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June 27, 2005

Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket Nos. 050045-EI & 050188-EI

Dear Ms. Bayo:

Enclosed for filing, on behalf of the Office of Public Counsel, are the original and 25 copies of the Direct Testimony of J. Randall Woolridge.

Please indicate the time and date of receipt on the enclosed duplicate of this letter and return it to our office.

Sincerely,

Charles J. Beck
Deputy Public Counsel

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for rate increase by Florida Power & Light Company.	)	Docket No. 050045-EI
In re: 2005 comprehensive depreciation study by Florida Power & Light Company.	)	Docket No. 050188-EI
	)	Dated: June 27, 2005

DIRECT TESTIMONY

OF

J. RANDALL WOOLRIDGE

On Behalf of the Citizens of the State of Florida

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FLORIDA POWER & LIGHT COMPANY

DOCKET NOS. 050045-EI & 050188-EI

Direct Testimony of
Dr. J. Randall Woolridge

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Q. PLEASE STATE YOUR FULL NAME, ADDRESS, AND OCCUPATION.

A. My name is J. Randall Woolridge and my business address is 120 Haymaker Circle, State College, PA 16801. I am a Professor of Finance and the Goldman, Sachs & Co. and Frank P. Smeal Endowed University Fellow in Business Administration at the University Park Campus of the Pennsylvania State University. I am also the Director of the Smeal College Trading Room and the President of the Nittany Lion Fund, LLC. In addition, I am affiliated with the Columbia Group Inc., a public utility consulting firm based in Georgetown, CT. A summary of my educational background, research, and related business experience is provided in Appendix A.

I. SUBJECT OF TESTIMONY AND SUMMARY OF RECOMMENDATIONS

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I have been asked by the Florida Office of Public Counsel to provide an opinion as to the overall fair rate of return or cost of capital for Florida Power and Light Company ("FPL" or "Company") and to evaluate FPL's rate of return testimony in this proceeding.

Q. PLEASE REVIEW YOUR COST OF CAPITAL RETURN FINDINGS.

A. I have independently arrived at a cost of capital for the Company. I have established an equity cost rate of 8.8% for FPL primarily by applying the Discounted Cash Flow ("DCF") approach to a group of electric utility companies. I have also performed a Capital Asset Pricing

Model ("CAPM") study. Utilizing my equity cost rate, capital structure ratios, and senior capital cost rates, I am recommending an overall fair rate of return for the Company of 7.34%. This recommendation is summarized in Exhibit_(JRW-1).

Q. PLEASE SUMMARIZE YOUR ASSESSMENT OF THE COMPANY'S RATE OF RETURN POSITION.

A. The Company's rate of return testimony is offered by Mr. Moray P. Dewhurst, the Company's Chief Financial Officer (CFO), and Dr. William E. Avera, a consultant. The Company's proposed rate of return is excessive due to an inflated long-term debt cost rate and an overstated equity cost rate. Mr. Dewhurst's long-term debt cost rate of 5.89% includes four proforma financings at interest rates well above current market yields. His capital structure contains a common equity ratio which is higher than other operating electric utility companies and is much higher than the common equity ratios of publicly-held electric companies. The Company's requested return on equity of 12.3% includes a 50 basis point performance incentive on top of Dr. Avera's estimated equity cost rate of 11.8%. Dr. Avera's 11.8% is unreasonably high due to (1) an upwardly-biased expected growth rate in his DCF equity cost rate, (2) the use of forecasted interest rates that are well in excess of the current long-term market yields, (3) excessive risk premium estimates in his various risk premium approaches, and (4) the lack of a financial risk adjustment as well as an inappropriate flotation cost adjustment.

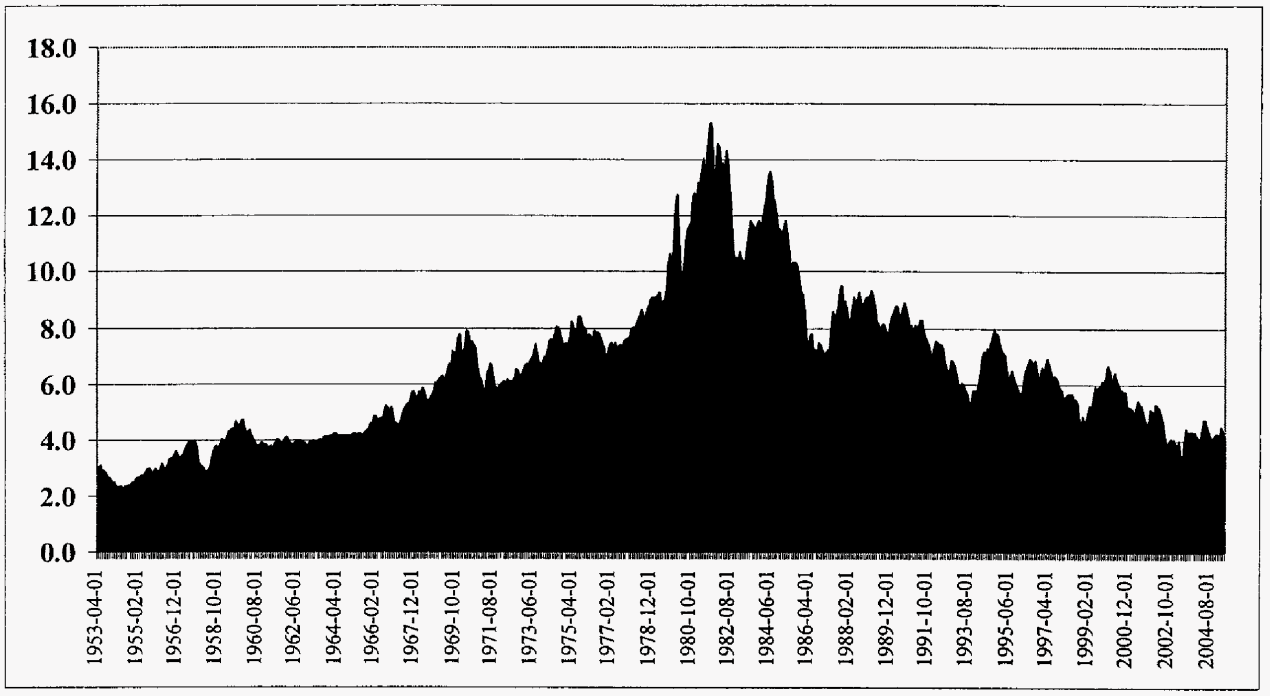
Q. PLEASE DISCUSS CAPITAL COSTS IN TODAY'S MARKETS.

A. Capital cost rates for U.S. corporations are currently at their lowest levels in more than

four decades. Corporate capital cost rates are determined by the level of interest rates and the risk premium demanded by investors to buy the debt and equity capital of corporate issuers. The base level of interest rates in the US economy is indicated by the rates on U.S. Treasury bonds. The benchmark for long-term capital costs is the rate on ten-year Treasury bonds. The rates are provided in the graph below from 1953 to the present. As indicated, prior to the secular decline in rates that began last year, the 10-year Treasury had not been in the 4-5 percent range since the 1960s.

Yields on Ten-Year Treasury Bonds

1953-Present

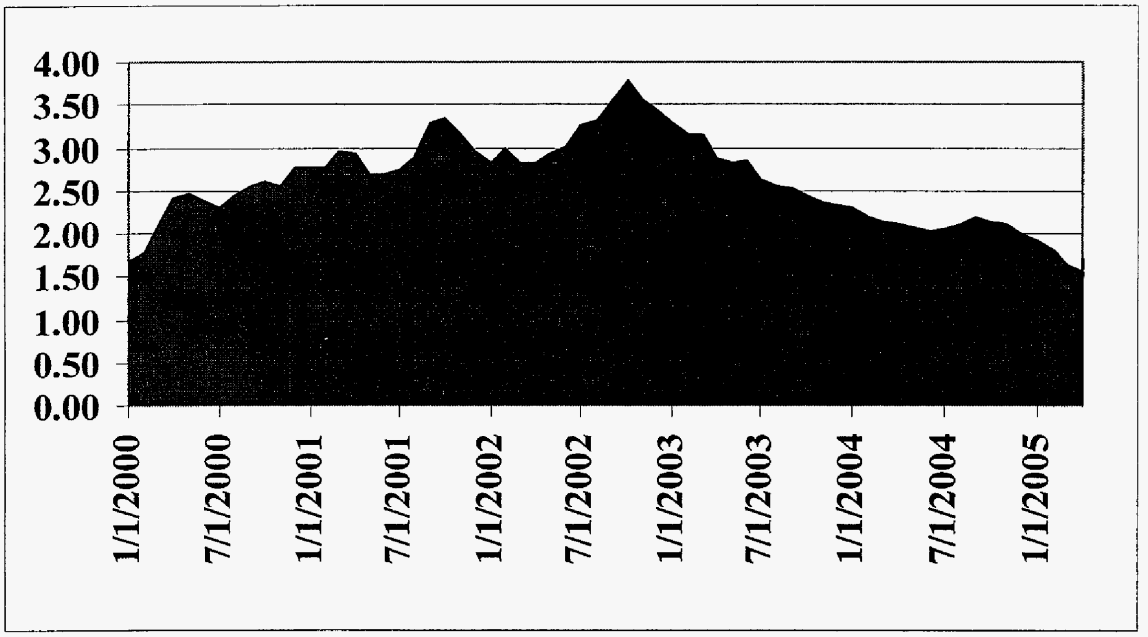


Source: http://research.stlouisfed.org/fred2/data/GS10.txt

The second base component of the corporate capital cost rates is the risk premium. The risk premium is the return premium required by investors to purchase riskier securities. Risk premiums for bonds are the yield differentials between different bond classes as rated by agencies such as Moody's, and Standard and Poor's. The graph below provides the yield differential between Baa-rate corporate bonds and 10-year Treasuries. This yield differential peaked at 350 basis points (BPs) in 2002 and has declined significantly since that time. This is an indication that the market price of risk has declined and therefore the risk premium has declined in recent years.

Corporate Bond Yield Spreads

Baa-Rated Corporate Bond Yield Minus Ten-Year Treasury Bond Yield



Source: http://www.treas.gov/offices/domestic-finance/debt-management/interest-rate/index.html

The equity risk premium is the return premium required to purchase stocks as

opposed to bonds. Since the equity risk premium is not readily observable in the markets (as are bond risk premiums), and there are alternative approaches to estimating the equity premium, it is the subject of much debate. One way to estimate the equity risk premium is to compare the mean returns on bonds and stocks over long historic periods. Measured in this manner, the equity risk premium has been in the 5-7 percent range. But recent studies by leading academics indicate the forward-looking equity risk premium is in the 3-4 percent range. These authors indicate that historic equity risk premiums are upwardly biased measures of expected equity risk premiums. Jeremy Siegel, a Wharton finance professor and author of the popular book *Stocks for the Long Term*, published a study entitled "The Shrinking Equity Risk Premium."[1] He concludes:

> The degree of the equity risk premium calculated from data estimated from 1926 is unlikely to persist in the future. The real return on fixed-income assets is likely to be significantly higher than estimated on earlier data. This is confirmed by the yields available on Treasury index-linked securities, which currently exceed 4%. Furthermore, despite the acceleration in earnings growth, the return on equities is likely to fall from its historical level due to the very high level of equity prices relative to fundamentals.

