Exhibit No. \_\_\_\_ (WEA-2)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-2)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

#### EXHIBIT NO.\_\_\_(WEA-2)

#### **QUALIFICATIONS OF WILLIAM E. AVERA**

#### Q. What is the purpose of this exhibit?

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

#### 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 Utilities Commission of Ohio ("PUCO" 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<sup>®</sup>) 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.

Exhibit No.\_\_\_(WEA-2) Page 4 of 10

### WILLIAM E. AVERA

FINCAP, INC. Financial Concepts and Applications *Economic and Financial Counsel*  3907 Red River Austin, Texas 78751 (512) 458–4644 FAX (512) 458–4768 fincap@texas.net

#### **Summary of Qualifications**

Ph.D. in economics and finance; Chartered Financial Analyst (CFA<sup>®</sup>) 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.

Exhibit No.\_\_\_(WEA-2) Page 5 of 10

<i>Lecturer in Finance</i> , 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.
<b>Education</b>	
<ul><li><i>Ph.D., Economics and Finance,</i></li><li>University of North Carolina at Chapel Hill</li><li>(Jan. 1969 to Aug. 1972)</li></ul>	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
<i>B.A., Economics,</i> 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**

<u>University-Sponsored Programs</u>: 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.

<u>Business and Government-Sponsored Programs:</u> 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.

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

<u>State Regulatory Agencies:</u> 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.

# <u>Military</u>

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).

# **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**

- "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 15<sup>th</sup> 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)
- "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)
- ""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)
- "Growth Rates, Expected Returns, and Variance in Portfolio Selection and Performance Evaluation," with Henry A. Latané, Econometric Society, Oslo, Norway (Aug. 1973)

Exhibit No. \_\_\_\_ (WEA-3)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-3)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

Exhibit No.\_\_\_(WEA-3) Page 1 of 38

# EXHIBIT NO.\_\_\_(WEA-3)

# **DESCRIPTIONS OF QUANTITATIVE ANALYSES**

1	Q. What is the purpose of this schedule?
2	A. Exhibit No(WEA-3) presents capital market estimates of the
3	cost of equity. First, I examine the concept of the cost of equity, along with the
4	risk-return tradeoff principle fundamental to capital markets. Next, I describe
5	DCF, CAPM, and comparable earnings analyses conducted to estimate the cost
6	of equity for reference groups of comparable risk firms.
	A. <u>Overview</u>
7	Q. What role does the rate of return on common equity play in a
8	utility's rates?
9	A. The return on common equity is the cost of inducing and
10	retaining investment in the utility's physical plant and assets. This investment
11	is necessary to finance the asset base needed to provide utility service.
12	Investors will commit money to a particular investment only if they expect it to
13	produce a return commensurate with those from other investments with
14	comparable risks. Moreover, the return on common equity is integral in
15	achieving the sound regulatory objectives of rates that are sufficient to: 1) fairly
16	compensate capital investment in the utility, 2) enable the utility to offer a

1	return adequate to attract new capital on reasonable terms, and 3) maintain the
2	utility's financial integrity. Meeting these objectives allows the utility to fulfill
3	its obligation to provide reliable service while meeting the needs of customers
4	through necessary system expansion.
5	Q. What fundamental economic principle underlies any evaluation
6	of investors' required return on equity?
7	A. The fundamental economic principle underlying the cost of equity
8	concept is the notion that investors are risk averse. The required rate of return
9	for a particular asset at any point in time is a function of: 1) the yield on risk-
10	free assets, and 2) its relative risk, with investors demanding correspondingly
11	larger risk premiums for assets bearing greater risk. Given this risk-return
12	tradeoff, the required rate of return (k) from an asset (i) can be generally
13	expressed as:
14	$k_i = R_f + RP_i$
15 16	where: $R_{\rm f}$ = Risk-free rate of return, and $RP_{\rm i}$ = Risk premium required to hold riskier asset i.
17	Thus, the required rate of return for a particular asset at any point in time is a
18	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.

3	Q. Is the cost of equity observable in the capital markets?
4	A. No. Unlike debt capital, there is no contractually guaranteed
5	return on common equity capital since shareholders are the residual owners of
6	the utility. Because it is unobservable, the cost of equity for a particular utility
7	must be estimated by analyzing information about capital market conditions
8	generally, assessing the relative risks of the company specifically, and
9	employing various quantitative methods that focus on investors' current
10	required rates of return. These various quantitative methods typically attempt
11	to infer investors' required rates of return from stock prices, interest rates, or
12	other capital market data.
	B. <u>Comparable Risk Proxy Groups</u>
13	Q. How did you implement these quantitative methods to estimate
14	the cost of common equity for Avista?
15	A. Application of the DCF model and other quantitative methods to
16	estimate the cost of equity requires observable capital market data, such as
17	stock prices. Moreover, even for a firm with publicly traded stock, the cost of

18 equity can only be estimated. As a result, applying quantitative models using

1	observable n	narket data only produces an estimate that inherently includes	
2	some degree	of observation error. Thus, the accepted approach to increase	
3	confidence in the results is to apply the DCF model and other quantitative		
4	methods to a proxy group of publicly traded companies that investors regard as		
5	risk compara	able.	
6	Q.	What specific proxy group did you rely on for your analysis?	
7	А.	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-" to "BBB+," (2) a Value Line Safety
  Rank of "2" or "3", and (3) a Value Line Financial Strength Rating of "B+" to
  "B++".<sup>1</sup> I refer to this group as the "Utility Proxy Group."
  Q. What other proxy group did you consider in evaluating a fair
- 15 **ROE for Avista?**
- 16
- A. Under the regulatory standards established by *Hope* and *Bluefield*,
- 17 the salient criterion in establishing a meaningful benchmark to evaluate a fair

<sup>&</sup>lt;sup>1</sup> In addition, I excluded four utilities (Allegheny Energy, Inc., FirstEnergy Corp., Northeast Utilities, and Progress Energy, Inc.) that otherwise would have been in the proxy group, but are not appropriate for inclusion because they are currently involved in a major merger or acquisition.

1	ROE is relative risk, not the particular business activity or degree of regulation.
2	With regulation taking the place of competitive market forces, required returns
3	for utilities should be in line with those of non-utility firms of comparable risk
4	operating under the constraints of free competition. Consistent with this
5	accepted regulatory standard, I also applied the DCF model to a reference
6	group of comparable risk companies in the non-utility sectors of the economy. I
7	refer to this group as the "Non-Utility Proxy Group".
8	Q. What criteria did you apply to develop the Non-Utility Proxy
9	Group?
10	A. My comparable risk proxy group of non-utility firms was
11	composed of those U.S. companies followed by Value Line that: (1) pay
12	common dividends; (2) have a Safety Rank of "1"; (3) have a Financial Strength
13	Rating of "B++" or greater; (4) have a beta of 0.85 or less; and, (5) have
14	investment grade credit ratings from S&P.
15	Q. Do these criteria provide objective evidence to evaluate
16	investors' risk perceptions?
17	A. Yes. Credit ratings are assigned by independent rating agencies
18	for the purpose of providing investors with a broad assessment of the

1	creditworthiness of a firm. Ratings generally extend from triple-A (the highest)
2	to D (in default). Other symbols ( <i>e.g.,</i> "A+") are used to show relative standing
3	within a category. Because the rating agencies' evaluation includes virtually all
4	of the factors normally considered important in assessing a firm's relative credit
5	standing, corporate credit ratings provide a broad, objective measure of overall
6	investment risk that is readily available to investors. Although the credit rating
7	agencies are not immune to criticism, their rankings and analyses are widely
8	cited in the investment community and referenced by investors. <sup>2</sup> Investment
9	restrictions tied to credit ratings continue to influence capital flows, and credit
10	ratings are also frequently used as a primary risk indicator in establishing
11	proxy groups to estimate the cost of common equity.
12	While credit ratings provide the most widely referenced benchmark for
13	investment risks, other quality rankings published by investment advisory
14	services also provide relative assessments of risks that are considered by
15	investors in forming their expectations for common stocks. Value Line's
16	primary risk indicator is its Safety Rank, which ranges from "1" (Safest) to "5"
17	(Riskiest). This overall risk measure is intended to capture the total risk of a
	<sup>2</sup> While the ratings agencies were faulted during the financial crisis for failing to adequately

<sup>&</sup>lt;sup>2</sup> While the ratings agencies were faulted during the financial crisis for failing to adequately assess the risk associated with structured finance products, investors continue to regard corporate credit ratings as a reliable guide to investment risks.

1	stock, and incorporates elements of stock price stability and financial strength.
2	Given that Value Line is perhaps the most widely available source of
3	investment advisory information, its Safety Rank provides useful guidance
4	regarding the risk perceptions of investors.
5	The Financial Strength Rating is designed as a guide to overall financial
6	strength and creditworthiness, with the key inputs including financial leverage,
7	business volatility measures, and company size. Value Line's Financial Strength
8	Ratings range from "A++" (strongest) down to "C" (weakest) in nine steps.
9	Finally, Value Line's beta measures the volatility of a security's price relative to
10	the market as a whole. A stock that tends to respond less to market movements
11	has a beta less than 1.00, while stocks that tend to move more than the market
12	have betas greater than 1.00.
13	Q. How do the overall risks of your proxy groups compare with
14	Avista?
15	A. Table WEA-2 compares the Utility Proxy Group with the Non-
16	Utility Proxy Group and Avista across four key indicators of investment risk:

# TABLE WEA-2 COMPARISON OF RISK INDICATORS

	S&P	Value Line		
	Credit <u>Rating</u>	Safety <u>Rank</u>	Financial <u>Strength</u>	<u>Beta</u>
Utility Group	BBB	3	B++	0.74
Non-Utility Proxy Group	А	1	A+	0.70
Avista	BBB	2	B++	0.70

# Q. Do these comparisons indicate that investors would view the firms in your proxy groups as risk-comparable to the Company?

Yes. Considered together, a comparison of these objective А. 5 6 measures, which consider of a broad spectrum of risks, including financial and 7 business position, and exposure to firm-specific factors, indicates that investors 8 would likely conclude that the overall investment risks for Avista are generally 9 comparable to those of the firms in the Utility Proxy Group. With respect to the Non-Utility Proxy Group, its average credit ratings, 10 11 Safety Rank, and Financial Strength Rating suggest less risk than for Avista, 12 with its 0.70 average beta indicating identical risk. While the impact of 13 differences in regulation is reflected in objective risk measures, my analyses 14 conservatively focus on a lower-risk group of non-utility firms.

3

4

Exhibit No.\_\_\_(WEA-3) Page 9 of 38

1 **Q**. How are DCF models used to estimate the cost of equity? 2 A. DCF models attempt to replicate the market valuation process that 3 sets the price investors are willing to pay for a share of a company's stock. The 4 model rests on the assumption that investors evaluate the risks and expected 5 rates of return from all securities in the capital markets. Given these 6 expectations, the price of each stock is adjusted by the market until investors 7 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 8 9 worth. By estimating the cash flows investors expect to receive from the stock 10 in the way of future dividends and capital gains, we can calculate their required 11 rate of return. In other words, the cash flows that investors expect from a stock 12 are estimated, and given its current market price, we can "back-into" the 13 discount rate, or cost of equity, that investors implicitly used in bidding the 14 stock to that price.

**Discounted Cash Flow Analyses** 

С.

15

#### 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

1	investors' required rate of return. That is, the cost of equity is the discount rate	
2	that equates the current price of a share of stock with the present value of all	
3	expected cash flows from the stock.	
4	Q. What form of the DCF model is customarily used to estimate the	
5	cost of equity in rate cases?	
6	A. Rather than developing annual estimates of cash flows into	
7	perpetuity, the DCF model can be simplified to a "constant growth" form: <sup>3</sup>	
8	$P_{0} = \frac{D_{1}}{k_{e} - g}$	
9	where: $P_0 = Current price per share;$	
10	$D_1$ = Expected dividend per share in the coming	
11	year;	
12	k <sub>e</sub> = Cost of equity;	
13	g = Investors' long-term growth expectations.	
14	The cost of equity (K <sub>e</sub> ) can be isolated by rearranging terms:	
15	$k_e = \frac{D_1}{P_0} + g$	

<sup>&</sup>lt;sup>3</sup> 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.

