY PROXY GROUP

	Company	(a) Expected Return on Common Equity	(b) Adjustment Factor	(c) Adjusted Return on Common Equity
1	American Elec Pwr	12.5%	1.0299	12.9%
2	Avista Corp.	8.5%	1.0173	8.6%
3	Black Hills Corp.	9.5%	1.0261	9.7%
4	Cleco Corp.	10.5%	1.0248	10.8%
5	DTE Energy Co.	9.0%	1.0140	9.1%
6	Edison International	10.5%	1.0371	10.9%
7	Hawaiian Elec.	11.0%	1.0023	11.0%
8	IDACORP, Inc.	7.0%	1.0184	7.1%
9	NiSource Inc.	7.5%	1.0100	7.6%
10	Northeast Utilities	10.5%	1.0202	10.7%
11	PG&E Corp.	11.0%	1.0306	11.3%
12	PNM Resources	7.0%	1.0176	7.1%
13	Portland General Elec.	8.5%	1.0234	8.7%
14	PPL Corp.	23.5%	1.0395	24.4%
15	Progress Energy	9.5%	1.0080	9.6%
16	P S Enterprise Group	14.5%	1.0532	15.3%
17	Westar Energy	9.0%	1.0238	9.2%
18	Wisconsin Energy	11.5%	1.0282	11.8%
19	Xcel Energy, Inc.	10.0%	1.0189	10.2%
	Average (d)			10.5%

(a) 3-5 year projections from The Value Line Investment Survey(Nov. 30 & Dec. 28, 2007, Feb. 8, 2008).

(b) Adjustment to convert year-end "r" to an average rate of return from Schedule WEA-3.

(c) (a) x (b).

(d) Excludes highlighted figures.