Even Alan Greenspan, the Chairman of the Federal Reserve Board, indicated in an October 14, 1999, speech on financial risk that the fact that equity risk premiums have declined during the past decade is "not in dispute." His assessment focused on the relationship between information availability and equity risk premiums.

[1] Jeremy J. Siegel, "The Shrinking Equity Risk Premium," *The Journal of Portfolio Management* (Fall, 1999), p.15.

> There can be little doubt that the dramatic improvements in information technology in recent years have altered our approach to risk. Some analysts perceive that information technology has permanently lowered equity premiums and, hence, permanently raised the prices of the collateral that underlies all financial assets.
>
> The reason, of course, is that information is critical to the evaluation of risk. The less that is known about the current state of a market or a venture, the less the ability to project future outcomes and, hence, the more those potential outcomes will be discounted.
>
> The rise in the availability of real-time information has reduced the uncertainties and thereby lowered the variances that we employ to guide portfolio decisions. At least part of the observed fall in equity premiums in our economy and others over the past five years does not appear to be the result of ephemeral changes in perceptions. It is presumably the result of a permanent technology-driven increase in information availability, which by definition reduces uncertainty and therefore risk premiums. This decline is most evident in equity risk premiums. It is less clear in the corporate bond market, where relative supplies of corporate and Treasury bonds and other factors we cannot easily identify have outweighed the effects of more readily available information about borrowers.[2]

In sum, the relatively low interest rates in today's markets as well as the lower risk premiums required by investors indicate that capital costs for U.S. companies are the lowest in decades. In addition, the 2003 tax law further lowered capital cost rates for companies.

Q. HOW DID THE *JOBS AND GROWTH TAX RELIEF RECONCILIATION ACT of 2003* REDUCE THE COST OF CAPITAL FOR COMPANIES?

[2] Alan Greenspan, "Measuring Financial Risk in the Twenty-First Century," Office of the Comptroller of the Currency Conference, October 14, 1999.

A. On May 28th of 2003, President Bush signed the *Jobs and Growth Tax Relief Reconciliation Act of 2003.* The primary purpose of this legislation was to reduce taxes to enhance economic growth. A primary component of the new tax law was a significant reduction in the taxation of corporate dividends for individuals. Dividends have been described as "double-taxed." First, corporations pay taxes on the income they earn before they pay dividends to investors, then investors pay taxes on the dividends that they receive from corporations. One of the implications of the double taxation of dividends is that, all else equal, it results in a higher cost of raising capital for corporations. The tax legislation reduced the effect of double taxation of dividends by lowering the tax rate on dividends from the 30 percent range (the average tax bracket for individuals) to 15 percent.

Overall, the 2003 tax law reduced the pre-tax return requirements of investors, thereby reducing corporations' cost of equity capital. This is because the reduction in the taxation of dividends for individuals enhances their after-tax returns and thereby reduces their pre-tax required returns. This reduction in pre-tax required returns (due to the lower tax on dividends) effectively reduces the cost of equity capital for companies. The 2003 tax law also reduced the tax rate on long-term capital gains from 20% to 15%. The magnitude of the reduction in corporate equity cost rates is debatable, but my assessment indicates that it could be as large as 100 basis points. (See Exhibit_(JRW-2)).

II. COMPARISON GROUP SELECTION

Q. PLEASE DESCRIBE YOUR APPROACH TO DEVELOPING A FAIR RATE OF RETURN RECOMMENDATION FOR FPL.

A. To develop a fair rate of return recommendation for FPL, I evaluated the return requirements of investors on the common stock of publicly-held electric companies.

Q. PLEASE DESCRIBE YOUR ELECTRIC UTILITY COMPANIES.

A. I am using the group of electric companies employed by FPL Witness Avera. This group includes twenty one publicly-traded electric utility companies. Summary financial statistics for the group are provided in Exhibit_(JRW-3). On average, the group has operating revenues of $6,948M, earns a return on equity of 11.0%, and sells at a market-to-book value ratio of 1.64.

III. DEBT COST RATES AND CAPITAL STRUCTURE RATIOS

Q. WHAT ARE THE COMPANY'S PROPOSED CAPITAL STRUCTURE RATIOS AND SENIOR CAPITAL COST RATES?

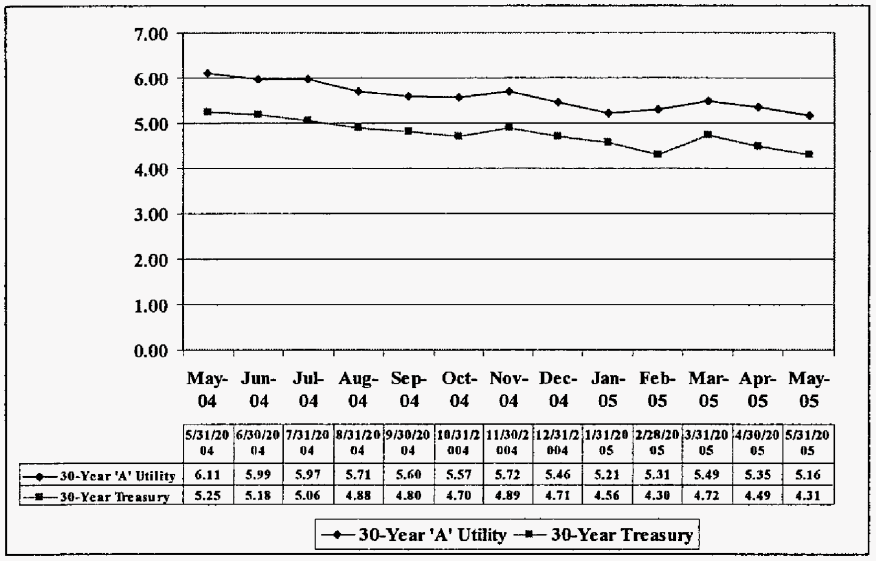
A. Mr. Dewhurst has proposed a capital structure based on a thirteen month pro forma capitalization consisting of 0.55% short-term debt, 43.62% long-term debt, and 55.83% common equity. He has also proposed a long-term debt cost rate of 5.89% and a short-term debt cost rate of 8.73%. This position is summarized on page 1 of Exhibit_(JRW-4).

Q. ARE YOU ADOPTING THE COMPANY'S PROPOSED SENIOR CAPITAL COST RATES?

A. I am using the short-term debt cost rate of 8.73% at this time. It is abnormally high relative to short-term interest rates due to (1) the fixed financing commitment fees and (2) the low projected balances of short-term debt.

I am not employing the Company's proposed long-term debt cost rate of 5.89%. It is unrealistic because of the projected yields on four proforma debt offerings. Page 2 of Exhibit_(JRW-4) provides the Company's long-term debt outstanding as provided in FPL Schedule D-4a, page 1. These debt issues, listed as First Mortgage bond issues number 9, 10, 11, and 12, are to be sold between December 2005 and December 2006 and have projected yields of 6.8%, 6.8%, 7.2%, and 7.2%, respectively. As shown in the graph below, since the Company filed its testimony, long-term interest rates have decreased and thus these projected rates are well in excess of current market interest rates.

30-Year Bond Yields
A-Rated Public Utility and Treasury Bond Yields



	5/31/2004	6/30/2004	7/31/2004	8/31/2004	9/30/2004	10/31/2004	11/30/2004	12/31/2004	1/31/2005	2/28/2005	3/31/2005	4/30/2005	5/31/2005
30-Year 'A' Utility	6.11	5.99	5.97	5.71	5.60	5.57	5.72	5.46	5.21	5.31	5.49	5.35	5.16
30-Year Treasury	5.25	5.18	5.06	4.88	4.80	4.70	4.89	4.71	4.56	4.30	4.72	4.49	4.31

Source: Bloomberg

The yield on 30-year A-rated public utility bonds was 5.16% as of the end of May. Considering the current yields on these bonds as well as the recent trends in interest rates, I will use 5.25% as the yield on the four proforma bond issues of the Company. As developed on page 2 of Exhibit_(JRW-4), using this rate for these four bond issues provides an overall long-term debt cost rate to 5.45% for the Company.

Q. ARE YOU ADOPTING THE COMPANY'S PROPOSED CAPITAL STRUCTURE RATIOS?

A. Yes, with a very important caveat. FPL's proposed capital structure includes a common equity ratio of 55.83% which is high by industry standards. FPL's actual common equity ratio is 61.92%. The 55.83% ratio is adjusted according to rating agency standards to reflect the Company's fixed charges associated with purchased power contracts. This figure was used for

limited purposes in FPL's 1999 Stipulation and Settlement Agreement between FPL and the OPC. As discussed at length by Mr. Dewhurst, this equity-rich capitalization has provided the Company with a very strong financial position.

The caveat on adopting FPL's capital structure is that the Company's financial risk is (1) lower than other operating electric utilities and (2) much lower than publicly-held electric companies. This lower financial risk allows for a lower allowed return on common equity for FPL.

Q. PLEASE SUMMARIZE YOUR PROPOSED CAPITAL STRUCTURE RATIOS AND SENIOR CAPITAL COST RATES.

A. My recommended structure and senior capital cost rates which are shown below.

Florida Power & Light Company
Proposed Capital Structure and Senior Capital Cost Rates

Source of Capital	Capitalization Ratio	Cost Rate
Short-Term Debt	0.55%	8.73%
Long-Term Debt	43.62%	5.45%
Common Equity	55.83%	

IV. THE COST OF COMMON EQUITY CAPITAL

A. OVERVIEW

Q. WHY MUST AN OVERALL COST OF CAPITAL OR FAIR RATE OF RETURN BE ESTABLISHED FOR A PUBLIC UTILITY?

A. In a competitive industry, the return on a firm's common equity capital is determined

through the competitive market for its goods and services. Due to the capital requirements needed to provide utility services, however, and to the economic benefit to society from avoiding duplication of these services, some public utilities are monopolies. It is not appropriate to permit monopoly utilities to set their own prices because of the lack of competition and the essential nature of the services. Thus, regulation seeks to establish prices which are fair to consumers and at the same time are sufficient to meet the operating and capital costs of the utility, i.e., provide an adequate return on capital to attract investors.

Q. PLEASE PROVIDE AN OVERVIEW OF THE COST OF CAPITAL IN THE CONTEXT OF THE THEORY OF THE FIRM.

A. The total cost of operating a business includes the cost of capital. The cost of common equity capital is the expected return on a firm's common stock that the marginal investor would deem sufficient to compensate for risk and the time value of money. In equilibrium, the expected and required rates of return on a company's common stock are equal.

Normative economic models of the firm, developed under very restrictive assumptions, provide insight into the relationship between firm performance or profitability, capital costs, and the value of the firm. Under the economist's ideal model of perfect competition, where entry and exit is costless, products are undifferentiated, and there are increasing marginal costs of production, firms produce up to the point where price equals marginal cost. Over time, a long-run equilibrium is established where price equals average cost, including the firm's capital costs. In equilibrium, total revenues equal total costs, and because capital costs represent investors' required return on the

firm's capital, actual returns equal required returns and the market value and the book value of the firm's securities must be equal.