1	This constant growth form of the DCF model recognizes that the rate of return
2	to stockholders consists of two parts: 1) dividend yield $(D_1/P_0)$ , and 2) growth
3	(g). In other words, investors expect to receive a portion of their total return in
4	the form of current dividends and the remainder through price appreciation.
5	Q. What steps are required to apply the DCF model?
6	A. The first step in implementing the constant growth DCF model is
7	to determine the expected dividend yield $(D_1/P_0)$ for the firm in question. This
8	is usually calculated based on an estimate of dividends to be paid in the coming
9	year divided by the current price of the stock. The second, and more
10	controversial, step is to estimate investors' long-term growth expectations $(g)$
11	for the firm. The final step is to sum the firm's dividend yield and estimated
12	growth rate to arrive at an estimate of its cost of equity.
13	Q. How was the dividend yield for the Utility Proxy Group
14	determined?
15	A. Estimates of dividends to be paid by each of these utilities over
16	the next twelve months, obtained from Value Line, served as $D_1$ . This annual
17	dividend was then divided by the corresponding stock price for each utility to
18	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 Exhibit No.\_\_(WEA-5).
- Q. What is the next step in applying the constant growth DCF
  4 model?
- 5 А. The next step is to evaluate long-term growth expectations, or "g", 6 for the firm in question. In constant growth DCF theory, earnings, dividends, 7 book value, and market price are all assumed to grow in lockstep, and the 8 growth horizon of the DCF model is infinite. But implementation of the DCF 9 model is more than just a theoretical exercise; it is an attempt to replicate the 10 mechanism investors used to arrive at observable stock prices. A wide variety 11 of techniques can be used to derive growth rates, but the only "g" that matters 12 in applying the DCF model is the value that investors expect. Q. Are historical growth rates likely to be representative of 13
- 14 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 growth in dividends, earnings pressure, and, in many

1	cases, significant write-offs. While these conditions serve to depress historical
2	growth measures, they are not representative of long-term expectations for the
3	utility industry or the expectations that investors have incorporated into current
4	market prices. As a result, historical growth measures for utilities do not
5	currently meet the requirements of the DCF model.
6	Q. What are investors most likely to consider in developing their
7	long-term growth expectations?
8	A. While the DCF model is technically concerned with growth in
9	dividend cash flows, implementation of this DCF model is solely concerned
10	with replicating the forward-looking evaluation of real-world investors. In the
11	case of electric utilities, dividend growth rates are not likely to provide a
12	meaningful guide to investors' current growth expectations. This is because
13	utilities have significantly altered their dividend policies in response to more
14	accentuated business risks in the industry, with the payout ratio for electric
15	utilities falling from approximately 80 percent historically to on the order of 60
16	to 70 percent. <sup>4</sup> As a result of this trend towards a more conservative payout
17	ratio, dividend growth in the utility industry has remained largely stagnant as

<sup>&</sup>lt;sup>4</sup> The Value Line Investment Survey (Sep. 15, 1995 at 161, Feb. 4, 2011 at 2237).

utilities conserve financial resources to provide a hedge against heightened
 uncertainties.

3	As payout ratios for firms in the utility industry trended downward,
4	investors' focus has increasingly shifted from dividends to earnings as a
5	measure of long-term growth. Future trends in earnings, which provide the
6	source for future dividends and ultimately support share prices, play a pivotal
7	role in determining investors' long-term growth expectations. The importance
8	of earnings in evaluating investors' expectations and requirements is well
9	accepted in the investment community. As noted in Finding Reality in Reported
10	Earnings published by the Association for Investment Management and
11	Research:
12	[E]arnings, presumably, are the basis for the investment benefits
13	that we all seek. "Healthy earnings equal healthy investment
14	benefits" seems a logical equation, but earnings are also a
15	scorecard by which we compare companies, a filter through
16	which we assess management, and a crystal ball in which we try
17	to foretell future performance. <sup>5</sup>
18	Value Line's near-term projections and its Timeliness Rank, which is the
19	principal investment rating assigned to each individual stock, are also based

<sup>&</sup>lt;sup>5</sup> Association for Investment Management and Research, "Finding Reality in Reported Earnings: An Overview", p. 1 (Dec. 4, 1996).

- 1 primarily on various quantitative analyses of earnings. As Value Line
- 2 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%.<sup>6</sup>
- 6 The fact that investment advisory services, such as Value Line, Thompson, and
- 7 Reuters, focus on growth in earnings indicates that the investment community
- 8 regards this as a superior indicator of future long-term growth. Indeed, "A
- 9 Study of Financial Analysts: Practice and Theory," published in the *Financial*
- 10 *Analysts Journal*, reported the results of a survey conducted to determine what
- 11 analytical techniques investment analysts actually use.<sup>7</sup> Respondents were
- 12 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
- 14 ranked dividends first while 276 ranked it last. The article concluded:
- 15 Earnings and cash flow are considered far more important than
- 16 book value and dividends.<sup>8</sup>
- 17 More recently, the *Financial Analysts Journal* reported the results of a
- 18 study of the relationship between valuations based on alternative multiples and

<sup>8</sup> Id. at 88.

<sup>&</sup>lt;sup>6</sup> The Value Line Investment Survey, *Subscriber's Guide*, p. 53.

<sup>&</sup>lt;sup>7</sup> Block, Stanley B., "A Study of Financial Analysts: Practice and Theory", *Financial Analysts Journal* (July/August 1999).

1	actual market prices, which concluded, "In all cases studied, earnings
2	dominated operating cash flows and dividends."9
3	Q. Do the growth rate projections of security analysts consider
4	historical trends?
5	A. Yes. Professional security analysts study historical trends
6	extensively in developing their projections of future earnings. Hence, to the
7	extent there is any useful information in historical patterns, that information is
8	incorporated into analysts' growth forecasts.
9	Q. What are security analysts currently projecting in the way of
10	growth for the firms in the Utility Proxy Group?
11	A. The Value Line earnings growth projections for each of the firms
12	in the Utility Proxy Group are displayed on Exhibit No(WEA-5). Also
13	presented are the earnings per share ("EPS") growth projections reported by
14	Thomson Reuters ("IBES") and Zacks Investment Research ("Zacks"). <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Liu, Jing, Nissim, Doron, & Thomas, Jacob, "Is Cash Flow King in Valuations?," *Financial Analysts Journal*, Vol. 63, No. 2 (March/April 2007) at 56.

<sup>&</sup>lt;sup>10</sup> Formerly I/B/E/S International, Inc., IBES growth rates are now compiled and published by Thomson Reuters.

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

4 A. No. In applying the DCF model to estimate the cost of common 5 equity, the only relevant growth rate is the forward-looking expectations of investors that are captured in current stock prices. Investors, just like securities 6 7 analysts and others in the investment community, do not know how the future 8 will actually turn out. They can only make investment decisions based on their 9 best estimate of what the future holds in the way of long-term growth for a 10 particular stock, and securities prices are constantly adjusting to reflect their 11 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.

3	The continued success of investment services such as Thomson Reuters
4	and Value Line, and the fact that projected growth rates from such sources are
5	widely referenced, provides strong evidence that investors give considerable
6	weight to analysts' earnings projections in forming their expectations for future
7	growth. While the projections of securities analysts may be proven optimistic
8	or pessimistic in hindsight, this is irrelevant in assessing the expected growth
9	that investors have incorporated into current stock prices, and any bias in
10	analysts' forecasts – whether pessimistic or optimistic – is irrelevant if investors
11	share analysts' views. Earnings growth projections of security analysts provide
12	the most frequently referenced guide to investors' views and are widely
13	accepted in applying the DCF model. As explained in New Regulatory Finance:
14	Because of the dominance of institutional investors and their
15	influence on individual investors, analysts' forecasts of long-run
16	growth rates provide a sound basis for estimating required
17	returns. Financial analysts exert a strong influence on the
18	expectations of many investors who do not possess the resources
19	to make their own forecasts, that is, they are a cause of $\sigma$ [growth].
20	The accuracy of these forecasts in the sense of whether they turn
	5

out to be correct is not an issue here, as long as they reflect widely
 held expectations.<sup>11</sup>

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

5 A. In constant growth theory, growth in book equity will be equal to the product of the earnings retention ratio (one minus the dividend payout 6 7 ratio) and the earned rate of return on book equity. Furthermore, if the earned 8 rate of return and the payout ratio are constant over time, growth in earnings and dividends will be equal to growth in book value. Despite the fact that these 9 conditions are seldom, if ever, met in practice, this "sustainable growth" 10 11 approach may provide a rough guide for evaluating a firm's growth prospects and is frequently proposed in regulatory proceedings. 12 13 Accordingly, while I believe that analysts' forecasts provide a superior and more direct guide to investors' growth expectations, I have included the 14

15 "sustainable growth" approach for completeness. The sustainable growth rate

16 is calculated by the formula, g = br+sv, where "b" is the expected retention ratio,

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

- 18 expected to be issued annually as new common stock, and "v" is the equity
- 19 accretion rate.

<sup>&</sup>lt;sup>11</sup> Morin, Roger A., "New Regulatory Finance," *Public Utilities Reports, Inc.* at 298 (2006).

Exhibit No.\_\_\_(WEA-3) Page 20 of 38

Q.	What is the purpose of the "sv" term?
А.	Under DCF theory, the "sv" factor is a component of the growth
rate designe	ed to capture the impact of issuing new common stock at a price
above, or be	elow, book 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 v	vith new stock issues will accrue to the current shareholders. This
increase to t	he book value of existing shareholders leads to higher expected
earnings an	d dividends, with the "sv" factor incorporating this additional
growth com	iponent.
Q.	What growth rate does the earnings retention method suggest
for the Util	ity Proxy Group?

The sustainable, "br+sv" growth rates for each firm in the Utility А. Proxy Group are summarized on Exhibit No. (WEA-5), with the underlying details being presented on Exhibit No. (WEA-6). 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

1	the theory underlying this approach to estimating investors' growth
2	expectations. Meanwhile, the percent of common equity expected to be issued
3	annually as new common stock (s) was equal to the product of the projected
4	market-to-book ratio and growth in common shares outstanding, while the
5	equity accretion rate (v) was computed as 1 minus the inverse of the projected
6	market-to-book ratio.
7	Q. What cost of equity estimates were implied for the Utility Proxy
8	Group using the DCF model?
9	A. After combining the dividend yields and respective growth
10	projections for each utility, the resulting cost of equity estimates are shown on
11	Exhibit No(WEA-5).
12	Q. In evaluating the results of the constant growth DCF model, is it
13	appropriate to eliminate estimates that are extreme low or high outliers?
14	A. Yes. In applying quantitative methods to estimate the cost of
15	equity, it is essential that the resulting values pass fundamental tests of
16	reasonableness and economic logic. Accordingly, DCF estimates that are
17	implausibly low or high should be eliminated when evaluating the results of
18	this method.

1	Q. How did you evaluate DCF estimates at the low end of the
2	range?
3	A. It is a basic economic principle that investors can be induced to
4	hold more risky assets only if they expect to earn a return to compensate them
5	for their risk bearing. As a result, the rate of return that investors require from
6	a utility's common stock, the most junior and riskiest of its securities, must be
7	considerably higher than the yield offered by senior, long-term debt.
8	Consistent with this principle, the DCF results must be adjusted to eliminate
9	estimates that are determined to be extreme low outliers when compared
10	against the yields available to investors from less risky utility bonds.
11	Q. What does this test of logic imply with respect to the DCF
12	results for the Utility Proxy Group?
13	A. As noted earlier, the average S&P corporate credit rating for the
14	Utility proxy Group is "BBB", the same as for Avista. Companies rated "BBB-",
15	"BBB", and "BBB+" are all considered part of the triple-B rating category, with
16	Moody's monthly yields on triple-B bonds averaging approximately 6.1 percent
17	in February 2011. <sup>12</sup> It is inconceivable that investors are not requiring a
18	substantially higher rate of return for holding common stock. Consistent with

<sup>&</sup>lt;sup>12</sup> Moody's Investors Service, www.credittrends.com.

1	this principle, the DCF results for the Utility Proxy Group must be adjusted to
2	eliminate estimates that are determined to be extreme low outliers when
3	compared against the yields available to investors from less risky utility bonds.
4	Q. Have similar tests been applied by regulators?
5	A. Yes. FERC has noted that adjustments are justified where
6	applications of the DCF approach produce illogical results. FERC evaluates
7	DCF results against observable yields on long-term public utility debt and has
8	recognized that it is appropriate to eliminate estimates that do not sufficiently
9	exceed this threshold. In a 2002 opinion establishing its current precedent for
10	determining ROEs for electric utilities, for example, FERC noted:
11	An adjustment to this data is appropriate in the case of PG&E's
12	low-end return of 8.42 percent, which is comparable to the
13	average Moody's "A" grade public utility bond yield of 8.06
14	percent, for October 1999. Because investors cannot be expected
15	to purchase stock if debt, which has less risk than stock, yields
16	essentially the same return, this low-end return cannot be
17	considered reliable in this case. <sup>13</sup>
18	Similarly, in its August 2006 decision in Kern River Gas Transmission Company,
19	FERC noted that:

<sup>&</sup>lt;sup>13</sup> Southern California Edison Company, 92 FERC ¶ 61,070 at p. 22 (2000).