In the real world, firms can achieve competitive advantage due to product market imperfections - most notably through product differentiation (adding real or perceived value to products) and achieving economies of scale (decreasing marginal costs of production). Competitive advantage allows firms to price products above average cost and thereby earn accounting profits greater than those required to cover capital costs. When these profits are in excess of that required by investors, or when a firm earns a return on equity in excess of its cost of equity, investors respond by valuing the firm's equity in excess of its book value.

James M. McTaggart, founder of the international management consulting firm Marakon Associates, has described this essential relationship between the return on equity, the cost of equity, and the market-to-book ratio in the following manner:[3]

> Fundamentally, the value of a company is determined by the cash flow it generates over time for its owners, and the minimum acceptable rate of return required by capital investors. This "cost of equity capital" is used to discount the expected equity cash flow, converting it to a present value. The cash flow is, in turn, produced by the interaction of a company's return on equity and the annual rate of equity growth. High return on equity (ROE) companies in low-growth markets, such as Kellogg, are prodigious generators of cash flow, while low ROE companies in high-growth markets, such as Texas Instruments, barely generate enough cash flow to finance growth.
>
> A company's ROE over time, relative to its cost of equity, also determines whether it is worth more or less than its book value. If its ROE is consistently greater than the cost of equity capital (the investor's minimum acceptable return), the business is economically profitable and its market value will exceed book value. If,

[3] James M. McTaggart, "The Ultimate Poison Pill: Closing the Value Gap," *Commentary* (Spring 1988), p. 2.

however, the business earns an ROE consistently less than its cost of equity, it is economically unprofitable and its market value will be less than book value.

As such, the relationship between a firm's return on equity, cost of equity, and market-to-book ratio is relatively straightforward. A firm which earns a return on equity above its cost of equity will see its common stock sell at a price above its book value. Conversely, a firm which earns a return on equity below its cost of equity will see its common stock sell at a price below its book value.

Q. WHAT ECONOMIC FACTORS HAVE AFFECTED THE COST OF EQUITY CAPITAL FOR PUBLIC UTILITIES?

A. Exhibit_(JRW-5) provides indicators of public utility equity cost rates over the past decade. Page 1 shows the yields on 10-year, 'A' rated public utility bonds. These yields peaked in the Dewhurst 1990s at 10%, and have generally declined since that time. In particular, over the past two years they have declined from the seven percent range to the 4.5 to 5.0 percent range. Page 2 provides the dividend yields for the fifteen utilities in the Dow Jones Utilities Average over the past decade. These yields peaked in 1994 at 6.7%. Since that time they have declined and have remained in the 4.5-5.0 percent range in recent years.

Average earned returns on common equity and market-to-book ratios are given on page 3 of Exhibit_(JRW-5). Over the past decade, earned returns on common equity have consistently been in the 10.0 - 13.0 percent range. The low point was 10.3 % in 1997 and they have increased to 12.5 percent range as of the year 2003. Over the past decade, market-to-book ratios for this group bottomed out at 128% in 1994 and they have increased to the 150-180 percent range in recent years.

The indicators in Exhibit_(JRW-5), coupled with the overall decrease in interest rates, suggest that capital costs for the Dow Jones Utilities have decreased over the past decade. Specifically for the equity cost rate, the significant increase in the market-to-book ratios, coupled with only a much smaller increase in the average return on equity, suggests a substantial decline in the overall equity cost rate.

Q. WHAT FACTORS DETERMINE INVESTORS' EXPECTED OR REQUIRED RATE OF RETURN ON EQUITY?

A. The expected or required rate of return on common stock is a function of market-wide, as well as company-specific, factors. The most important market factor is the time value of money as indicated by the level of interest rates in the economy. Common stock investor requirements generally increase and decrease with like changes in interest rates. The perceived risk of a firm is the predominant factor that influences investor return requirements on a company-specific basis. A firm's investment risk is often separated into business and financial risk. Business risk encompasses all factors that affect a firm's operating revenues and expenses. Financial risk results from incurring fixed obligations in the form of debt in financing its assets.

Q. HOW DOES THE INVESTMENT RISK OF ELECTRIC UTILITY COMPANIES COMPARE WITH THAT OF OTHER INDUSTRIES?

A. Due to the essential nature of their service as well as their regulated status, public utilities are exposed to a lesser degree of business risk than other, non-regulated businesses. The relatively low level of business risk allows public utilities to meet much of their capital requirements through

borrowing in the financial markets, thereby incurring greater than average financial risk. Nonetheless, the overall investment risk of public utilities is below most other industries. Exhibit_(JRW-6) provides an assessment of investment risk for 100 industries as measured by beta, which according to modern capital market theory is the only relevant measure of investment risk that need be of concern for investors. These betas come from the *Value Line Investment Survey* and are compiled by Aswath Damodoran of New York University. They may be found on the Internet at http://www.stern.nyu.edu/~adamodar/. The study shows that the investment risk of public utilities is relatively low. The average beta for electric utilities in the Eastern U.S. is 0.72. This figure ranks in the bottom quarter of the 100 industries in terms of beta. As such, the cost of equity for the electric utility industry is among the lowest of all industries in the U.S.

Q. HOW CAN THE EXPECTED OR REQUIRED RATE OF RETURN ON COMMON EQUITY CAPITAL BE DETERMINED?

A. The costs of debt and preferred stock are normally based on historic or book values and can be determined with a great degree of accuracy. The cost of common equity capital, however, cannot be determined precisely and must instead be estimated from market data and informed judgment. This return to the stockholder should be commensurate with returns on investments in other enterprises having comparable risks.

According to valuation principles, the present value of an asset equals the discounted value of its expected future cash flows. Investors discount these expected cash flows at their required rate of return that, as noted above, reflects the time value of money and the perceived riskiness of the

expected future cash flows. As such, the cost of common equity is the rate at which investors discount expected cash flows associated with common stock ownership.

Models have been developed to ascertain the cost of common equity capital for a firm. Each model, however, has been developed using restrictive economic assumptions. Consequently, judgment is required in selecting appropriate financial valuation models to estimate a firm's cost of common equity capital, in determining the data inputs for these models, and in interpreting the models' results. All of these decisions must take into consideration the firm involved as well as conditions in the economy and the financial markets.

Q. HOW DO YOU PLAN TO ESTIMATE THE COST OF EQUITY CAPITAL FOR THE COMPANY?

A. I rely primarily on the Discounted Cash Flow ("DCF") model to estimate the cost of equity capital. I believe that the DCF model provides the best measure of equity cost rates for public utilities. I have also performed a Capital Asset Pricing Model (CAPM) study, but I give these results less weight because I believe that risk premium studies, of which the CAPM is one form, provide a less reliable indication of equity cost rates for public utilities.

B. DISCOUNTED CASH FLOW ANALYSIS

Q. BRIEFLY DESCRIBE THE THEORY BEHIND THE TRADITIONAL DCF MODEL.

A. According to the discounted cash flow model, the current stock price is equal to the discounted value of all future dividends that investors expect to receive from investment in the firm. As such, stockholders' returns ultimately result from current as well as future dividends. As owners of a corporation, common stockholders are entitled to a pro-rata share of the firm's earnings. The DCF model presumes that earnings that are not paid out in the form of dividends are reinvested in the firm so as to provide for future growth in earnings and dividends. The rate at which investors discount future dividends, which reflects the timing and riskiness of the expected cash flows, is interpreted as the market's expected or required return on the common stock. Therefore this discount rate represents the cost of common equity. Algebraically, the DCF model can be expressed as:

$$P = \frac{D_1}{(1+k)^1} + \frac{D_2}{(1+k)^2} + \ldots \frac{Dn}{(1+k)^n}$$

where P is the current stock price, D_n is the dividend in year n, and k is the cost of common equity.

Q. IS THE DCF MODEL CONSISTENT WITH VALUATION TECHNIQUES EMPLOYED BY INVESTMENT FIRMS?

A. Yes. Virtually all investment firms use some form of the DCF model as a valuation technique. One common application for investment firms is called the three-stage DCF or dividend discount model (DDM). The stages in a three-stage DCF model are discussed below. This model presumes that a company's dividend payout progresses initially through a growth stage, then

proceeds through a transition stage, and finally assumes a steady state stage. The dividend payment stage of a firm depends on the profitability of its internal investments, which, in turn, is largely a function of the life cycle of the product or service. These stages are depicted in the graphic below labeled the Three Stage DCF Model.[4]

1. **Growth stage**: Characterized by rapidly expanding sales, high profit margins, and abnormally high growth in earnings per share. Because of highly profitable expected investment opportunities, the payout ratio is low. Competitors are attracted by the unusually high earnings, leading to a decline in the growth rate.

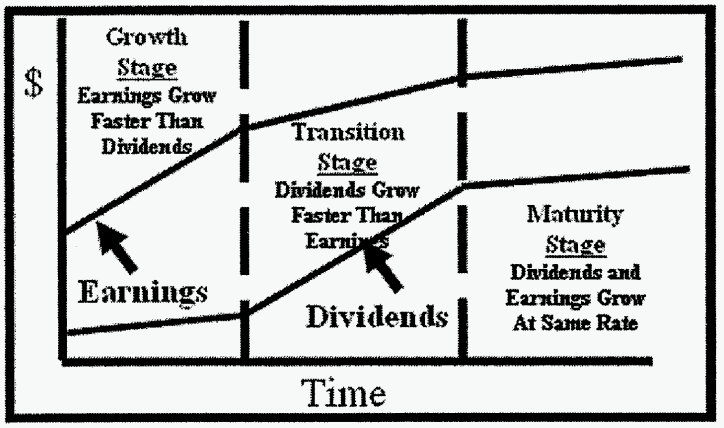
2. **Transition stage**: In later years, increased competition reduces profit margins and earnings growth slows. With fewer new investment opportunities, the company begins to pay out a larger percentage of earnings.

3. **Maturity (steady-state) stage**: Eventually the company reaches a position where its new investment opportunities offer, on average, only slightly attractive returns on equity. At that time its earnings growth rate, payout ratio, and return on equity stabilize for the remainder of its life. The constant-growth DCF model is appropriate when a firm is in the maturity stage of the life cycle.

In using this model to estimate a firm's cost of equity capital, dividends are projected into the future using the different growth rates in the alternative stages, and then the equity cost rate is the discount rate that equates the present value of the future dividends to the current stock price.

Three-Stage DCF Model

[4] This description comes from William F. Sharp, Gordon J. Alexander, and Jeffrey V. Bailey, *Investments* (Prentice-Hall, 1995), pp. 590-91.



Q. HOW DO YOU ESTIMATE STOCKHOLDERS' EXPECTED OR REQUIRED RATE OF RETURN USING THE DCF MODEL?

A. Under certain assumptions, including a constant and infinite expected growth rate, and constant dividend/earnings and price/earnings ratios, the DCF model can be simplified to the following:

$$P = \frac{D_1}{k - g}$$

where D_1 represents the expected dividend over the coming year and g is the expected growth rate of dividends. This is known as the constant-growth version of the DCF model. To use the constant-growth DCF model to estimate a firm's cost of equity, one solves for k in the above expression to obtain the following:

$$D_1$$

$$k = \frac{D}{P} + g$$

Given the regulated status of public utilities, and especially the fact that their returns on investment are effectively set through the ratemaking process, the industry would be in the steady-state stage of a three-stage DCF. The DCF valuation procedure for companies in this stage is the constant-growth DCF. In the constant-growth version of the DCF model, the current dividend payment and stock price are directly observable. Therefore, the primary problem and controversy in applying the DCF model to estimate equity cost rates entails estimating investors' expected dividend growth rate.

Q. WHAT FACTORS SHOULD ONE CONSIDER WHEN APPLYING THE DCF METHODOLOGY?

A. One should be sensitive to several factors when using the DCF model to estimate a firm's cost of equity capital. In general, one must recognize the assumptions under which the DCF model was developed in estimating its components (the dividend yield and expected growth rate). The dividend yield can be measured precisely at any point in time, but tends to vary somewhat over time. Estimation of expected growth is considerably more difficult. One must consider recent firm performance, in conjunction with current economic developments and other information available to investors, to accurately estimate investors' expectations.

Q. PLEASE DISCUSS EXHIBIT_(JRW-7).

A. My DCF analysis is provided in Exhibit_(JRW-7). The DCF summary is on page 1 of

this Exhibit and the supporting data and analysis for the dividend yield and expected growth rate are provided on the following pages.

Q. WHAT DIVIDEND YIELD DO YOU EMPLOY IN YOUR DCF ANALYSIS FOR YOUR GROUP OF ELECTRIC UTILITY COMPANIES?

A. The dividend yields on the common stock for the companies in the group are provided on page 2 of Exhibit_(JRW-7) for the five-month period ending May, 2005. Over this period, the average monthly dividend yield for the group is 4.0%. As of May, 2005, the mean dividend yield for the group is 4.0%. For the DCF dividend yields for the group, I use the average of the five month and May, 2005 dividend yields. As such, the average DCF dividend yield for the group is 4.0%

Q. PLEASE DISCUSS THE APPROPRIATE ADJUSTMENT TO THE SPOT DIVIDEND YIELD.

A. According to the traditional DCF model, the dividend yield term relates to the dividend yield over the coming period. As indicated by Professor Myron Gordon, who is commonly associated with the development of the DCF model for popular use, this is obtained by (1) multiplying the expected dividend over the coming quarter by 4, and (2) dividing this dividend by the current stock price to determine the appropriate dividend yield for a firm, which pays dividends on a quarterly basis.[5]

In applying the DCF model, some analysts adjust the current dividend for growth over the

coming year as opposed to the coming quarter. This can be complicated because firms tend to announce changes in dividends at different times during the year. As such, the dividend yield computed based on presumed growth over the coming quarter as opposed to the coming year can be quite different. Consequently, it is common for analysts to adjust the dividend yield by some fraction of the long-term expected growth rate.

The appropriate adjustment to the dividend yield is further complicated in the regulatory process when the overall cost of capital is applied to a projected or end-of-future-test-year rate base. The net effect of this application is an overstatement of the equity cost rate estimate derived from the DCF model. In the context of the constant-growth DCF model, both the adjusted dividend yield and the growth component are overstated. Put simply, the overstatement results from applying an equity cost rate computed using current market data to a future or test-year-end rate base which includes growth associated with the retention of earnings during the year.

Q. GIVEN THIS DISCUSSION, WHAT ADJUSTMENT FACTOR WILL YOU USE FOR YOUR DIVIDEND YIELD?

A. I will adjust the dividend yield for the electric utility group by 1/2 the expected growth so as to reflect growth over the coming year.

Q. PLEASE DISCUSS THE GROWTH RATE COMPONENT OF THE DCF MODEL.

A. There is much debate as to the proper methodology to employ in estimating the growth component of the DCF model. By definition, this component is investors' expectation of the long-

[5] *Petition for Modification of Prescribed Rate of Return*, Federal Communications Commission, Docket No. 79-05,

term dividend growth rate. Presumably, investors use some combination of historic and/or projected growth rates for earnings and dividends per share and for internal or book value growth to assess long-term potential.

Q. WHAT GROWTH DATA HAVE YOU REVIEWED FOR THE GROUP OF ELECTRIC UTILITY COMPANIES?

A. I have analyzed a number of measures of growth for the electric utility companies. I calculated historic growth rates in sales, earnings, dividends, and book value per share growth rates for the companies in the group. I have reviewed *Value Line's* historic and projected growth rate estimates for earnings per share (EPS), dividends per share (DPS), and book value per share (BVPS). In addition, I have utilized earnings growth rate forecasts as provided by Zacks, Reuters, and First Call. These services solicit 5-year earning growth rate projections for securities analysts and compile and publish the averages of these forecasts on a monthly basis. They are readily available on the Internet. Finally, I have also assessed prospective growth as measured by prospective earnings retention rates and earned returns on common equity.

Q. PLEASE DISCUSS HISTORIC GROWTH IN EARNINGS AND DIVIDENDS AS WELL AS INTERNAL GROWTH.

A. Historic growth rates for EPS, DPS, and BVPS are readily available to virtually all investors and presumably an important ingredient in forming expectations concerning future growth. However, one must use historic growth numbers as measures of investors' expectations with

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Direct Testimony of Myron J. Gordon and Lawrence I. Gould at 62 (April 1980).

caution. In some cases, past growth may not reflect future growth potential. Also, employing a single growth rate number (for example, for five or ten years), is unlikely to accurately measure investors' expectations due to the sensitivity of a single growth rate figure to fluctuations in individual firm performance as well as overall economic fluctuations (i.e., business cycles). However, one must appraise the context in which the growth rate is being employed. According to the conventional DCF model, the expected return on a security is equal to the sum of the dividend yield and the expected long-term growth in dividends. Therefore, to best estimate the cost of common equity capital using the conventional DCF model, one must look to long-term growth rate expectations.

Internally generated growth is a function of the percentage of earnings retained within the firm (the earnings retention rate) and the rate of return earned on those earnings (the return on equity). The internal growth rate is computed as the retention rate times the return on equity. Internal growth is significant in determining long-run earnings and, therefore, dividends. Investors recognize the importance of internally generated growth and pay premiums for stocks of companies that retain earnings and earn high returns on internal investments.

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF *VALUE LINE'S* HISTORIC AND PROJECTED GROWTH RATES FOR THE GROUP OF ELECTRIC UTILITY COMPANIES.

A. Historic growth rates for the companies in the group, as published in the *Value Line Investment Survey*, are provided in Panel A, page 3 of Exhibit_(JRW-7). Due to the presence of

outliers among the historic growth rate figures, both the mean and medians are used in the analysis. Historic growth in EPS, DPS, and BVPS for the twenty-one company group, as measured by the means and medians, ranges from -0.6% to 5.07%, with an average of 2.6%.

Projections of EPS, DPS, and BVPS growth for the group are shown in Panel B. As above, due to the presence of outliers, both the mean and medians are used in the analysis. For the group, the average of the means and medians of the projections is 5.0%. Also provided in Panel B is prospective internal growth for the group as measured by *Value Line*'s average projected retention rate and return on shareholders' equity. The average prospective internal growth rate for the group is 4.8%.

Q. PLEASE ASSESS GROWTH FOR THE GROUP AS MEASURED BY ANALYSTS' FORECASTS OF EXPECTED 5-YEAR GROWTH IN EPS.

A. Zacks, First Call, and Reuters collect, summarize, and publish Wall Street analysts' projected 5-year EPS growth rate forecasts for companies. These forecasts are provided for the group of electric utility companies on page 4 of Exhibit_(JRW-7). Since there is considerable overlap in analyst coverage between the three services, I have averaged the expected 5-year EPS growth rates from the three services for each company to arrive at an expected EPS growth rate for each company. For the twenty-one company electric utility group, the average of the projected 5-year EPS growth rates is 5.0%.

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF THE HISTORIC AND PROSPECTIVE GROWTH OF THE GROUP OF ELECTRIC UTILITY COMPANIES.

A. For the company group of electric utility companies, the average of historic growth rate measures in EPS, DPS, and BVPS is 2.6%. Projected growth is higher. The average of *Value Line* projected growth rates and prospective internal growth rates for the group are 5.0% and 4.8%, and the average of the analysts' projected 5-year EPS growth rate forecasts for these companies is 5.0%. Giving greater weight to the projected growth rate figures, an expected growth rate in the range of 4.5-5.0 percent is reasonable. I will use the midpoint of this range – 4.75% - as the expected growth rate for the electric utility group.

Q. BASED ON THE ABOVE, ANALYSIS, WHAT ARE YOUR INDICATED COMMON EQUITY COST RATES FROM THE DCF MODEL FOR THE GROUP?

A. My DCF-derived equity cost rate for the group is:

$$\text{DCF Equity Cost Rate (k)} = \frac{D}{P} + g$$

	Dividend Yield	½ Growth Adjustment	DCF Growth Rate	Equity Cost Rate
Twenty-One Electric Utility Group	4.0%	1.02375	4.75%	8.8%

These results are summarized on page 1 of Exhibit_(JRW-7).

C. CAPITAL ASSET PRICING MODEL RESULTS

Q. PLEASE DISCUSS THE CAPITAL ASSET PRICING MODEL (CAPM).

A. The CAPM is a more general risk premium approach to gauging a firm's cost of equity capital. According to the risk premium approach, the cost of equity is the sum of the interest rate on a risk-free bond (R_f) and a risk premium (RP), as in the following:

$$k = R_f + RP$$

The yield on long-term Treasury securities is normally used as R_f. Risk premiums are measured in different ways. The CAPM is a theory of the risk and expected returns of common stocks. In the CAPM, two types of risk are associated with a stock: firm-specific risk or unsystematic risk; and market or systematic risk, which is measured by a firm's beta. The only risk that investors receive a return for bearing is systematic risk.

According to the CAPM, the expected return on a company's stock, which is also the equity cost rate (K), is equal to:

$$K = (R_f) + ß_{ibm} * [E(R_m) - (R_f)]$$

Where:

- *K* represents the estimated rate of return on the stock;
- $E(R_m)$ represents the expected return on the overall stock market. Frequently, the 'market' refers to the S&P 500;
- (R_f) represents the risk-free rate of interest;
- $[E(R_m) - (R_f)]$ represents the expected equity or market risk premium—the excess return that an investor expects to receive above the risk-free rate for investing in risky stocks; and
- *Beta*—($ß_i$) is a measure of the systematic risk of an asset.

To estimate the required return or cost of equity using the CAPM requires three inputs: the risk-free rate of interest (R_f), the beta ($ß_i$), and the expected equity or market risk premium, $[E(R_m) - (R_f)]$. R_f is the easiest of the inputs to measure – it is the yield on long-term Treasury bonds. $ß_i$, the measure of systematic risk, is a little more difficult to measure because there are different opinions about what adjustments, if any, should be made to historic betas due to their tendency to regress to 1.0 over time. And finally, an even more difficult input to measure is the expected equity or market risk premium, $[E(R_m) - (R_f)]$. I will discuss each of these inputs, with most of the discussion focusing on the expected equity risk premium.