Exhibit No.\_\_\_(WEA-3) Page 24 of 38

- 1 [T]he 7.31 and 7.32 percent costs of equity for El Paso and
- Williams found by the ALJ are only 110 and 122 basis points
  above that average yield for public utility debt.<sup>14</sup>
- 4 The Commission upheld the opinion of Staff and the Administrative Law Judge
- 5 that cost of equity estimates for these two proxy group companies "were too
- 6 low to be credible." <sup>15</sup>
- 7 The practice of eliminating low-end outliers has been affirmed in
- 8 numerous FERC proceedings,<sup>16</sup> and in its April 15, 2010 decision in *SoCal*
- 9 *Edison*, FERC affirmed that, "it is reasonable to exclude any company whose
- 10 low-end ROE fails to exceed the average bond yield by about 100 basis points or
- 11 more."<sup>17</sup>

14

# 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
- 16 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

<sup>15</sup> Id.

<sup>16</sup> See, e.g., Virginia Electric Power Co., 123 FERC ¶ 61,098 at P 64 (2008).

<sup>17</sup> Southern California Edison Co., 131 FERC ¶ 61,020 at P 55 (2010) ("SoCal Edison").

 $<sup>^{14}</sup>$  Kern River Gas Transmission Company, Opinion No. 486, 117 FERC  $\P$  61,077 at P 140 & n. 227 (2006).

- 1 below, forecasts of IHS Global Insight and the EIA imply an average triple-B
- 2 bond yield of 7.19 percent over the period 2012-2015:

3

4

# TABLE 2 IMPLIED BBB BOND YIELD

	2012-15
Projected AA Utility Yield	
IHS Global Insight (a)	6.33%
EIA (b)	6.58%
Average	6.45%
Current BBB - AA Yield Spread (c)	0.74%
Implied Triple-B Utility Yield	7.19%

<sup>(</sup>a) IHS Global Insight, U.S. Economic Outlook at 19 (February 2011).

- 5 The increase in debt yields anticipated by IHS Global Insight and EIA is also
- 6 supported by the widely-referenced Blue Chip Financial Forecasts, which
- 7 projects that yields on corporate bonds will climb more than 100 basis points
- 8 through the period 2012-2016.<sup>18</sup>

<sup>(</sup>b) Energy Information Administration, *Annual Energy Outlook 2011* Early Release (Dec. 16, 2010).

<sup>(</sup>c) Based on monthly average bond yields for the six-month period September 2010 - February 2011.

<sup>&</sup>lt;sup>18</sup> Blue Chip Financial Forecasts, Vol. 29, No. 12 (Dec. 1, 2010) & Vol. 30, No. 3 (Mar. 1, 2011).

Exhibit No.\_\_\_(WEA-3) Page 26 of 38

1	Q. What does this test of logic imply with respect to the DCF
2	results for the Utility Proxy Group?
3	A. As shown on Exhibit No(WEA-5), fourteen low-end DCF
4	estimates ranged from 2.6 percent to 6.9 percent. Eight of these values were
5	below current utility bond yields, with cost of equity estimates below 7.0
6	percent being less than the yield on triple-B utility bonds expected during the
7	period 2012-2015. In light of the risk-return tradeoff principle and the test
8	applied in SoCal Edison, it is inconceivable that investors are not requiring a
9	substantially higher rate of return for holding common stock, which is the
10	riskiest of a utility's securities. As a result, consistent with the test of economic
11	logic applied by FERC and the upward trend expected for utility bond yields,
12	these values provide little guidance as to the returns investors require from
13	utility common stocks and should be excluded.
14	Q. Do you also recommend excluding estimates at the high end of
15	the range of DCF results?
16	A. Yes. The upper end of the cost of common equity range produced
17	by the DCF analysis presented in Exhibit No(WEA-5) was set by three cost
18	of equity estimates for Otter Tail Corp. that exceeded 20 percent. When
19	compared with the balance of the remaining estimates, these values are clearly

1	implausible	e and should be exclue	led in evaluating the results of the DCF model
2	for the Utility Proxy Group. This is also consistent with the precedent adopted		
3	by FERC, which has established that estimates found to be "extreme outliers"		
4	should be c	disregarded in interpre	eting the results of the DCF model. <sup>19</sup>
5	Q.	What cost of equity	v is implied by your DCF results for the
6	Utility Pro	xy Group?	
7	А.	As shown on Exhib	it No(WEA-5) and summarized in Table 3,
8	below, after	r eliminating illogical l	low- and high-end values, application of the
9	constant growth DCF model resulted in the following cost of equity estimates:		
1.0			
ΤU	TABLE 3     DCE RESULTS - LITH ITY PROXY CROUP		
11		DCF RESULTS	TABLE 3 – UTILITY PROXY GROUP
11		DCF RESULTS <u>Growth Rate</u>	TABLE 3 – UTILITY PROXY GROUP <u>Average Cost of Equity</u>
11		DCF RESULTS <u>Growth Rate</u> Value Line	TABLE 3 - UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9%
11		DCF RESULTS <u>Growth Rate</u> Value Line IBES	TABLE 3 5 – UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9% 10.6%
11		DCF RESULTS <u>Growth Rate</u> Value Line IBES Zacks	TABLE 3 5 – UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9% 10.6% 10.6%
11		DCF RESULTS Growth Rate Value Line IBES Zacks br+sv	TABLE 3 5 – UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9% 10.6% 10.6% 9.2%
10	Q.	DCF RESULTS Growth Rate Value Line IBES Zacks br+sv What were the resu	TABLE 3 5 – UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9% 10.6% 10.6% 9.2% alts of your DCF analysis for the Non-Utility
10 11 12 13	Q. Proxy Grou	DCF RESULTS Growth Rate Value Line IBES Zacks br+sv What were the resu up?	TABLE 3 5 – UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9% 10.6% 10.6% 9.2% Alts of your DCF analysis for the Non-Utility
10 11 12 13 14	Q. Proxy Grot A.	DCF RESULTS Growth Rate Value Line IBES Zacks br+sv What were the resu up? I applied the DCF n	TABLE 3 5 – UTILITY PROXY GROUP <u>Average Cost of Equity</u> 10.9% 10.6% 10.6% 9.2% Alts of your DCF analysis for the Non-Utility model to the Non-Utility Proxy Group in
10 11 12 13 14 15	Q. Proxy Grou A. exactly the	DCF RESULTS Growth Rate Value Line IBES Zacks br+sv What were the resu up? I applied the DCF n same manner describe	TABLE 3 <b>Average Cost of Equity</b> 10.9% 10.6% 10.6% 9.2% <b>Automatical States of Your DCF analysis for the Non-Utility</b> nodel to the Non-Utility Proxy Group in ed earlier for the Utility Proxy Group. The
10 11 12 13 14 15 16	Q. Proxy Grou A. exactly the results of n	DCF RESULTS Growth Rate Value Line IBES Zacks br+sv What were the resu up? I applied the DCF n same manner describe ny DCF analysis for the	TABLE 3         S - UTILITY PROXY GROUP         Average Cost of Equity         10.9%         10.6%         10.6%         9.2%    Alts of your DCF analysis for the Non-Utility Inodel to the Non-Utility Proxy Group in ed earlier for the Utility Proxy Group. The e Non-Utility Proxy Group are presented in

1	Exhibit No(WEA-7), with the sustainable, "br+sv" growth rates being
2	developed on Exhibit No(WEA-8). As shown on Exhibit No(WEA-7)
3	and summarized in Table 4, below, after eliminating illogical low- and high-end
4	values, application of the constant growth DCF model resulted in cost of
5	common equity estimates on the order of at least 12 percent:

# 6 TABLE 4 7 DCF RESULTS – NON-UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.9%
IBES	12.4%
Zacks	12.5%
br+sv	12.1%

8 As discussed earlier, reference to the Non-Utility Proxy Group is consistent 9 with established regulatory principles and required returns for utilities should 10 be in line with those of non-utility firms of comparable risk operating under the 11 constraints of free competition.

# D. <u>Capital Asset Pricing Model</u>

12

- Q. Please describe the CAPM.
- 13 A. The CAPM is a theory of market equilibrium that measures risk
- 14 using the beta coefficient. Assuming investors are fully diversified, the relevant

1	risk of an individual asset ( <i>e.g.</i> , common stock) is its volatility relative to the								
2	market as a whole, with beta reflecting the tendency of a stock's price to follow								
3	changes in the market. The CAPM is mathematically expressed as:								
4	$R_j = R_f + \beta_j (R_m - R_f)$								
5 6 7	where: $R_j$ = required rate of return for stock j; $R_f$ = risk-free rate; $R_m$ = expected return on the market portfolio; and,								
8	$\beta_j$ = beta, or systematic risk, for stock j.								
9	Like the DCF model, the CAPM is an <i>ex-ante</i> , or forward-looking model based								
10	on expectations of the future. As a result, in order to produce a meaningful								
11	estimate of investors' required rate of return, the CAPM must be applied using								
12	estimates that reflect the expectations of actual investors in the market, not with								
13	backward-looking, historical data.								
14	Q. How did you apply the CAPM to estimate the cost of common								
15	equity?								
16	A. Application of the CAPM to the Utility Proxy Group based on a								
17	forward-looking estimate for investors' required rate of return from common								
18	stocks is presented on Exhibit No(WEA-9). In order to capture the								
19	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.

3	The dividend yield for each firm was calculated based on the annual
4	indicated dividend payment obtained from Value Line, increased by one-half of
5	the growth rate discussed subsequently $(1 + 0.5g)$ to convert them to year-ahead
6	dividend yields presumed by the constant growth DCF model. The growth rate
7	was equal to the earnings growth projections for each firm published by IBES,
8	with each firm's dividend yield and growth rate being weighted by its
9	proportionate share of total market value. Based on the weighted average of
10	the projections for the 354 individual firms, current estimates imply an average
11	growth rate over the next five years of 10.5 percent. Combining this average
12	growth rate with an adjusted dividend yield of 2.3 percent results in a current
13	cost of common equity estimate for the market as a whole $(R_m)$ of
14	approximately 12.8 percent. Subtracting a 4.7 percent risk-free rate based on
15	the average yield on 30-year Treasury bonds produced a market equity risk
16	premium of 8.1 percent.

# Exhibit No.\_\_\_(WEA-3) Page 31 of 38

		Q.	What was the source of the beta values you used to apply the
C	CAPM	?	
	-	A.	I relied on the beta values reported by Value Line, which in my
e	xperie	nce is	s the most widely referenced source for beta in regulatory
р	rocee	lings	. As noted in New Regulatory Finance:
	,	Value	Line is the largest and most widely circulated independent
	j	nves	tment advisory service, and influences the expectations of a
	]	arge	number of institutional and individual investors Value
	]	Line ł	petas are computed on a theoretically sound basis using a
	1	oroad	lly based market index, and they are adjusted for the
	1	regree	ssion tendency of betas to converge to 1.00.20
		Q.	What else should be considered in applying the CAPM?
	-	A.	As explained by <i>Morningstar</i> :
		One c	of the most remarkable discoveries of modern finance is that
		of a re	elationship between firm size and return. The relationship
		cuts a	cross the entire size spectrum but is most evident among
	:	small	er companies, which have higher returns on average than
	]	argei	cones. <sup>21</sup>
В	ecaus	e emp	pirical research indicates that the CAPM does not fully account for
0	bserve	ed dif	ferences in rates of return attributable to firm size, a modification is
re	equire	d to a	account for this size effect.
		Accoi	ding to the CAPM, the expected return on a security should consist
0	f the r	iskles	ss rate, plus a premium to compensate for the systematic risk of the
20 21	Morin, <i>Mornir</i>	Rogei Igstar,	A., "New Regulatory Finance," <i>Public Utilities Reports</i> at 71 (2006). "Ibbotson SBBI 2010 Valuation Yearbook," at p. 85 (footnote omitted).

1	particular security. The degree of systematic risk is represented by the beta
2	coefficient. The need for the size adjustment arises because differences in
3	investors' required rates of return that are related to firm size are not fully
4	captured by beta. To account for this, Morningstar has developed size
5	premiums that need to be added to the theoretical CAPM cost of equity
6	estimates to account for the level of a firm's market capitalization in
7	determining the CAPM cost of equity. <sup>22</sup> Accordingly, my CAPM analyses
8	incorporated an adjustment to recognize the impact of size distinctions, as
9	measured by the average market capitalization for the respective proxy groups.
10	Q. What cost of equity estimate was indicated for the Utility Proxy
11	Group based on this forward-looking application of the CAPM?
12	A. The average market capitalization of the Utility Proxy Group is
13	\$6.8 billion. Based on data from Morningstar, this means that the theoretical
14	CAPM cost of equity estimate must be increased by 74 basis points to account
15	for the industry group's relative size. As shown on Exhibit No(WEA-9),
16	
	adjusting the theoretical CAPM result to incorporate this size adjustment

<sup>22</sup> *Id.* at Table C-1.

Exhibit No.\_\_\_(WEA-3) Page 33 of 38

1	Q.	What cost of common equity was indicated for the Non-Utility
2	Proxy Grou	p based on this forward-looking application of the CAPM?
3	А.	As shown on Exhibit No(WEA-10), applying the forward-
4	looking CA	PM approach to the firms in the Non-Utility Proxy Group results in
5	an average	implied cost of common equity of 10.1 percent.
6	Q.	Should the CAPM approach be applied using historical rates of
7	return?	
8	А.	No. The CAPM cost of common equity estimate is calibrated from
9	investors' re	equired risk premium between Treasury bonds and common stocks.
10	In response	to heightened uncertainties, investors have repeatedly sought a safe
11	haven in U.	S. government bonds and this "flight to safety" has pushed Treasury
12	yields signi	ficantly lower while yield spreads for corporate debt have widened.
13	This distort	ion not only impacts the absolute level of the CAPM cost of equity
14	estimate, bu	It it affects estimated risk premiums. Economic logic would suggest
15	that investo	rs' required risk premium for common stocks over Treasury bonds
16	has also inc	reased.
17	Mea	nwhile, backward-looking approaches incorrectly assume that
18	investors' as	ssessment of the required risk premium between Treasury bonds
19	and commo	n stocks is constant, and equal to some historical average. At no

1	time in recent history has the fallacy of this assumption been demonstrated
2	more concretely than it is today. This incongruity between investors' current
3	expectations and historical risk premiums is particularly relevant during
4	periods of heightened uncertainty and rapidly changing capital market
5	conditions, such as those experienced recently. <sup>23</sup>

#### E. <u>Expected Earnings Approach</u>

6 Q. What other analyses did you conduct to estimate the cost of equity? 7 8 A. As I noted earlier, I also evaluated the ROE using the comparable 9 earnings method. Reference to rates of return available from alternative 10 investments of comparable risk can provide an important benchmark in 11 assessing the return necessary to assure confidence in the financial integrity of a 12 firm and its ability to attract capital. This comparable earnings approach is 13 consistent with the economic underpinnings for a fair rate of return established by the Supreme Court in Hope and Bluefield. Moreover, it avoids the 14 complexities and limitations of capital market methods and instead focuses on 15

<sup>&</sup>lt;sup>23</sup> FERC has previously rejected CAPM methodologies based on historical data because whatever historical relationships existed between debt and equity securities may no longer hold. *See Orange & Rockland Utils., Inc., 40 F.E.R.C. P63,053, at pp. 65,208 -09 (1987), aff'd, Opinion No. 314, 44 F.E.R.C. P61,253 at 65,208.* 

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

# 3 Q. What economic premise underlies the expected earnings 4 approach?

5 А. The simple, but powerful concept underlying the expected 6 earnings approach is that investors compare each investment alternative with 7 the next best opportunity. If the utility is unable to offer a return similar to that 8 available from other opportunities of comparable risk, investors will become 9 unwilling to supply the capital on reasonable terms. For existing investors, 10 denying the utility an opportunity to earn what is available from other similar 11 risk alternatives prevents them from earning their opportunity cost of capital. 12 In this situation the government is effectively taking the value of investors' capital without adequate compensation. The expected earnings approach is 13 14 consistent with the economic rationale underpinning established regulatory 15 standards, which specifies a methodology to determine an ROE benchmark 16 based on earned rates of return for a peer group of other regional utilities.

# Q. How is the comparison of opportunity costs typically implemented?

3 А. The traditional comparable earnings test identifies a group of 4 companies that are believed to be comparable in risk to the utility. The actual 5 earnings of those companies on the book value of their investment are then 6 compared to the allowed return of the utility. While the traditional comparable 7 earnings test is implemented using historical data taken from the accounting 8 records, it is also common to use projections of returns on book investment, 9 such as those published by recognized investment advisory publications (e.g., 10 Value Line). Because these returns on book value equity are analogous to the 11 allowed return on a utility's rate base, this measure of opportunity costs results 12 in a direct, "apples to apples" comparison.

Moreover, regulators do not set the returns that investors earn in the capital markets – they can only establish the allowed return on the value of a utility's investment, as reflected on its accounting records. As a result, the expected earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk will earn on invested capital. This opportunity cost test does not require theoretical models to indirectly infer investors' perceptions from stock prices or other market data.

1	As long as the proxy companies are similar in risk, their expected earned
2	returns on invested capital provide a direct benchmark for investors'
3	opportunity costs that is independent of fluctuating stock prices, market-to-
4	book ratios, debates over DCF growth rates, or the limitations inherent in any
5	theoretical model of investor behavior.
6	Q. What rates of return on equity are indicated for electric utilities
7	based on the expected earnings approach?
8	A. Value Line reports that its analysts anticipate an average rate of
9	return on common equity for the electric utility industry of 10.5 percent over its
10	forecast horizon. <sup>24</sup> Meanwhile, for the gas utility industry Value Line expects
11	returns on common equity of 10.0 percent over the period 2011-2016.25
12	For the firms in the Utility Proxy Group specifically, the returns on
13	common equity projected by Value Line over its forecast horizon are shown on
14	Exhibit No(WEA-11). Consistent with the rationale underlying the
15	development of the br+sv growth rates, these year-end values were converted to
16	average returns using the same adjustment factor discussed earlier and
17	developed on Exhibit No(WEA-6). As shown on Exhibit No(WEA-11),

<sup>&</sup>lt;sup>24</sup> The Value Line Investment Survey at 139 (Feb. 25, 2011).

<sup>&</sup>lt;sup>25</sup> The Value Line Investment Survey at 546 (Mar. 11, 2011).

- 1 after eliminating two low-end outliers, Value Line's projections for the utility
- 2 proxy group suggested an average ROE of 10.4 percent.

# F. <u>Summary of Quantitative Results</u>

- Q. Please summarize the results of your quantitative analyses.
- A. The cost of equity estimates implied by my quantitative analyses
- 5 are summarized in Table 5 below:

3

4

# TABLE 5 SUMMARY OF QUANTITATIVE RESULTS

DCF	<u>Utility</u>	<u>Non-Utility</u>
Earnings Growth		
Value Line	10.9%	11.9%
IBES	10.6%	12.4%
Zacks	10.6%	12.5%
br + sv	9.2%	12.1%
<u>CAPM</u>	11.5%	10.1%
Expected Earnings	<u>Electric</u>	Gas
Value Line 2014-16	10.5%	10.0%
Utility Proxy Group	10.4%	

Exhibit No. \_\_\_\_ (WEA-4)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-4)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

# Exhibit No.\_\_(WEA-4) Page 1 of 1

# UTILITY PROXY GROUP

		At Fise	cal Year-End 2	2010 (a)	Value Line Projected (b)			
	Company	Debt	Preferred	Common Equity	Debt	Other	Common Equity	
1	ALLETE	44.4%	0.0%	55.6%	44.0%	0.0%	56.0%	
2	Alliant Energy	46.7%	4.1%	49.1%	45.4%	3.5%	51.1%	
3	Ameren Corp.	48.0%	0.0%	52.0%	46.9%	1.0%	52.1%	
4	American Elec Pwr	57.0%	0.2%	42.8%	51.5%	0.0%	48.5%	
5	Avista Corp.	49.8%	2.1%	48.1%	50.2%	0.0%	49.8%	
6	Black Hills Corp.	56.7%	0.0%	43.3%	54.9%	0.0%	45.1%	
7	Cleco Corp.	54.2%	0.0%	45.7%	47.2%	0.5%	52.3%	
8	Constellation Energy	34.8%	1.5%	63.6%	31.7%	1.0%	67.3%	
9	DTE Energy Co.	50.5%	2.0%	47.5%	53.0%	0.0%	47.0%	
10	Edison International	52.2%	3.8%	44.1%	52.2%	3.0%	44.8%	
11	Empire District Elec	52.2%	0.0%	47.8%	48.9%	0.0%	51.1%	
12	Entergy Corp.	55.2%	1.6%	43.2%	57.3%	1.0%	41.7%	
13	Exelon Corp.	47.7%	0.3%	52.0%	47.0%	0.0%	53.0%	
14	Great Plains Energy	56.5%	0.6%	42.9%	53.5%	0.5%	46.0%	
15	Hawaiian Elec.	47.8%	1.2%	51.0%	47.5%	1.0%	51.6%	
16	IDACORP, Inc.	52.2%	0.0%	47.8%	50.5%	0.0%	49.5%	
17	Integrys Energy Group	47.7%	0.0%	52.3%	45.1%	1.0%	53.9%	
18	OGE Energy Corp.	51.1%	0.0%	48.9%	51.9%	0.0%	48.1%	
19	Otter Tail Corp.	44.3%	1.3%	54.3%	42.9%	0.0%	57.1%	
20	PG&E Corp.	52.1%	1.0%	46.8%	46.9%	1.0%	52.2%	
21	Pinnacle West Capital	49.5%	0.0%	50.5%	46.6%	0.0%	53.4%	
22	Portland General Elec.	53.3%	0.0%	46.7%	50.3%	0.0%	49.7%	
23	Pub Sv Enterprise Grp	48.3%	0.0%	51.7%	41.7%	0.0%	58.3%	
24	SCANA Corp.	57.0%	0.0%	43.0%	52.8%	0.0%	47.2%	
25	Sempra Energy	50.7%	0.5%	48.8%	47.9%	1.0%	51.1%	
26	UIL Holdings	60.8%	0.0%	39.1%	58.6%	0.0%	41.4%	
27	Westar Energy	56.2%	0.4%	43.5%	55.8%	0.5%	43.7%	
28	Wisconsin Energy	56.9%	0.3%	42.7%	54.8%	0.5%	44.7%	
	Average	51.2%	0.8%	48.0%	49.2%	0.5%	50.3%	

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

(b) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011). Adjusted to include short-term debt equal to

Exhibit No. \_\_\_\_ (WEA-5)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-5)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