Q. PLEASE DISCUSS EXHIBIT_(JRW-8).

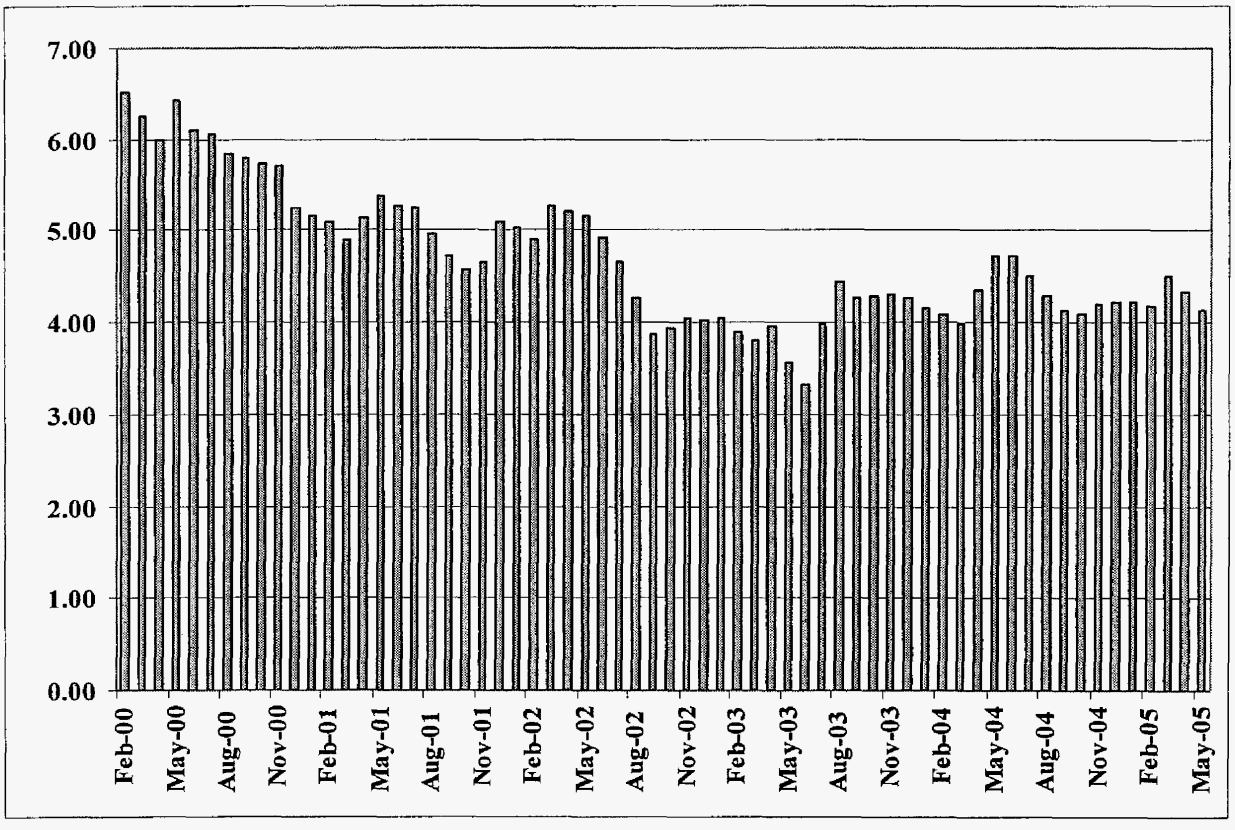
A. Exhibit_(JRW-8) provides the summary results for my CAPM study. Page 1 gives the results, and the following pages contain the supporting data.

Q. PLEASE DISCUSS THE RISK-FREE INTEREST RATE IN YOUR CAPM.

A. The yield on long-term Treasury bonds has usually been viewed as the risk-free rate of interest in the CAPM. The yield on long-term Treasury bonds, in turn, was normally considered to be the yield on Treasury bonds with 30-year maturities. However, in recent years, the yield on 10-year Treasury bonds has replaced the yield on 30-year Treasury bonds as the benchmark long-term Treasury rate. The 10-year Treasury yields over the past five years are shown in the chart below. These rates hit a 60-year low in the summer of 2003 at 3.33%. They increased with the rebounding economy to 4.75% in June of last year, and have since remained in the 4.0-4.50

percent range. As of May 2005, these rates have been near the lower boundry of this range (4.0%). Given this recent range and recent movement, as well as the potential for higher long-term rates, I will use 4.50% as the risk-free rate, or R_f, in my CAPM.

Ten-Year U.S. Treasury Yields
January 2000-May 2005

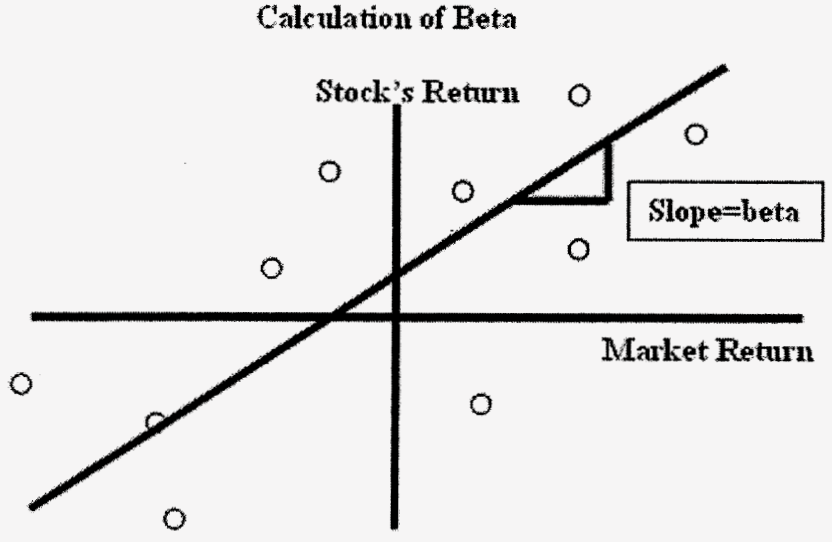


Source: http://www.federalreserve.gov/releases/h15/current/h15.pdf

Q. WHAT BETAS ARE YOU EMPLOYING FOR THE ELECTRIC UTILITY GROUP IN YOUR CAPM?

A. Beta (ß) is a measure of the systematic risk of a stock. The market, usually taken to be

the S&P 500, has a beta of 1.0. The beta of a stock with the same price movement as the market also has a beta of 1.0. A stock whose price movement is greater than that of the market, such as a technology stock, is riskier than the market and has a beta greater than 1.0. A stock with below average price movement, such as that of a regulated public utility, is less risky than the market and has a beta less than 1.0. Estimating a stock's beta involves running a linear regression of a stock's return on the market return as in the following:



The slope of the regression line is the stock's ß. A steeper line indicates the stock is more sensitive to the return on the overall market. This means that the stock has a higher ß and greater than average market risk. A less steep line indicates a lower ß and less market risk.

Numerous online investment information services, such Yahoo and Reuters, provide estimates of stock betas. Usually these services report different betas for the same stock. The

differences are usually due to (1) the time period over which the ß is measured and (2) any adjustments that are made to reflect the fact that betas tend to regress to 1.0 over time. In estimating an equity cost rate for the group of electric utility companies, I am using the average betas for the companies as provided in the *Value Line Investment Survey*. As shown on page 2 of Exhibit_(JRW-8), the average for the eleven company group is 0.78.

Q. PLEASE DISCUSS THE OPPOSING VIEWS REGARDING THE EQUITY RISK PREMIUM.

A. The equity or market risk premium—$[E(R_m) - R_f]$: is equal to the expected return on the stock market (e.g., the expected return on the S&P 500 ($E(R_m)$) minus the risk-free rate of interest (R_f). The equity premium is the difference in the expected total return between investing in equities and investing in "safe" fixed-income assets, such as long-term government bonds. However, while the equity risk premium is easy to define conceptually, it is difficult to measure because it requires an estimate of the expected return on the market.

Q. PLEASE DISCUSS THE ALTERNATIVE APPROACHES TO ESTIMATING THE EQUITY RISK PREMIUM.

A. The table below highlights the primary approaches to, and issues in, estimating the expected equity risk premium. The traditional way to measure the equity risk premium was to use the difference between historic average stock and bond returns. In this case, historic stock and bond returns, also called ex post returns, were used as the measures of the market's expected

return (known as the ex ante or forward-looking expected return). This type of historic evaluation of stock and bond returns is often called the "Ibbotson approach" after Professor Roger Ibbotson who popularized this method of using historic financial market returns as measures of expected returns. Most historic assessments of the equity risk premium suggest an equity risk premium of 5-7 percent above the rate on long-term Treasury bonds. However, this can be a problem because (1) ex post returns are not the same as ex ante expectations, (2) market risk premiums can change over time, increasing when investors become more risk-averse, and decreasing when investors become less risk-averse, and (3) market conditions can change such that ex post historic returns are poor estimates of ex ante expectations.

Risk Premium Approaches

	Historical Ex Post Excess Returns	Surveys	Ex Ante Models and Market Data
Means of Assessing the Equity-Bond Risk Premium	Historical average is a popular proxy for the ex ante premium – but likely to be misleading	Investor and expert surveys can provide direct estimates of prevailing expected returns/premiums	Current financial market prices (simple valuation ratios or DCF-based measures) can give most objective estimates of feasible ex ante equity-bond risk premium
Problems/Debated Issues	Time variation in required returns and systematic selection and other biases have boosted valuations over time, and have exaggerated realized excess equity returns compared with ex ante expected premiums	Limited survey histories and questions of survey representativeness. Surveys may tell more about *hoped-for* expected returns than about objective required premiums due to irrational biases such as extrapolation.	Assumptions needed for DCF inputs, notably the trend earnings growth rate, make even these models' outputs subjective. The range of views on the growth rate, as well as the debate on the relevant stock and bond yields, leads to a range of premium estimates.

Source: Antti Ilmanen, Expected Returns on Stocks and Bonds," *Journal of Portfolio Management*, (Winter 2003).

The use of historic returns as market expectations has been criticized in numerous academic

studies.[6] The general theme of these studies is that the large equity risk premium discovered in historic stock and bond returns cannot be justified by the fundamental data. These studies, which fall under the category "Ex Ante Models and Market Data," compute ex ante expected returns using market data to arrive at an expected equity risk premium. These studies have also been called "Puzzle Research" after the famous study by Mehra and Prescott in which the authors first questioned the magnitude of historic equity risk premiums relative to fundamentals.[7]

Q. PLEASE BRIEFLY SUMMARIZE SOME OF THE NEW ACADEMIC STUDIES THAT DEVELOP EX ANTE EQUITY RISK PREMIUMS.

A. Two of the most prominent studies of ex ante expected equity risk premiums were by Eugene Fama and Ken French (2002) and James Claus and Jacob Thomas (2001). The primary debate in these studies revolves around two related issues: (1) the size of expected equity risk premium, which is the return equity investors require above the yield on bonds; and (2) the fact that estimates of the ex ante expected equity risk premium using fundamental firm data (earnings and dividends) are much lower than estimates using historic stock and bond return data. Fama and French (2002), two of the most preeminent scholars in finance, use dividend and earnings growth models to estimate expected stock returns and ex ante expected equity risk premiums.[8] They compare these results to actual stock returns over the period 1951-2000. Fama and French estimate

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[6] The problems with using ex post historic returns as measure of ex ante expectation will be discussed at length later in my testimony.