#### DCF MODEL

#### **UTILITY PROXY GROUP**

		(a)	(a)		(b)	(c)	(d)	(e)	(f)	(f)	(f)	(f)	
		Dividend Yield				Growth Rates				Cost of Equity Estimates			
	Company	ny <u>Price</u> <u>Dividends</u> <u>Yield</u>			<u>V Line</u>	<b>IBES</b>	<u>Zacks</u>	<u>br+sv</u>	<u>V Line</u>	<b>IBES</b>	<u>Zacks</u>	<u>br+sv</u>	
1	ALLETE	\$ 37.02	\$ 1.79	4.8%	4.5%	5.0%	5.0%	3.8%	9.3%	9.8%	9.8%	8.7%	
2	Alliant Energy	\$ 38.43	\$ 1.72	4.5%	7.0%	8.0%	5.0%	5.8%	11.5%	12.5%	9.5%	10.3%	
3	Ameren Corp.	\$ 26.91	\$ 1.54	5.7%	-2.0%	-1.7%	4.0%	2.5%	3.7%	4.0%	9.7%	8.2%	
4	American Elec Pwr	\$ 34.92	\$ 1.86	5.3%	3.5%	3.9%	4.0%	4.9%	8.8%	9.2%	9.3%	10.2%	
5	Avista Corp.	\$ 22.16	\$ 1.10	5.0%	8.5%	4.7%	4.7%	3.6%	13.5%	9.7%	9.7%	8.6%	
6	Black Hills Corp.	\$ 31.30	\$ 1.46	4.7%	6.5%	6.0%	6.0%	3.3%	11.2%	10.7%	10.7%	8.0%	
7	Cleco Corp.	\$ 32.62	\$ 1.12	3.4%	8.0%	3.0%	7.0%	4.1%	11.4%	6.4%	10.4%	7.6%	
8	Constellation Energy	\$ 30.90	\$ 0.96	3.1%	6.0%	9.9%	9.9%	4.7%	9.1%	13.0%	13.0%	7.8%	
9	DTE Energy Co.	\$ 48.18	\$ 2.30	4.8%	5.5%	5.8%	5.0%	3.6%	10.3%	10.6%	9.8%	8.3%	
10	Edison International	\$ 35.81	\$ 1.29	3.6%	-1.0%	5.0%	5.0%	4.7%	2.6%	8.6%	8.6%	8.3%	
11	Empire District Elec	\$ 21.01	\$ 1.28	6.1%	7.0%	NA	NA	2.6%	13.1%	NA	NA	8.6%	
12	Entergy Corp.	\$ 68.49	\$ 3.34	4.9%	1.0%	2.0%	1.5%	4.6%	5.9%	6.9%	6.4%	9.5%	
13	Exelon Corp.	\$ 41.34	\$ 2.10	5.1%	-1.5%	-0.8%	-2.5%	5.8%	3.6%	4.3%	2.6%	10.9%	
14	Great Plains Energy	\$ 19.25	\$ 0.85	4.4%	6.0%	8.9%	9.0%	2.1%	10.4%	13.3%	13.4%	6.5%	
15	Hawaiian Elec.	\$ 24.04	\$ 1.24	5.2%	11.5%	7.0%	8.6%	4.2%	16.7%	12.2%	13.8%	9.4%	
16	IDACORP, Inc.	\$ 36.77	\$ 1.20	3.3%	5.5%	4.7%	4.7%	5.0%	8.8%	8.0%	8.0%	8.2%	
17	Integrys Energy Group	\$ 49.24	\$ 2.72	5.5%	9.5%	7.9%	10.4%	3.1%	15.0%	13.4%	15.9%	8.6%	
18	OGE Energy Corp.	\$ 47.86	\$ 1.53	3.2%	6.5%	7.0%	5.5%	7.1%	9.7%	10.2%	8.7%	10.3%	
19	Otter Tail Corp.	\$ 21.64	\$ 1.19	5.5%	17.0%	16.5%	22.0%	3.5%	22.5%	22.0%	27.5%	9.0%	
20	PG&E Corp.	\$ 43.00	\$ 1.92	4.5%	6.0%	6.5%	7.7%	6.7%	10.5%	11.0%	12.2%	11.1%	
21	Pinnacle West Capital	\$ 42.31	\$ 2.10	5.0%	6.0%	6.4%	5.8%	3.7%	11.0%	11.4%	10.8%	8.6%	
22	Portland General Elec.	\$ 23.23	\$ 1.07	4.6%	3.0%	4.7%	5.2%	3.7%	7.6%	9.3%	9.8%	8.3%	
23	Pub Sv Enterprise Grp	\$ 31.10	\$ 1.37	4.4%	2.0%	3.7%	2.0%	6.5%	6.4%	8.1%	6.4%	10.9%	
24	SCANA Corp.	\$ 38.73	\$ 1.94	5.0%	3.0%	4.7%	4.6%	5.0%	8.0%	9.7%	9.6%	10.0%	
25	Sempra Energy	\$ 51.94	\$ 1.92	3.7%	1.0%	5.6%	7.0%	5.7%	4.7%	9.3%	10.7%	9.4%	
26	UIL Holdings	\$ 28.94	\$ 1.73	6.0%	3.0%	2.9%	2.4%	5.7%	9.0%	8.9%	8.4%	11.6%	
27	Westar Energy	\$ 25.68	\$ 1.28	5.0%	8.5%	6.5%	5.3%	4.6%	13.5%	11.5%	10.3%	9.6%	
28	Wisconsin Energy	\$ 29.37	\$ 1.06	3.6%	7.5%	8.5%	8.0%	5.5%	<u>11.1%</u>	<u>12.1%</u>	11.6%	<u>9.2%</u>	
	Average (g)								10.9%	10.6%	10.6%	9.2%	

(a) Recent price and estimated dividend for next 12 mos. from The Value Line Investment Survey, Summary and Index (Mar. 25, 2011).

(b) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011).

(c) Thomson ReutersCompany in Context Report (Mar. 18, 2011).

(d) www.zacks.com (retrieved Mar. 22, 2011).

(e) See Exhibit No.\_\_\_(WEA-6).

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

(g) Excludes highlighted figures.

Exhibit No. \_\_\_\_ (WEA-6)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-6)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

### **BR + SV GROWTH RATE**

# UTILITY PROXY GROUP

		(a)	(a)	(a)			(b)	(c)		(d)	(e)		
			2015				Adjustment			"S	v" Factor		
	<u>Company</u>	<u>EPS</u>	DPS	<b>BVPS</b>	b	<u>r</u>	<b>Factor</b>	<u>Adjusted r</u>	br	S	<u>v</u>	sv	<u>br + sv</u>
1	ALLETE	\$3.00	\$1.95	\$31.25	35.0%	9.6%	1.0211	9.8%	3.4%	0.0187	0.2188	0.41%	3.8%
2	Alliant Energy	\$3.60	\$2.00	\$30.60	44.4%	11.8%	1.0205	12.0%	5.3%	0.0140	0.3558	0.50%	5.8%
3	Ameren Corp.	\$2.50	\$1.54	\$36.50	38.4%	6.8%	1.0188	7.0%	2.7%	0.0104	(0.2167)	-0.23%	2.5%
4	American Elec Pwr	\$3.75	\$2.10	\$36.00	44.0%	10.4%	1.0287	10.7%	4.7%	0.0097	0.2000	0.19%	<b>4.9%</b>
5	Avista Corp.	\$2.00	\$1.30	\$22.50	35.0%	8.9%	1.0253	9.1%	3.2%	0.0222	0.1818	0.40%	3.6%
6	Black Hills Corp.	\$2.50	\$1.55	\$30.75	38.0%	8.1%	1.0237	8.3%	3.2%	0.0296	0.0538	0.16%	3.3%
7	Cleco Corp.	\$2.75	\$1.60	\$28.50	41.8%	9.6%	1.0265	9.9%	4.1%	-	0.1231	0.00%	4.1%
8	Constellation Energy	\$3.25	\$1.00	\$47.75	69.2%	6.8%	1.0250	7.0%	4.8%	0.0083	(0.1938)	-0.16%	4.7%
9	DTE Energy Co.	\$4.25	\$2.70	\$46.50	36.5%	9.1%	1.0200	9.3%	3.4%	0.0086	0.1913	0.16%	3.6%
10	Edison International	\$3.25	\$1.40	\$40.25	56.9%	8.1%	1.0285	8.3%	4.7%	-	(0.0063)	0.00%	4.7%
11	Empire District Elec	\$1.75	\$1.35	\$17.50	22.9%	10.0%	1.0119	10.1%	2.3%	0.0080	0.3000	0.24%	2.6%
12	Entergy Corp.	\$6.75	\$3.70	\$63.75	45.2%	10.6%	1.0256	10.9%	4.9%	(0.0105)	0.2714	-0.29%	4.6%
13	Exelon Corp.	\$3.75	\$2.10	\$26.00	44.0%	14.4%	1.0204	14.7%	6.5%	(0.0136)	0.5048	-0.69%	5.8%
14	Great Plains Energy	\$1.75	\$1.20	\$23.50	31.4%	7.4%	1.0231	7.6%	2.4%	0.0241	(0.1190)	-0.29%	2.1%
15	Hawaiian Elec.	\$2.00	\$1.30	\$18.00	35.0%	11.1%	1.0220	11.4%	4.0%	0.0098	0.2653	0.26%	4.2%
16	IDACORP, Inc.	\$3.10	\$1.40	\$36.50	54.8%	8.5%	1.0303	8.8%	4.8%	0.0181	0.0875	0.16%	5.0%
17	Integrys Energy Group	\$4.00	\$2.72	\$42.75	32.0%	9.4%	1.0141	9.5%	3.0%	0.0033	0.1000	0.03%	3.1%
18	OGE Energy Corp.	\$4.00	\$1.80	\$33.50	55.0%	11.9%	1.0389	12.4%	6.8%	0.0076	0.3619	0.28%	7.1%
19	Otter Tail Corp.	\$1.85	\$1.30	\$21.45	29.7%	8.6%	1.0353	8.9%	2.7%	0.0401	0.2200	0.88%	3.5%
20	PG&E Corp.	\$4.25	\$2.20	\$36.25	48.2%	11.7%	1.0384	12.2%	5.9%	0.0332	0.2368	0.79%	6.7%
21	Pinnacle West Capital	\$3.50	\$2.30	\$38.25	34.3%	9.2%	1.0339	9.5%	3.2%	0.0418	0.1000	0.42%	3.7%
22	Portland General Elec.	\$2.00	\$1.20	\$23.75	40.0%	8.4%	1.0327	8.7%	3.5%	0.0385	0.0500	0.19%	3.7%
23	Pub Sv Enterprise Grp	\$3.25	\$1.50	\$27.75	53.8%	11.7%	1.0375	12.2%	6.5%	-	0.3063	0.00%	6.5%
24	SCANA Corp.	\$3.50	\$2.10	\$36.75	40.0%	9.5%	1.0420	9.9%	4.0%	0.0470	0.2263	1.06%	5.0%
25	Sempra Energy	\$4.75	\$2.05	\$47.50	56.8%	10.0%	1.0230	10.2%	5.8%	(0.0085)	0.1739	-0.15%	5.7%
26	UIL Holdings	\$2.35	\$1.73	\$27.00	26.4%	8.7%	1.0819	9.4%	2.5%	0.1394	0.2286	3.19%	5.7%
27	Westar Energy	\$2.40	\$1.44	\$24.00	40.0%	10.0%	1.0207	10.2%	4.1%	0.0275	0.2000	0.55%	4.6%
28	Wisconsin Energy	\$2.50	\$1.40	\$20.25	44.0%	12.3%	1.0215	12.6%	5.5%	-	0.4600	0.00%	5.5%

#### **BR + SV GROWTH RATE**

		(a)	(a)	(f)	(a)	(a)	(f)	(g)	(a)	(a)		(h)	(a)	(a)	(g)
			2010			2015		Chg	20	2015 Price			Common Shares -		
	<u>Company</u>	<u>Eq Ratio</u>	<u>Tot Cap</u>	<u>Com Eq</u>	<u>Eq Ratio</u>	<u>Tot Cap</u>	<u>Com Eq</u>	<u>Equity</u>	<u>High</u>	Low	<u>Avg.</u>	<u>M/B</u>	<u>2010</u>	<u>2015</u>	Growth
1	ALLETE	55.8%	\$1,748	\$975	56.0%	\$2,150	\$1,204	4.3%	\$45.00	\$35.00	\$40.00	1.280	35.80	38.50	1.46%
2	Alliant Energy	49.5%	\$5,841	\$2,891	51.5%	\$6,895	\$3,551	4.2%	\$55.00	\$40.00	\$47.50	1.552	110.89	116.00	0.91%
3	Ameren Corp.	50.9%	\$15,185	\$7,729	53.0%	\$17,600	\$9,328	3.8%	\$35.00	\$25.00	\$30.00	0.822	240.40	256.00	1.27%
4	American Elec Pwr	46.5%	\$29,185	\$13,571	50.5%	\$35,800	\$18,079	5.9%	\$55.00	\$35.00	\$45.00	1.250	481.00	500.00	0.78%
5	Avista Corp.	49.1%	\$2,139	\$1,050	52.0%	\$2,600	\$1,352	5.2%	\$30.00	\$25.00	\$27.50	1.222	54.84	60.00	1.81%
6	Black Hills Corp.	51.6%	\$2,101	\$1,084	49.5%	\$2,775	\$1,374	4.9%	\$40.00	\$25.00	\$32.50	1.057	38.97	44.75	2.80%
7	Cleco Corp.	48.5%	\$2,718	\$1,318	55.0%	\$3,125	\$1,719	5.5%	\$40.00	\$25.00	\$32.50	1.140	60.75	60.75	0.00%
8	Constellation Energy	62.8%	\$12,468	\$7,830	67.5%	\$14,900	\$10,058	5.1%	\$50.00	\$30.00	\$40.00	0.838	199.00	209.00	0.99%
9	DTE Energy Co.	48.7%	\$13,811	\$6,726	47.5%	\$17,300	\$8,218	4.1%	\$70.00	\$45.00	\$57.50	1.237	170.00	176.00	0.70%
10	Edison International	46.5%	\$21,185	\$9,851	45.0%	\$29,100	\$13,095	5.9%	\$50.00	\$30.00	\$40.00	0.994	325.81	325.81	0.00%
11	Empire District Elec	48.7%	\$1,351	\$658	52.0%	\$1,425	\$741	2.4%	\$30.00	\$20.00	\$25.00	1.429	41.58	42.75	0.56%
12	Entergy Corp.	42.1%	\$20,166	\$8,490	42.0%	\$26,100	\$10,962	5.2%	\$100.00	\$75.00	\$87.50	1.373	178.75	172.00	-0.77%
13	Exelon Corp.	52.9%	\$25,651	\$13,569	53.5%	\$31,100	\$16,639	4.2%	\$60.00	\$45.00	\$52.50	2.019	662.00	640.00	-0.67%
14	Great Plains Energy	49.2%	\$5,868	\$2,887	48.5%	\$7,500	\$3,638	4.7%	\$25.00	\$17.00	\$21.00	0.894	135.71	155.00	2.69%
15	Hawaiian Elec.	50.7%	\$2,841	\$1,440	52.0%	\$3,450	\$1,794	4.5%	\$30.00	\$19.00	\$24.50	1.361	95.52	99.00	0.72%
16	IDACORP, Inc.	49.8%	\$2,807	\$1,398	50.5%	\$3,750	\$1,894	6.3%	\$50.00	\$30.00	\$40.00	1.096	47.90	52.00	1.66%
17	Integrys Energy Group	56.8%	\$5,119	\$2,907	54.0%	\$6,200	\$3,348	2.9%	\$55.00	\$40.00	\$47.50	1.111	77.35	78.50	0.30%
18	OGE Energy Corp.	49.2%	\$4,653	\$2,289	49.5%	\$6,825	\$3,378	8.1%	\$60.00	\$45.00	\$52.50	1.567	97.60	100.00	0.49%
19	Otter Tail Corp.	59.2%	\$1,067	\$632	61.0%	\$1,475	\$900	7.3%	\$35.00	\$20.00	\$27.50	1.282	36.00	42.00	3.13%
20	PG&E Corp.	47.4%	\$21,793	\$10,330	54.0%	\$28,100	\$15,174	8.0%	\$55.00	\$40.00	\$47.50	1.310	370.60	420.00	2.53%
21	Pinnacle West Capital	49.6%	\$6,687	\$3,317	53.5%	\$8,700	\$4,655	7.0%	\$50.00	\$35.00	\$42.50	1.111	101.43	122.00	3.76%
22	Portland General Elec.	49.7%	\$3,100	\$1,541	50.0%	\$4,275	\$2,138	6.8%	\$30.00	\$20.00	\$25.00	1.053	75.21	90.00	3.66%
23	Pub Sv Enterprise Grp	60.5%	\$15,950	\$9,650	58.5%	\$24,000	\$14,040	7.8%	\$45.00	\$35.00	\$40.00	1.441	506.00	506.00	0.00%
24	SCANA Corp.	47.1%	\$7,854	\$3,699	49.5%	\$11,375	\$5,631	8.8%	\$55.00	\$40.00	\$47.50	1.293	128.00	153.00	3.63%
25	Sempra Energy	54.1%	\$16,646	\$9,005	51.5%	\$22,000	\$11,330	4.7%	\$65.00	\$50.00	\$57.50	1.211	246.50	238.00	-0.70%
26	UIL Holdings	47.5%	\$1,250	\$594	41.5%	\$3,250	\$1,349	17.8%	\$40.00	\$30.00	\$35.00	1.296	30.00	50.00	10.76%
27	Westar Energy	46.4%	\$5,181	\$2,404	45.5%	\$6,500	\$2,958	4.2%	\$35.00	\$25.00	\$30.00	1.250	112.13	125.00	2.20%
28	Wisconsin Energy	49.0%	\$7,765	\$3,805	48.0%	\$9,825	\$4,716	4.4%	\$45.00	\$30.00	\$37.50	1.852	233.80	233.80	0.00%

(a) The Value Line Investment Survey (Dec. 24, 2010, Feb. 4, & Feb. 25, 2011).

(b) Computed using the formula 2\*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity).

(c) Product of average year-end "r" for 2015 and Adjustment Factor.

(d) Product of change in common shares outstanding and M/B Ratio.

(e) Computed as 1 - B/M Ratio.

(f) Product of total capital and equity ratio.

(g) Five-year rate of change.

(h) Average of High and Low expected market prices divided by 2014-16 BVPS.

Exhibit No. \_\_\_\_ (WEA-7)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-7)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

#### DCF MODEL

#### NON-UTILITY PROXY GROUP

		(a)	(a)	(b)	(c)	(d)	(e)	(e)	(e)	(e)
		Dividend	Growth Rates		C	ost of Equit	y Estimates	5		
	Company	Yield	V Line	IBES	Zacks	br+sv	V Line	IBES	Zacks	br+sv
1	3M Company	2.39%	7.0%	11.9%	11.3%	12.9%	9.4%	14.3%	13.7%	15.3%
2	Abbott Labs.	3.67%	10.0%	8.9%	9.0%	15.0%	13.7%	12.6%	12.7%	18.7%
3	Alberto-Culver	1.02%	15.0%	9.4%	12.5%	8.4%	16.0%	10.4%	13.5%	9.4%
4	AT&T Inc.	6.09%	5.5%	5.7%	7.0%	5.4%	11.6%	11.8%	13.1%	11.5%
5	Automatic Data Proc.	2.93%	8.0%	10.6%	10.8%	9.5%	10.9%	13.5%	13.7%	12.4%
6	Bard (C.R.)	0.77%	9.5%	10.9%	11.8%	18.1%	10.3%	11.7%	12.6%	18.9%
7	Baxter Int'l Inc.	2.45%	10.0%	9.6%	9.3%	15.5%	12.5%	12.1%	11.8%	17.9%
8	Becton, Dickinson	1.97%	9.5%	9.9%	10.8%	9.0%	11.5%	11.9%	12.8%	11.0%
9	Bristol-Myers Squibb	5.11%	8.5%	1.8%	2.0%	5.7%	13.6%	6.9%	7.1%	10.8%
10	Brown-Forman 'B'	1 90%	7.5%	10.9%	13.0%	10.6%	9.4%	12.8%	14.9%	12.5%
11	Chubb Corp	2 55%	2.5%	87%	9.8%	8.0%	5.1%	11.3%	12.4%	10.5%
12	Church & Dwight	0.97%	12.0%	11.8%	12.0%	10.3%	13.0%	12.8%	13.0%	11.3%
12	Coca-Cola	2.80%	9.5%	8.7%	9.0%	9.9%	12.3%	11.5%	11.8%	12.7%
14	Colgate-Palmolive	2.00%	11.0%	9.3%	9.0%	18.1%	13.8%	12.1%	12.0%	20.8%
15	Commerce Bancshs	2.70%	7.0%	7.0%	7.0%	7.9%	9.2%	9.7%	9.2%	10.1%
15	ConAgra Foods	2.22/0	10.5%	7.0%	2.070 8.0%	2.270 8.1%	1.4.4%	11.6%	11 Q%	10.1%
10	Contra Wholesale	1.74%	7 5%	12 20/	12 00/	0.1 /0 8 <b>2</b> 0/	14.4 /0 Q 70/	11.0 /0	11.9/0	0.5%
17	Cullen/Erect Pankoro	2.06%	1.5%	13.3 /0 0 E0/	12.9 /0 0 00/	0.2 /0 E 70/	7 50/	14.J /0	14.1 /0	9.5%
10	CUTERI/Frost Dankers	2.90%	4.5%	0.3% 10.1%	0.0%	5.7% 7.00/	10.0%	11.3 % 11 E9/	11.0%	0.0%
19	Cv5 Caremark Corp.	1.42%	9.3%	10.1%	12.0%	10.6%	10.9%	11.3%	13.4%	9.∠%
20	Ecolad Inc.	1.41%	12.0%	13.2%	13.2%	19.6%	13.4%	14.0%	14.0%	21.0%
21	Exxon Mobil Corp.	2.26%	6.0% 0.5%	12.1%	8.4%	13.5%	8.3%	14.4%	10.7%	15.7%
22	Gen I Mills	3.02%	9.5%	7.7%	8.0%	9.3%	12.5%	10.7%	11.0%	17.0%
23	Heinz (H.J.)	3.85%	6.5%	7.0%	8.0%	13.9%	10.4%	10.9%	11.9%	17.8%
24	Hormel Foods	2.01%	10.5%	10.0%	9.3%	10.7%	12.5%	12.0%	11.3%	12.7%
25	Int'l Business Mach.	1.77%	13.0%	11.5%	9.3%	20.4%	14.8%	13.3%	11.1%	22.2%
26	Johnson & Johnson	3.44%	4.5%	6.0%	5.8%	10.8%	7.9%	9.4%	9.2%	14.2%
27	Kellogg	3.14%	9.5%	8.6%	9.0%	9.7%	12.6%	11.7%	12.1%	12.9%
28	Kimberly-Clark	4.09%	6.5%	7.5%	8.7%	18.6%	10.6%	11.6%	12.8%	22.7%
29	Kraft Foods	3.71%	8.0%	8.4%	8.0%	10.7%	11.7%	12.1%	11.7%	14.4%
30	Lilly (Eli)	5.64%	-2.5%	-6.4%	-5.3%	8.4%	3.1%	-0.8%	0.3%	14.0%
31	Lockheed Martin	3.78%	10.0%	8.1%	6.8%	20.3%	13.8%	11.9%	10.6%	24.1%
32	McCormick & Co.	2.24%	8.5%	9.6%	9.5%	13.3%	10.7%	11.8%	11.7%	15.6%
33	McDonald's Corp.	3.25%	9.5%	9.8%	9.3%	10.7%	12.8%	13.1%	12.6%	13.9%
34	McKesson Corp.	0.98%	10.0%	14.2%	11.0%	11.7%	11.0%	15.2%	12.0%	12.7%
35	Medtronic, Inc.	2.47%	7.5%	8.8%	8.4%	11.7%	10.0%	11.3%	10.9%	14.1%
36	Microsoft Corp.	2.26%	12.5%	11.3%	11.7%	15.3%	14.8%	13.6%	14.0%	17.5%
37	NIKE, Inc. 'B'	1.49%	9.5%	10.9%	12.5%	12.2%	11.0%	12.4%	14.0%	13.7%
38	Northrop Grumman	2.82%	12.5%	11.0%	11.1%	7.9%	15.3%	13.8%	13.9%	10.7%
39	PepsiCo, Inc.	2.91%	11.0%	8.9%	9.5%	14.5%	13.9%	11.8%	12.4%	17.4%
40	Pfizer, Inc.	4.50%	5.0%	2.8%	3.5%	7.0%	9.5%	7.3%	8.0%	11.5%
41	Procter & Gamble	3.01%	8.0%	8.9%	9.2%	7.2%	11.0%	11.9%	12.2%	10.3%
42	Raytheon Co.	3.02%	10.0%	8.0%	10.0%	8.6%	13.0%	11.0%	13.0%	11.6%
43	Stryker Corp.	1.26%	12.5%	10.9%	11.4%	13.6%	13.8%	12.2%	12.7%	14.9%
44	Sysco Corp.	3.47%	8.0%	10.0%	9.7%	14.2%	11.5%	13.5%	13.2%	17.6%
45	TJX Companies	1.28%	13.5%	14.5%	14.4%	11.1%	14.8%	15.8%	15.7%	12.4%
46	United Parcel Serv.	2.59%	9.0%	11.7%	11.5%	17.9%	11.6%	14.3%	14.1%	20.5%
47	Verizon Communic.	5.63%	4.0%	6.2%	14.9%	5.7%	9.6%	11.8%	20.5%	11.3%
48	Walgreen Co.	1.68%	11.5%	13.4%	13.0%	8.4%	13.2%	15.1%	14.7%	10.1%
49	Wal-Mart Stores	2.16%	10.0%	10.7%	11.3%	9.9%	12.2%	12.9%	13.5%	12.1%
50	Waste Management	3.52%	5.5%	9.6%	11.0%	5.2%	9.0%	13.1%	14.5%	8.7%
	Average (f)						11.9%	12.4%	12.5%	12.1%

- (a) www.valueline.com (retrieved Jan. 28, 2011).
- (b) Thomson Reuters Company in Context Report (Jan. 28, 2011).
- (c) www.zacks.com (retrieved Jan. 31, 2011).
- (d) See Exhibit No.\_\_\_(WEA-8).
- (e) Sum of dividend yield and respective growth rate.
- (f) Excludes highlighted figures.