[7] Rahnish Mehra and Edward Prescott, "The Equity Premium: A Puzzle," *Journal of Monetary Economic* (1985).

[8] Eugene F. Fama and Kenneth R. French, "The Equity Premium," *The Journal of Finance*, April 2002. This paper may be downloaded from the Internet at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=236590.

that the expected equity risk premium from DCF models using dividend and earnings growth to be between 2.55% and 4.32%. These figures are much lower than the ex post historic equity risk premium produced from the average stock and bond return over the same period, which is 7.40%.

Fama and French conclude that the ex ante equity risk premium estimates using DCF models and fundamental data are superior to those using ex post historic stock returns for three reasons: (1) the estimates are more precise (a lower standard error); (2) the Sharpe ratio, which is measured as the [(expected stock return – risk-free rate)/standard deviation], is constant over time for the DCF models but more than doubles for the average stock-bond return model; and (3) valuation theory specifies relationships between the market-to-book ratio, return on investment, and cost of equity capital that favor estimates from fundamentals. They also conclude that the high average stock returns over the past 50 years were the result of low expected returns and that the average equity risk premium has been in the 3-4 percent range.

The study by Claus and Thomas of Columbia University provides direct support for the findings of Fama and French.[9] These authors compute ex ante expected equity risk premiums over the 1985-1998 period by (1) computing the discount rate that equates market values with the present value of expected future cash flows, and (2) then subtracting the risk-free interest rate. The expected cash flows are developed using analysts' earnings forecasts. The authors conclude that over this period the ex ante expected equity risk premium is in the range of 3.0%. Claus and Thomas note that, over this period, ex post historic stock returns overstate the ex ante expected

equity risk premium because as the expected equity risk premium has declined, stock prices have risen. In other words, from a valuation perspective, the present value of expected future returns increase when the required rate of return decreases. The higher stock prices have produced stock returns that have exceeded investors' expectations and therefore ex post historic equity risk premium estimates are biased upwards as measures of ex ante expected equity risk premiums.

Q. PLEASE PROVIDE A SUMMARY OF THE EX ANTE EQUITY RISK PREMIUM STUDIES.

A. Richard Derrig and Elisha Orr (2003) recently completed the most comprehensive paper to date which summarizes and assesses the many risk premium studies.[10] Appendix B of their study, which provides summary statistics for the different studies, is included as page 3 of Exhibit_(JRW-8). The risk premium studies listed under the 'Social Security' and 'Puzzle Research' sections are primarily ex ante expected equity risk premium studies. Most of these studies are performed by leading academic scholars in finance and economics. A review of the 'ERP Estimate' column in Appendix B of the Derrig and Orr study suggests that the average ex ante equity risk premium estimate is in the 4.0% range.

Q. GIVEN THIS BACKGROUND INFORMATION, HOW WILL YOU ESTIMATE AN EQUITY RISK PREMIUM FOR YOUR CAPM?

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[9] James Claus and Jacob Thomas, "Equity Risk Premia as Low as Three Percent? Empirical Evidence from Analysts' Earnings Forecasts for Domestic and International Stock Market," *Journal of Finance*. (October 2001).
[10] Richard Derrig and Elisha Orr, "Equity Risk Premium: Expectations Great and Small," Working Paper (version 3.0), Automobile Insurers Bureau of Massachusetts, August 28, 2003.

A. My equity risk premium is the average of: (1) the 4.0% average ex ante expected equity risk premiums from the studies covered in the Derrig and Orr (2003) study, and (2) an ex ante expected equity risk premium developed using Ibbotson and Chen's "building blocks methodology."

Q. PLEASE DISCUSS THE EX ANTE EXPECTED EQUITY RISK PREMIUM COMPUTED USING THE "BUILDING BLOCKS METHODOLOGY."

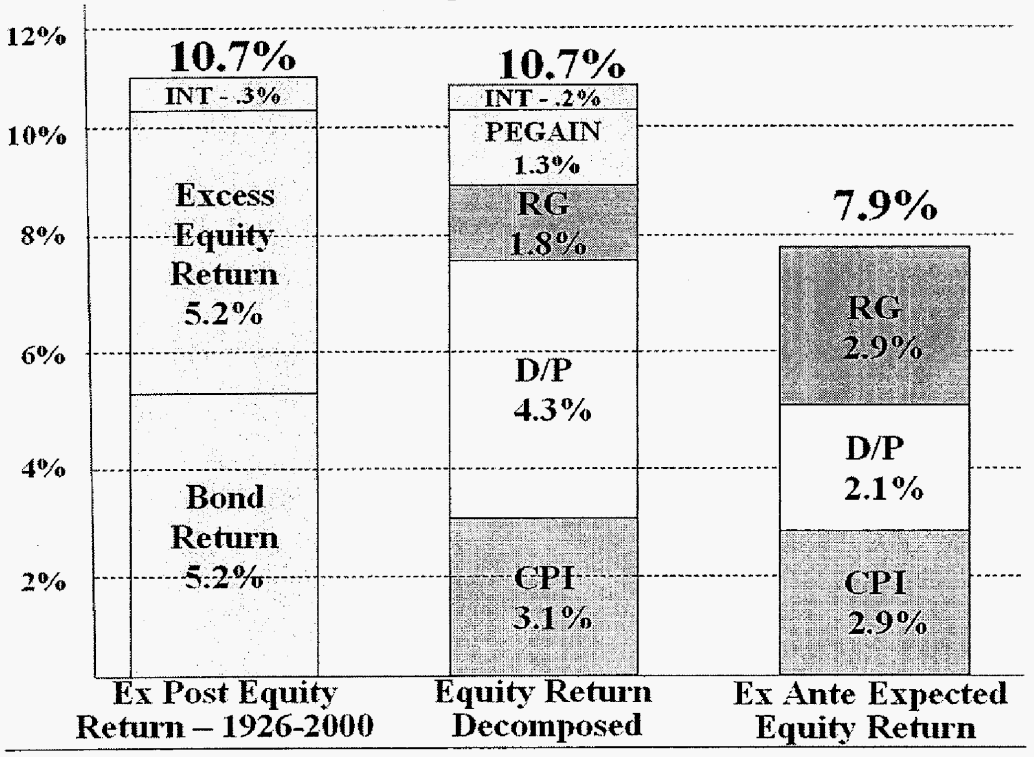
A. Ibbotson and Chen (2002) evaluate the ex post historic mean stock and bond returns in what is called a "building blocks methodology."[11] They use 75 years of data and relate the compounded historic returns to the different fundamental variables employed by different researchers in building ex ante expected equity risk premiums. Among the variables included were inflation, real EPS and DPS growth, ROE and book value growth, and P/E ratios. By relating the fundamental factors to the ex post historic returns, the methodology bridges the gap between the ex post and ex ante equity risk premiums. Ilmanen (2003) illustrates this approach using the geometric returns and five fundamental variables – inflation (CPI), dividend yield (D/P), real earnings growth (RG), repricing gains (PEGAIN) and return interaction/reinvestment (INT). [12] This is shown in the graph below. The first column breaks the 1926-2000 geometric mean stock return of 10.7% into the different return components demanded by investors: the

[11] Roger Ibbotson and Peng Chen, "Long Run Returns: Participating in the Real Economy," *Financial Analysts Journal*, January 2003.

[12] Antti Ilmanen, Expected Returns on Stocks and Bonds," *Journal of Portfolio Management*, (Winter 2003), p. 11.

historic Treasury bond return (5.2%), the excess equity return (5.2%), and a small interaction term (0.3%). This 10.7% annual stock return over the 1926-2000 period can then be broken down into the following fundamental elements: inflation (3.1%), dividend yield (4.3%), real earnings growth (1.8%), repricing gains (1.3%) associated with higher P/E ratios, and a small interaction term (0.2%).

Decomposing Equity Market Returns
The Building Blocks Methodology

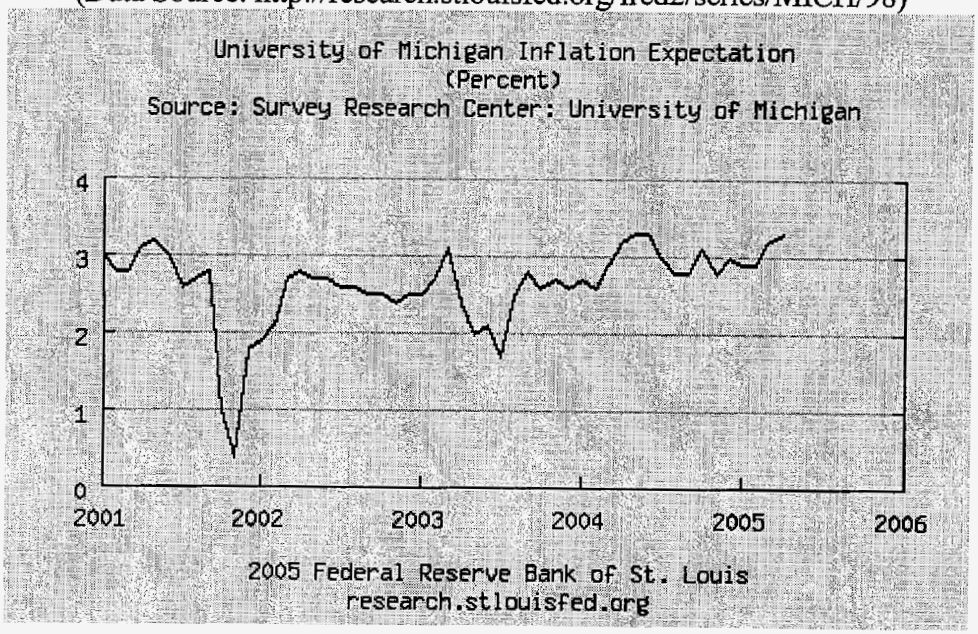


Q. HOW ARE YOU USING THIS METHODOLOGY TO DERIVE AN EX ANTE EXPECTED EQUITY RISK PREMIUM?

A. The third column in the graph above shows current inputs to estimate an ex ante expected market return. These inputs include the following:

CPI – To assess expected inflation, I have employed expectations of the short-term and long-term inflation rate. The graph below shows the expected annual inflation rate according to consumers, as measured by the CPI, over the coming year. This survey is published monthly by the University of Michigan Survey Research Center. In the most recent report, expected one-year ahead inflation rate was 3.3%.