Exhibit No. \_\_\_\_ (WEA-8)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-8)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

#### **BR + SV GROWTH RATE**

# NON-UTILITY PROXY GROUP

		(a)	(a)	(a)			(b)	(c)		(d)	(e)		
			2014 -				Adjust.			"s	v" Factor		
	Company	<u>EPS</u>	DPS	<u>BVPS</u>	b	<u>r</u>	<b>Factor</b>	<u>Adj. r</u>	br	S	v	SV	<u>br + sv</u>
1	3M Company	\$7.60	\$3.10	\$40.05	59.2%	19.0%	1.0818	20.5%	12.2%	0.0106	0.6731	0.71%	12.9%
2	Abbott Labs.	\$5.70	\$2.18	\$22.05	61.8%	25.9%	1.0384	26.8%	16.6%	(0.0197)	0.7900	-1.56%	15.0%
3	Alberto-Culver	\$2.35	\$0.55	\$17.85	76.6%	13.2%	1.0315	13.6%	10.4%	(0.0330)	0.6033	-1.99%	8.4%
4	AT&T Inc.	\$3.25	\$2.00	\$24.05	38.5%	13.5%	1.0327	14.0%	5.4%	(0.0001)	0.4656	-0.01%	5.4%
5	Automatic Data Proc.	\$3.45	\$1.60	\$22.95	53.6%	15.0%	1.0786	16.2%	8.7%	0.0111	0.7039	0.78%	9.5%
6	Bard (C.R.)	\$7.75	\$0.85	\$31.45	89.0%	24.6%	1.0255	25.3%	22.5%	(0.0564)	0.7754	-4.37%	18.1%
7	Baxter Int'l Inc.	\$5.85	\$1.50	\$22.90	74.4%	25.5%	1.0560	27.0%	20.1%	(0.0633)	0.7224	-4.57%	15.5%
8	Becton, Dickinson	\$7.65	\$2.20	\$34.10	71.2%	22.4%	1.0306	23.1%	16.5%	(0.1030)	0.7216	-7.43%	9.0%
9	Bristol-Myers Squibb	\$2.35	\$1.54	\$11.65	34.5%	20.2%	1.0263	20.7%	7.1%	(0.0212)	0.6671	-1.42%	5.7%
10	Brown-Forman 'B'	\$4.50	\$1.48	\$20.40	67.1%	22.1%	1.0372	22.9%	15.4%	(0.0640)	0.7368	-4.71%	10.6%
11	Chubb Corp.	\$7.00	\$1.60	\$64.85	77.1%	10.8%	1.0184	11.0%	8.5%	(0.0319)	0.1632	-0.52%	8.0%
12	Church & Dwight	\$5.80	\$1.00	\$39.25	82.8%	14.8%	1.0465	15.5%	12.8%	(0.0414)	0.6075	-2.52%	10.3%
13	Coca-Cola	\$4.95	\$2.48	\$18.20	49.9%	27.2%	1.0479	28.5%	14.2%	(0.0526)	0.8267	-4.34%	9.9%
14	Colgate-Palmolive	\$7.20	\$3.20	\$13.25	55.6%	54.3%	1.0671	58.0%	32.2%	(0.1557)	0.9086	-14.15%	18.1%
15	Commerce Bancshs.	\$3.35	\$1.15	\$32.10	65.7%	10.4%	1.0480	10.9%	7.2%	0.0240	0.2867	0.69%	7.9%
16	ConAgra Foods	\$2.35	\$1.00	\$15.00	57.4%	15.7%	1.0288	16.1%	9.3%	(0.0217)	0.5385	-1.17%	8.1%
17	Costco Wholesale	\$4.20	\$0.95	\$33.50	77.4%	12.5%	1.0315	12.9%	10.0%	(0.0301)	0.5939	-1.79%	8.2%
18	Cullen/Frost Bankers	\$4.35	\$2.10	\$44.00	51.7%	9.9%	1.0382	10.3%	5.3%	0.0132	0.2667	0.35%	5.7%
19	CVS Caremark Corp.	\$4.00	\$0.56	\$38.15	86.0%	10.5%	1.0268	10.8%	9.3%	(0.0395)	0.3642	-1.44%	7.8%
20	Ecolab Inc.	\$3.60	\$0.85	\$14.45	76.4%	24.9%	1.0530	26.2%	20.0%	(0.0056)	0.7592	-0.43%	19.6%
21	Exxon Mobil Corp.	\$9.35	\$2.05	\$45.50	78.1%	20.5%	1.0546	21.7%	16.9%	(0.0578)	0.5956	-3.44%	13.5%
22	Gen'l Mills	\$3.15	\$1.36	\$11.95	56.8%	26.4%	1.0318	27.2%	15.5%	(0.0809)	0.7610	-6.16%	9.3%
23	Heinz (H.J.)	\$4.10	\$2.32	\$14.65	43.4%	28.0%	1.0908	30.5%	13.3%	0.0085	0.7830	0.66%	13.9%
24	Hormel Foods	\$2.10	\$0.70	\$13.55	66.7%	15.5%	1.0527	16.3%	10.9%	(0.0025)	0.6387	-0.16%	10.7%
25	Int'l Business Mach.	\$18.00	\$3.60	\$48.75	80.0%	36.9%	1.0856	40.1%	32.1%	(0.1501)	0.7759	-11.65%	20.4%
26	Johnson & Johnson	\$5.85	\$2.65	\$27.60	54.7%	21.2%	1.0378	22.0%	12.0%	(0.0185)	0.6846	-1.26%	10.8%
27	Kellogg	\$5.10	\$1.88	\$9.95	63.1%	51.3%	1.0352	53.1%	33.5%	(0.2690)	0.8829	-23.75%	9.7%
28	Kimberly-Clark	\$6.25	\$2.75	\$15.55	56.0%	40.2%	1.0140	40.8%	22.8%	(0.0506)	0.8363	-4.24%	18.6%
29	Kraft Foods	\$3.00	\$1.40	\$24.00	53.3%	12.5%	1.0480	13.1%	7.0%	0.0716	0.5200	3.72%	10.7%
30	Lilly (Eli)	\$3.40	\$2.20	\$15.60	35.3%	21.8%	1.0636	23.2%	8.2%	0.0032	0.6716	0.21%	8.4%
31	Lockheed Martin	\$13.25	\$3.50	\$31.25	73.6%	42.4%	1.0882	46.1%	34.0%	(0.1663)	0.8188	-13.62%	20.3%
32	McCormick & Co.	\$3.50	\$1.36	\$18.95	61.1%	18.5%	1.0649	19.7%	12.0%	0.0178	0.7293	1.30%	13.3%
33	McDonald's Corp.	\$6.05	\$3.00	\$19.00	50.4%	31.8%	1.0303	32.8%	16.5%	(0.0734)	0.8000	-5.87%	10.7%
34	McKesson Corp.	\$6.80	\$0.72	\$46.65	89.4%	14.6%	1.0421	15.2%	13.6%	(0.0380)	0.4957	-1.88%	11.7%
35	Medtronic, Inc.	\$4.50	\$1.18	\$25.95	73.8%	17.3%	1.0597	18.4%	13.6%	(0.0326)	0.5848	-1.91%	11.7%
36	Microsoft Corp.	\$3.35	\$0.96	\$10.75	71.3%	31.2%	1.0763	33.5%	23.9%	(0.1104)	0.7850	-8.66%	15.3%
37	NIKE, Inc. 'B'	\$5.65	\$1.50	\$34.60	73.5%	16.3%	1.0643	17.4%	12.8%	(0.0085)	0.6358	-0.54%	12.2%
38	Northrop Grumman	\$10.25	\$2.50	\$68.00	75.6%	15.1%	1.0293	15.5%	11.7%	(0.0783)	0.4868	-3.81%	<b>7.9%</b>
39	PepsiCo, Inc.	\$6.40	\$2.34	\$24.00	63.4%	26.7%	1.0724	28.6%	18.1%	(0.0449)	0.8118	-3.64%	14.5%
40	Pfizer, Inc.	\$2.05	\$1.16	\$13.00	43.4%	15.8%	1.0154	16.0%	7.0%	-	0.5273	0.00%	7.0%
41	Procter & Gamble	\$5.25	\$2.18	\$29.45	58.5%	17.8%	1.0230	18.2%	10.7%	(0.0495)	0.6900	-3.41%	7.2%
42	Raytheon Co.	\$7.20	\$2.00	\$38.65	72.2%	18.6%	1.0231	19.1%	13.8%	(0.0870)	0.5932	-5.16%	8.6%
43	Stryker Corp.	\$5.35	\$0.84	\$32.75	84.3%	16.3%	1.0660	17.4%	14.7%	(0.0144)	0.7213	-1.04%	13.6%
44	Sysco Corp.	\$2.75	\$1.10	\$10.10	60.0%	27.2%	1.0502	28.6%	17.2%	(0.0385)	0.7756	-2.98%	14.2%
45	TJX Companies	\$4.80	\$0.80	\$12.75	83.3%	37.6%	1.0374	39.1%	32.5%	(0.2565)	0.8355	-21.43%	11.1%
46	United Parcel Serv.	\$5.50	\$2.20	\$19.30	60.0%	28.5%	1.0912	31.1%	18.7%	(0.0090)	0.8245	-0.75%	17.9%
47	Verizon Communic.	\$3.05	\$1.96	\$18.95	35.7%	16.1%	1.0250	16.5%	5.9%	(0.0032)	0.6555	-0.21%	5.7%
48	Walgreen Co.	\$3.65	\$1.00	\$21.15	72.6%	17.3%	1.0252	17.7%	12.8%	(0.0684)	0.6475	-4.43%	8.4%
49	Wal-Mart Stores	\$6.05	\$1.75	\$23.40	71.1%	25.9%	1.0072	26.0%	18.5%	(0.1157)	0.7400	-8.56%	9.9%
50	Waste Management	\$2.90	\$1.60	\$15.30	44.8%	19.0%	1.0079	19.1%	8.6%	(0.0515)	0.6600	-3.40%	5.2%
	-												