Expected Inflation Rate
University of Michigan Consumer Research
(Data Source: http://research.stlouisfed.org/fred2/series/MICH/98)



Longer term inflation forecasts are available in the Federal Reserve Bank of Philadelphia's

publication entitled *Survey of Professional Forecasters.*[13] This survey of professional economists has been published for almost 50 years. While this survey is published quarterly, only the first quarter survey includes long-term forecasts of GDP growth, inflation, and market returns. In the first quarter, 2005 survey, published on February 14, 2005, the median long-term (10-term) expected inflation rate as measured by the CPI was 2.45% (see page 4 of Exhibit_(JRW-8)).

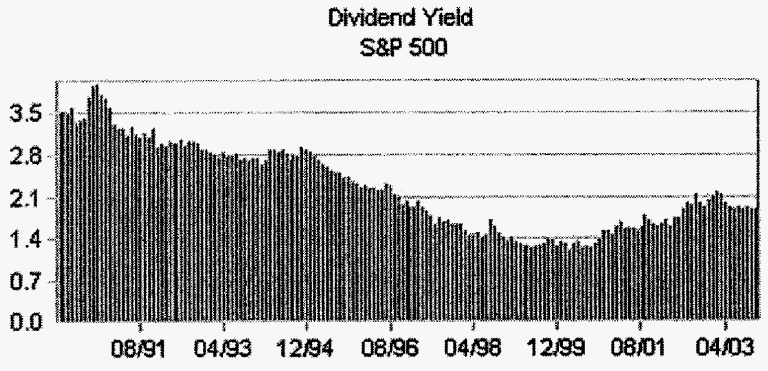
Given these results, I will use the average of the University of Michigan and Philadelphia Federal Reserve's surveys (3.30% and 2.45%), or 2.90%.

D/P – As shown in the graph below, the dividend yield on the S&P 500 has decreased gradually over the past decade. Today, it is far below its norm of 4.3% over the 1926-2000 time period. Whereas the S&P dividend yield bottomed out at less than 1.4% in 2000, it is currently at 2.1% which I use in the ex ante risk premium analysis.

S&P 500 Dividend Yield

(Data Source: http://www.barra.com/Research/fund_charts.asp)

[13]Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters,* February 14, 2005. The *Survey of Professional Forecasters* was formerly conducted by the American Statistical Association (ASA) and the National Bureau of Economic Research (NBER) and was known as the ASA/NBER survey. The survey, which began in 1968, is conducted each quarter. The Federal Reserve Bank of Philadelphia, in cooperation with the NBER, assumed responsibility for the survey in June 1990.



RG – To measure expected real growth in earnings, I use (1) the historic real earnings growth rate for the S&P 500, and (2) expected real GDP growth. The S&P 500 was created in 1960. It includes 500 companies which come from ten different sectors of the economy. Over the 1960-2003 period, nominal growth in EPS for the S&P 500 was 6.88%. On page 5 of Exhibit_(JRW-8), real EPS growth is computed using the CPI as a measure of inflation. As indicated by Ibbotson and Chen, real earnings growth over the 1926-2000 period was 1.8%. The real growth figure over 1960-2003 period for the S&P 500 is 2.5%.

The second input for expected real earnings growth is expected real GDP growth. The rationale is that over the long-term, corporate profits have averaged a relatively consistent 5.50% of US GDP.[14] Real GDP growth, according to McKinsey, has averaged 3.5% over the past 80 years. Expected GDP growth, according to the Federal Reserve Bank of Philadelphia's *Survey of Professional Forecasters,* is 3.3% (see page 4 of Exhibit_(JRW-8)).

Given these results, I will use the average of the historic S&P EPS real growth and the

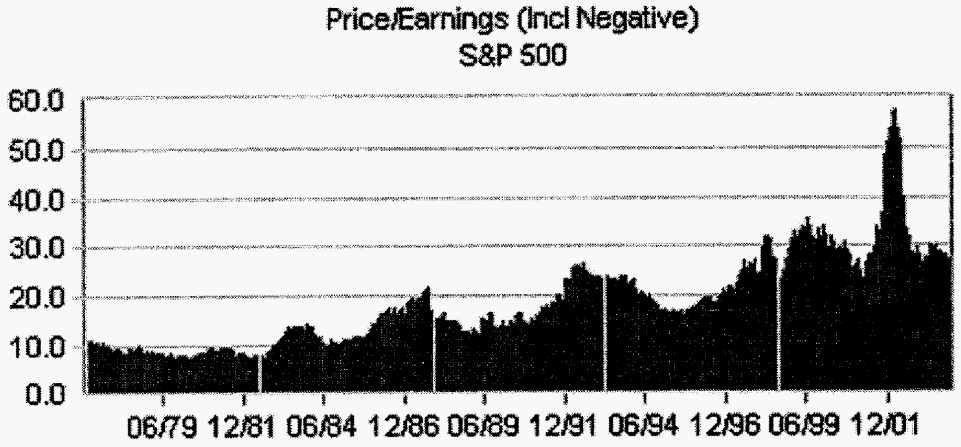
[14]Marc H. Goedhart, Timothy M. Koller, and Zane D. Williams, "The Real Cost of Equity," *McKinsey on Finance* (Autumn 2002), p.14. Available at http://www.corporatefinance.mckinsey.com/.

historic real GDP growth (and as supported by the Philadelphia Federal Reserve survey of expected GDP growth) (2.5% and 3.3%), or 2.9%, for real earnings growth.

PEGAIN – the repricing gains associated with increases in the P/E ratio accounted for 1.3% of the 10.7% annual stock return in the 1926-2000 period. In estimating an ex ante expected stock market return, one issue is whether investors expect P/E ratios to increase from their current levels. The graph below shows the P/E ratios for the S&P 500 over the past 25 years. The run-up and eventual peak in P/Es is most notable in the chart. The relatively low P/E ratios (in the range of 10) over two decades ago are also quite notable. As of May, 2005 the P/E for the S&P 500, using the trailing 12 months EPS, is in the range of 21.0 to 22.0 according to www.investor.reuters.com.

Given the current economic and capital markets environment, I do not believe that investors expect even higher P/E ratios. Therefore, a PEGAIN would not be appropriate in estimating an ex ante expected stock market return. There are two primary reasons for this. First, the average historic S&P 500 P/E ratio is 15 – thus the current P/E exceeds this figure by nDewhurst 50%. Second, as previously noted, interest rates are at a cyclical low not seen in almost 50 years. This is a primary reason for the high current P/Es. Given the current market environment with relatively high P/E ratios and low relative interest rate, investors are not likely to expect to get stock market gains from lower interest rates and higher P/E ratios.

S&P 500 P/E Ratios
(Data Source: http://www.barra.com/Research/fund_charts.asp)



Q. GIVEN THIS DISCUSSION, WHAT IS YOUR EX ANTE EXPECTED MARKET RETURN AND EQUITY RISK PREMIUM USING THE "BUILDING BLOCKS METHODOLOGY"?

A. My expected market return is represented by the last column on the right in the graph entitled "Decomposing Equity Market Returns: The Building Blocks Methodology" found earlier in my testimony. As shown on page 36, my expected market return is 7.90% which is composed of 2.90% expected inflation, 2.10% dividend yield, and 2.90% real earnings growth rate.

Expected Inflation	Dividend Yield	Real Earnings Growth Rate	Expected Market Return
2.90%	2.10%	2.90%	7.9%

Q. GIVEN THAT THE HISTORIC COMPOUNDED ANNUAL MARKET RETURN

IS IN EXCESS OF 10%, WHY DO YOU BELIEVE THAT YOUR EXPECTED MARKET RETURN OF 7.90% IS REASONABLE?

A. As discussed above in the development of the expected market return, stock prices are relatively high at the present time in relation to earnings and dividends and interest rates are relatively low. Hence, it is unlikely that investors are going to experience high stock market returns due to higher P/E ratios and/or lower interest rates. In addition, as shown in the decomposition of equity market returns, whereas the dividend portion of the return was historically 4.3%, the current dividend yield is only 2.1%. Due to these reasons, lower market returns are expected for the future.

Q. IS YOUR EXPECTED MARKET RETURN OF 7.90% CONSISTENT WITH THE FORECASTS OF MARKET PROFESSIONALS?

A. Yes. The only survey of market professionals dealing with forecasts of stock market returns is published by the previously-referenced Federal Reserve Bank of Philadelphia. In the first quarter, 2005 survey, published on February 14, 2005, the median long-term expected return on the S&P 500 was 7.00 (see page 4 of Exhibit_(JRW-8)). This is clDewhurst consistent with my expected market return of 7.90%.

Q. GIVEN THIS EXPECTED MARKET RETURN, WHAT IS YOUR EX ANTE EQUITY RISK PREMIUM USING THE "BUILDING BLOCKS METHODOLOGY"?

A. Previously I noted that I am using a risk-free interest rate of 4.50%. My ex ante equity risk premium is simply the expected market return from the "building blocks methodology" minus this risk-free rate:

Ex Ante Equity Risk Premium = 7.90% - 4.50% = 3.40%

Q. WHAT EQUITY RISK PREMIUM ARE YOU USING IN YOUR CAPM?

A. I am employing the average of the Derrig-Orr mean (4.00%) and my building blocks approach (3.40%), or 3.70%.

Q. IS YOUR EX ANTE EQUITY RISK PREMIUM CONSISTENT WITH THE EQUITY RISK PREMIUMS OF LEADING INVESTMENT FIRMS?

A. Yes. One of the first studies in this area was by Stephen Einhorn, one of Wall Street's leading investment strategists.[15] His study showed that the market or equity risk premium had declined to the 2.0 to 3.0 percent range by the early 1990s. Among the evidence he provided in support of a lower equity risk premium is the inverse relationship between real interest rates (observed interest rates minus inflation) and stock prices. He noted that the decline in the market risk premium has led to a significant change in the relationship between interest rates and stock prices. One implication of this development was that stock prices had increased higher than would be suggested by the historic relationship between valuation levels and interest rates.

The equity risk premiums of some of the other leading investment firms today support the

[15] Steven G. Einhorn, "The Perplexing Issue of Valuation: Will the Real Value Please Stand Up?" *Financial Analysts Journal* (July-August 1990), pp. 11-16.

result of the academic studies. An article in *The Economist* indicated that some other firms like J.P. Morgan are estimating an equity risk premium for an average risk stock in the 2.0 to 3.0 percent range above the interest rate on U.S. Treasury Bonds.[16]

Q. IS YOUR EX ANTE EQUITY RISK PREMIUM CONSISTENT WITH THE EQUITY RISK PREMIUMS USED BY CORPORATE CHIEF FINANCIAL OFFICERS (CFOs)?

A. Yes. John Graham and Campbell Harvey of Duke University surveyed CFOs to ascertain their ex ante equity risk premium. In Graham and Harvey's 2003 survey, the average ex ante 10-year equity risk premium of the CFOs was 3.8%.[17]

Q. IS YOUR EX ANTE EQUITY RISK PREMIUM CONSISTENT WITH THE EX ANTE EQUITY RISK PREMIUMS OF PROFESSIONAL FORECASTERS?

A. Yes. The financial forecasters in the previously-referenced Federal Reserve Bank of Philadelphia survey project both stock and bond returns. As shown on page 4 of Exhibit_(JRW-8)), the median long-term expected stock and bond returns were 7.00% and 5.00%, respectively. This provides an ex ante equity risk premium of 2.00%.