#### **BR + SV GROWTH RATE**

#### NON-UTILITY PROXY GROUP

		(a)	(a)	(f)	(a)	(a)		(g)	(a)	(a)	(f)
	Componen	Cor	nmon Equi	ty	2(	Lich Low Ave		N/D	Com	$\frac{1}{2014}$	es
1	<u>Company</u>	¢12.764	<u>2014</u> #28.075	<u>Cng.</u>	#125.00	<u>LOW</u>	<u>Аvg.</u> #122 БО	<u>IVI/D</u>	<u>2009</u> 710.00	<u>2014</u> 722.00	<u>Growtn</u>
1	3M Company	\$12,764 ¢22.857	\$28,973 \$22.550	17.8%	\$135.00 ¢115.00	\$110.00	\$122.50	3.059	1 551 00	1 520.00	0.35%
2	Abbott Labs.	\$22,836 ¢1 107	\$33,35U	8.0%	\$115.00 ¢E0.00	\$95.00 ¢40.00	\$105.00 ¢45.00	4.762	1,551.90	1,520.00	-0.41%
3	Alberto-Cuiver	\$1,197 ¢102 220	\$1,640 ¢141.905	6.5%	\$50.00 ¢E0.00	\$40.00 ¢40.00	\$45.00 ¢45.00	2.521	98.20 E 001.00	92.00 E 000.00	-1.31%
4	Al&I Inc.	\$102,339 #E 222	\$141,893	0.8%	\$50.00 ¢25.00	\$40.00 #70.00	\$45.00 #77.50	1.8/1	5,901.90	5,900.00	-0.01%
5	Automatic Data Proc.	\$3,323 \$2,104	\$11,700 ¢2,820	17.1% E 29/	\$85.00 ¢155.00	\$70.00 #125.00	\$77.50	3.377	501.70 05.02	510.00	1.33%
6 7	Dard (C.K.)	\$2,194 ¢7 101	\$2,830 #12.00	5.2%	\$155.00 ¢00.00	\$125.00	\$140.00 ¢22.50	4.452	95.92	90.00	-1.27%
7	Baxter Int I Inc.	\$7,191 ¢5 142	\$12,600	11.9%	\$90.00	\$75.00	\$82.50 #122 F0	3.603	600.97	550.00 205.00	-1.76%
8	Becton, Dickinson	\$5,143	\$6,985 #10. <b>00</b> 0	6.3%	\$135.00	\$110.00	\$122.50	3.592	237.08	205.00	-2.87%
9	Bristol-Myers Squibb	\$14,785	\$19,230	5.4%	\$40.00	\$30.00	\$35.00	3.004	1,709.50	1,650.00	-0.71%
10	Brown-Forman B	\$1,895	\$2,750	7.7%	\$85.00	\$70.00	\$77.50	3.799	146.96	135.00	-1.68%
11	Chubb Corp.	\$15,634	\$18,800	3.8%	\$85.00	\$70.00	\$77.50	1.195	332.01	290.00	-2.67%
12	Church & Dwight	\$1,602	\$2,550	9.7%	\$110.00	\$90.00	\$100.00	2.548	70.55	65.00	-1.63%
13	Coca-Cola	\$24,799	\$40,035	10.1%	\$115.00	\$95.00	\$105.00	5.769	2,303.00	2,200.00	-0.91%
14	Colgate-Palmolive	\$3,116	\$6,100	14.4%	\$160.00	\$130.00	\$145.00	10.943	494.17	460.00	-1.42%
15	Commerce Bancshs.	\$1,886	\$3,050	10.1%	\$50.00	\$40.00	\$45.00	1.402	87.26	95.00	1.71%
16	ConAgra Foods	\$4,721	\$6,300	5.9%	\$35.00	\$30.00	\$32.50	2.167	441.66	420.00	-1.00%
17	Costco Wholesale	\$10,018	\$13,725	6.5%	\$90.00	\$75.00	\$82.50	2.463	435.97	410.00	-1.22%
18	Cullen/Frost Bankers	\$1,894	\$2,775	7.9%	\$65.00	\$55.00	\$60.00	1.364	60.04	63.00	0.97%
19	CVS Caremark Corp.	\$35,768	\$46,750	5.5%	\$65.00	\$55.00	\$60.00	1.573	1,391.00	1,225.00	-2.51%
20	Ecolab Inc.	\$2,001	\$3,400	11.2%	\$65.00	\$55.00	\$60.00	4.152	236.60	235.00	-0.14%
21	Exxon Mobil Corp.	\$110,569	\$191,000	11.6%	\$125.00	\$100.00	\$112.50	2.473	4,727.00	4,200.00	-2.34%
22	Gen'l Mills	\$5,175	\$7,115	6.6%	\$55.00	\$45.00	\$50.00	4.184	656.00	595.00	-1.93%
23	Heinz (H.J.)	\$1,891	\$4,700	20.0%	\$75.00	\$60.00	\$67.50	4.608	318.06	321.00	0.18%
24	Hormel Foods	\$2,124	\$3,600	11.1%	\$40.00	\$35.00	\$37.50	2.768	267.19	266.00	-0.09%
25	Int'l Business Mach.	\$22,755	\$53,650	18.7%	\$240.00	\$195.00	\$217.50	4.462	1,305.30	1,100.00	-3.36%
26	Johnson & Johnson	\$50,588	\$73,850	7.9%	\$95.00	\$80.00	\$87.50	3.170	2,754.30	2,675.00	-0.58%
27	Kellogg	\$2,272	\$3,230	7.3%	\$95.00	\$75.00	\$85.00	8.543	381.38	325.00	-3.15%
28	Kimberly-Clark	\$5,406	\$6,220	2.8%	\$105.00	\$85.00	\$95.00	6.109	417.00	400.00	-0.83%
29	Kraft Foods	\$25,972	\$42,000	10.1%	\$55.00	\$45.00	\$50.00	2.083	1,477.90	1,750.00	3.44%
30	Lilly (Eli)	\$9,524	\$18,000	13.6%	\$50.00	\$45.00	\$47.50	3.045	1,149.00	1,155.00	0.10%
31	Lockheed Martin	\$4.129	\$10.000	19.4%	\$190.00	\$155.00	\$172.50	5.520	372.90	320.00	-3.01%
32	McCormick & Co.	\$1.335	\$2,555	13.9%	\$75.00	\$65.00	\$70.00	3.694	131.80	135.00	0.48%
33	McDonald's Corp.	\$14.034	\$19.000	6.2%	\$105.00	\$85.00	\$95.00	5.000	1.076.70	1.000.00	-1.47%
34	McKesson Corp.	\$7.532	\$11,480	8.8%	\$100.00	\$85.00	\$92.50	1.983	271.00	246.00	-1.92%
35	Medtronic. Inc.	\$14.629	\$26.600	12.7%	\$70.00	\$55.00	\$62.50	2.408	1.097.30	1.025.00	-1.35%
36	Microsoft Corp.	\$39.558	\$85,000	16.5%	\$55.00	\$45.00	\$50.00	4.651	8,908.00	7.900.00	-2.37%
37	NIKE Inc. 'B'	\$8,693	\$16.550	13.7%	\$105.00	\$85.00	\$95.00	2.746	485.50	478.00	-0.31%
38	Northrop Grumman	\$12 687	\$17,000	6.0%	\$145.00	\$120.00	\$132.50	1 949	306.87	250.00	-4 02%
39	PensiCo Inc	\$17,007 \$17,442	\$36,015	15.6%	\$140.00	\$115.00	\$102.00 \$127.50	5 313	1 565 00	1 500 00	-0.84%
40	Pfizer Inc	\$90.01 <i>4</i>	\$105.000	3.1%	\$30.00	\$25.00	\$27.50	2.010	8 070 00	8 070 00	0.0470
40 41	Procter & Camble	\$63,099	\$79.455	1.7%	\$105.00	\$25.00 \$85.00	\$95.00	2.110	2 917 00	2 700 00	-1 53%
42	Paytheon Co	¢0,077	¢12 275	4.7%	¢105.00	\$05.00 ¢85.00	\$95.00 \$95.00	2.458	282.20	2,700.00	2 54%
42 42	Struker Com	\$9,027 ¢6 505	\$12,373 ¢12,775	4.7 /0	¢120.00	\$05.00 ¢105.00	\$95.00 ¢117 50	2.436	207.00	200.00	-3.34 /0
43	Suyker Corp.	\$0,595 ¢2.450	\$12,775 ¢5 700	14.1 /0	\$130.00 ¢50.00	\$105.00 ¢40.00	¢45.00	3.300 4 455	597.90	590.00	-0.40 /0
44 ∕⊑	TIX Companies	Φ3,43U	φ3,700 ¢4 <b>2</b> 00	7 00/	Φ00.00 Φ0= 00	\$ <del>4</del> 0.00 ¢70.00	Φ43.00 ¢77 E0	4.400	400.00	220.00	-0.00%
43 47	Lipited Derest Companies	₽ <b>८,00</b> 9 Ф7 (00	Φ4,200 ¢10.025	7.0%	Φ03.00 ¢130.00	Φ/0.00 ¢100.00	Φ/7.0U	0.078 E.600	409.39	550.00	-4.22%
46	United Parcel Serv.	₽7,03U	Φ19,035 ΦΕ2,420	∠U.1%	\$120.00	\$100.00	\$110.00	5.699	772.85 2 825 70	905.00	-0.10%
4/	Verizon Communic.	Φ14.274	ФJ95,439	5.1% 5.0%	Φ00.00	ФСС 00	\$35.00	2.902	2,833.70	2,820.00	-U.11%
48	waigreen Co.	\$14,376	\$18,500 #TC 025	5.2% 1.40/	φ100.00	\$55.00 ¢80.00	\$60.00 ¢00.00	2.837	988.56	8/5.00	-2.41%
49 50	vval-Mart Stores	\$70,749	\$76,025	1.4%	\$100.00	\$80.00	\$90.00	3.846	3,786.00	3,250.00	-3.01%
50	waste Management	\$6,285	\$6,800	1.6%	\$50.00	\$40.00	\$45.00	2.941	486.12	445.00	-1.75%

(a) www.valueline.com (retrieved Jan. 28, 2011).

(b) Computed using the formula 2\*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity).

(c) Product of year-end "r" for 2014 and Adjustment Factor.

(d) Product of change in common shares outstanding and M/B Ratio.

(e) Computed as 1 - B/M Ratio.

(f) Five-year rate of change.

(g) Average of High and Low expected market prices divided by 2013-15 BVPS.

Exhibit No. \_\_\_\_ (WEA-9)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-9)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

#### CAPITAL ASSET PRICING MODEL

#### **UTILITY PROXY GROUP**

Market Rate of Return		
Dividend Yield (a)	2.3%	
Growth Rate (b)	10.5%	
Market Return (c)		12.8%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield		4.7%
<u>Market Risk Premium (e)</u>		8.1%
<u>Utility Proxy Group Beta (f)</u>		0.74
<u>Utility Proxy Group Risk Premium (g)</u>		6.0%
<u>Plus: Risk-free Rate (d)</u>		
Long-term Treasury Bond Yield		4.7%
Unadjusted CAPM (h)		10.7%
Size Adjustment (i)		0.74%
Implied Cost of Equity (j)		11.5%

- (a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 28, 2011).
- (b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 (retrieved Feb. 23, 2011).

(c) (a) + (b)

(d) Average yield on 30-year Treasury bonds for February 2011 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 (Feb. 4, Feb. 25, & Mar. 25, 2011).

(g) (e) x (f).

- (h) (d) + (g).
- (i) Morningstar, "Ibbotson SBBI 2010 Valuation Yearbook," at Table C-1 (2010).
- (j) (h) + (i).

Exhibit No. \_\_\_\_ (WEA-10)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-10)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

CAPITAL	ASSET	PRICING	MODEL
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#### **NON-UTILITY PROXY GROUP**

Market Rate of Return		
Dividend Yield (a)	2.3%	
Growth Rate (b)	10.5%	
Market Return (c)		12.8%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield		4.7%
<u>Market Risk Premium (e)</u>		8.1%
Non-Utility Proxy Group Beta (f)		0.71
<u>Utility Proxy Group Risk Premium (g)</u>		5.7%
<u>Plus: Risk-free Rate (d)</u>		
Long-term Treasury Bond Yield		4.7%
Unadjusted CAPM (h)		10.4%
Size Adjustment (i)		-0.37%
Implied Cost of Equity (j)		10.1%

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 28, 2011).

(b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 (retrieved Feb. 23, 2011).

(c) (a) + (b)

(d) Average yield on 30-year Treasury bonds for February 2011 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 Jan. 28, 2011).

(g) (e) x (f).

- (h) (d) + (g).
- (i) Morningstar, "Ibbotson SBBI 2010 Valuation Yearbook," at Table C-1 (2010).
- (j) (h) + (i).

Exhibit No. \_\_\_\_ (WEA-11)

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-11\_\_\_\_\_

DOCKET NO. UG-11\_\_\_\_\_

EXHIBIT NO.\_\_\_(WEA-11)

WILLIAM E. AVERA

REPRESENTING AVISTA CORPORATION

#### EXPECTED EARNINGS APPROACH

#### **UTILITY PROXY GROUP**

		(a)	(b)	(c)
		<b>Expected Return</b>	Adjustment	Adjusted Return
	Company	<u>on Common Equity</u>	Factor	<u>on Common Equity</u>
1	ALLETE	9.5%	1.021077	9.7%
2	Alliant Energy	12.0%	1.020547	12.2%
3	Ameren Corp.	7.0%	1.0188	7.1%
4	American Elec Pwr	10.5%	1.028674	10.8%
5	Avista Corp.	9.0%	1.02525	9.2%
6	Black Hills Corp.	8.0%	1.023679	8.2%
7	Cleco Corp.	10.0%	1.026528	10.3%
8	Constellation Energy	7.0%	1.025032	7.2%
9	DTE Energy Co.	9.0%	1.020027	9.2%
10	Edison International	8.5%	1.028458	8.7%
11	Empire District Elec	10.5%	1.011911	10.6%
12	Entergy Corp.	11.0%	1.02555	11.3%
13	Exelon Corp.	14.5%	1.020388	14.8%
14	Great Plains Energy	8.0%	1.023109	8.2%
15	Hawaiian Elec.	10.5%	1.021957	10.7%
16	IDACORP, Inc.	8.5%	1.030347	8.8%
17	Integrys Energy Group	9.5%	1.014113	9.6%
18	OGE Energy Corp.	12.0%	1.038907	12.5%
19	Otter Tail Corp.	8.5%	1.035333	8.8%
20	PG&E Corp.	12.0%	1.038435	12.5%
21	Pinnacle West Capital	8.5%	1.033878	8.8%
22	Portland General Elec.	8.5%	1.032728	8.8%
23	Pub Sv Enterprise Grp	11.5%	1.03748	11.9%
24	SCANA Corp.	9.5%	1.041985	9.9%
25	Sempra Energy	10.5%	1.022958	10.7%
26	UIL Holdings	9.0%	1.081864	9.7%
27	Westar Energy	10.0%	1.020723	10.2%
28	Wisconsin Energy	13.0%	1.021472	13.3%
	Average (d)			10.4%

(a) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011).

(b) Adjustment to convert year-end "r" to an average rate of return from Exhibit No.\_\_\_(WEA-6).

(c) (a) x (b).

(d) Excludes highlighted figures.