Q. IS YOUR EX ANTE EQUITY RISK PREMIUM CONSISTENT WITH THE EQUITY RISK PREMIUMS USED BY THE LEADING CONSULTING FIRMS?

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[16] For example, see "Welcome to Bull Country," *The Economist* (July 18, 1998), pp. 21-3, and "Choosing the Right Mixture," *The Economist* (February 27, 1999), pp. 71-2.

[17] John R. Graham and Campbell Harvey, "Expectations of Equity Risk Premia, Volatility, and Asymmetry," Duke University Working Paper, 2003.

A. Yes. McKinsey & Co. is widely recognized as the leading management consulting firm in the world. They recently published a study entitled "The Real Cost of Equity" in which they developed an ex ante equity risk premium for the US. In reference to the decline in the equity risk premium, as well as what is the appropriate equity risk premium to employ for corporate valuation purposes, the McKinsey authors concluded the following:

> We attribute this decline not to equities becoming less risky (the inflation-adjusted cost of equity has not changed) but to investors demanding higher returns in real terms on government bonds after the inflation shocks of the late 1970s and early 1980s. We believe that using an equity risk premium of 3.5 to 4 percent in the current environment better reflects the true long-term opportunity cost of equity capital and hence will yield more accurate valuations for companies.[18]

Q. WHAT EQUITY COST RATE IS INDICATED BY YOUR CAPM ANALYSIS?

A. This is summarized on page 1 of Exhibit_(JRW-8). Using a risk-free rate of 4.50% and a beta of 0.78 for twenty-one company electric utility group, my CAPM estimated equity cost rate is:

$$K = (R_f) + \beta_{ibm} * [E(R_m) - (R_f)]$$

	Risk-Free Rate	Beta	Equity Risk Premium	Equity Cost Rate
Twenty-One Company Electric Utility Group	4.50%	0.78	3.70%	7.39%

[18]Marc H. Goedhart, Timothy M. Koller, and Zane D. Williams, "The Real Cost of Equity," *McKinsey on Finance* (Autumn 2002), p.15. Available at http://www.corporatefinance.mckinsey.com/.

D. EQUITY COST RATE SUMMARY

Q. PLEASE SUMMARIZE YOUR EQUITY COST RATE STUDY.

A. The results for my DCF and CAPM analyses for the group of electric utility companies are indicated below:

Group	DCF	CAPM
Twenty-One Company Electric Utility Group	8.8%	7.39%

Q. GIVEN THESE RESULTS, WHAT EQUITY COST RATE RECOMMENDATION ARE YOU MAKING FOR FPL?

A. Giving primary weight to the DCF results, these results indicate that a fair equity cost rate for FPL is 8.8%. I will use this figure as the equity cost rate for the Company.

Q. HAVE YOU MADE ANY ADJUSTMENTS TO RECOGNIZE THE LOWER FINANCIAL RISK INCUMBENT IN FPL'S PROPOSED CAPITAL STRUCTURE?

A. No. As discussed below, FPL's proposed capitalization contains much less financial risk than the peer group of electric utilities. However, I am not making any explicit downward adjustments to my equity cost rate to reflect the lower financial risk. Hence, my recommendation is very fair in light of my adoption of FPL's capital structure.

Q. ISN'T YOUR RECOMMENDED RETURN LOW BY HISTORIC STANDARDS?

A. Yes it is, and appropriately so. My recommended rate of return is low by historic standards for three reasons. First, as discussed above, current capital costs are very low by historic standards, with interest rates at a cyclical low not seen since the 1960s. Second, the 2003 tax law, which reduces the tax rates on dividend income and capital gains, lowers the pre-tax return required by investors. And third, as discussed below, the equity or market risk premium has declined.

Q. FINALLY, PLEASE DISCUSS THIS RECOMMENDATION IN LIGHT OF RECENT YIELDS ON 'A' RATED PUBLIC UTILITY BONDS.

A. In recent months the yields on long-term 'A' rated public utility bonds have been in the 5.25 percent range. My equity return recommendation of 8.8% may appear to be too low given these yields. However, as previously noted, my recommendation must be viewed in the context of the significant decline in the market or equity risk premium. As a result, the return premium that equity investors require over bond yields is much lower than today. This decline was previously reviewed in my discussion of capital costs in today's markets. In addition, it will be examined in more depth in my critique of Dr. Avera's testimony.

Q. HOW DO YOU TEST THE REASONABLENESS OF YOUR 8.8% RECOMMENDATION?

A. To test the reasonableness of my 8.8% recommendation, I examine the relationship between the return on common equity and the market-to-book ratios for the group of electric utility companies.

Q. WHAT DO THE RETURNS ON COMMON EQUITY AND MARKET-TO-BOOK

RATIOS FOR THE GROUP INDICATE ABOUT THE REASONABLENESS OF YOUR 8.8% RECOMMENDATION?

A. Exhibit_(JRW-3) provides financial performance and market valuation statistics for the group of electric utility companies. The average current returns on equity and market-to-book ratios for the group are 11.0% and 1.64, respectively. These results clearly indicate that, on average, these companies are earning returns on equity significantly above their equity cost rates. As such, this observation provides evidence that my recommended equity cost rate of 8.8% is reasonable and fully consistent with the financial performance and market valuation of the gas companies.

V. CRITIQUE OF FPL'S RATE OF RETURN TESTIMONY

Q. PLEASE SUMMARIZE FPL'S OVERALL RATE OF RETURN RECOMMENDATION.

A. Mr. Dewhurst develops the company's proposed capital structure and senior capital cost rates, and Dr. Avera has recommended the equity cost rate. FPL's proposed rate of return is:

Capital Source	Ratio	Cost Rate	Weighted Cost Rate
Short-Term Debt	0.55%	8.73%	0.048%
Long-Term Debt	43.62%	5.89%	2.569%
Common Equity	55.83%	11.8%	6.04%
Total	100.00%		9.81%

Q. PLEASE EVALUATE THE COMPANY'S RATE OF RETURN POSITION.

A. The proposed rate of return is too high due to an inflated long-term debt cost rate and an overstated equity cost rate. Mr. Dewhurst's long-term debt cost rate of 5.89% includes four projected financings at interest rates well above current market yields. Dr. Avera's recommended return on common equity of 11.8% is unreasonably high due to (1) an upwardly-biased expected growth rate in his DCF equity cost rate, (2) the use of a forecasted interest rates that are well above current long-term market yields, (3) excessive risk premium estimates in his various risk premium approaches, and (4) the lack of a adjustment to reflect FPL's lower financial risk as well as an inappropriate flotation cost adjustment.

Q. WHAT ISSUES ARE YOU ADDRESSING IN YOUR REBUTTAL TESTIMONY?

A. I am addressing the following issues: (1) Mr. Dewhurst's proposed long-term debt cost rate and capital structure, and (2) Dr. Avera's equity cost rate approaches and results.

Long-Term Debt Cost Rate and Capital Structure

Q. WHY IS MR. DEWHURST'S LONG-TERM DEBT COST RATE INAPPROPRIATE

A. Mr. Dewhurst's long-term debt cost rate of 5.89% is excessive because of it includes four proforma debt offerings with projected yields well above current market interest rates. These debt issues, listed as First Mortgage bond issues number 9, 10, 11, and 12 on page 2 of Exhibit_(JRW-

4), have projected yields of 6.8%, 6.8%, 7.2%, and 7.2%, respectively. As discussed above, the yield on A-rated public utility bonds is now below 5.25%.

Q. PLEASE DISCUSS THE COMPANY'S PROPOSED CAPITAL STRUCTURE RATIOS.

A. FPL's proposed capital structure includes an adjusted common equity ratio of 55.83% which was used for limited purposes in FPL's 1999 Stipulation and Settlement Agreement between FPL and the OPC. This ratio is adjusted to reflect the Company's fixed charges associated with purchased power contracts. As discussed above, FPL's actual common equity ratio is 61.92%. Both the actual and adjusted common equity ratios are high by industry standards.

Q. BETWEEN PAGES 60 AND 73 OF HIS TESTIMONY, DR. AVERA ATTEMPTS TO JUSTIFY FPL'S PROPOSED CAPITAL STRUCTURE. PLEASE COMMENT.

A. Dr. Avera's attempts to demonstrate that FPL's proposed capital structure is similar to that of the peer group of electric utilities from which he estimates FPL's cost of common equity. Unfortunately, his analysis is seriously flawed and erroneous. The errors in his analysis include:

1. He uses the capital structures of the operating electric utilities and not the capital structures of the parent companies whose common stock trades in the market. Hence, he is comparing 'apples and oranges;'

2. His analysis excludes short-term debt; and

3. Whereas FPL's capitalization has been adjusted for fixed charges associated with purchased power contracts, the capital structures of the operating electric utilities have not.

To assess the magnitude of the differences in the capital structures, I have provided a comparison in the table below. The comparison shows the following capital structures: FPL's adjusted and actual, the operating electric utilities, and the publicly-traded electric companies (as found on page 1 of Exhibit_(JRW-9). The differences are dramatic. FPL's actual capital structure has a common equity ratio (61.92%) which is 17 percentage points above that of the publicly-traded electric companies.

Florida Power & Light Company
Capital Structure Study

Capital Source	FPL's Adjusted Capital Structure	FPL's Actual Capital Structure	Operating Co. Capital Structure	Publicly-Traded Capital Structure
Short-Term Debt	0.55%	0.61%	0.6%%	6.5%
Long-Term Debt	43.62%	37.47%	45.1%	47.9%
Preferred Stock			2.5	1.6%
Common Equity	55.83%	61.92%	51.8%	44.0%

Q. WHAT DOES THIS INDICATE ABOUT FPL'S CAPITALIZATION RELATIVE TO THAT OF THE PEER GROUP OF ELECTRIC COMPANIES?

A. This clearly shows that FPL's common equity ratio is significantly higher that that of the average of the peer group of publicly-traded electric utilities that are used to determine FPL's cost of equity capital. In fact, as indicated by Dr. Avera, FPL's debt ratio is below the S&P standards for A-rated electric utilities. Overall, this indicates that FPL has less financial risk than the peer group.

Equity Cost Rate Approaches and Results

Q. PLEASE REVIEW DR. AVERA'S EQUITY COST RATE APPROACHES.

A. Dr. Avera employs a DCF approach and various risk premium approaches, including analyses of allowed returns and realized rates of returns as well as an application of the CAPM using forward looking and historic equity risk premiums.

Q. PLEASE SUMMARIZE DR. AVERA'S EQUITY COST RATE RESULTS.

A. Dr. Avera's equity cost rate estimates for FPL are summarized below:

Summary of Equity Cost Rate Approaches and Results

Approach	Period	Result
DCF		
	Current	9.4%
Risk Premium		
Authorized Returns	Current	10.6%
Authorized Returns	Test Year	11.3%
Historic Returns	Current	9.7%
Historic Returns	Test Year	10.9%
CAPM - Forward Looking	Current	11.8%
CAPM - Forward Looking	Test Year	12.0%
CAPM – Historic	Current	10.1%
CAPM – Historic	Test Year	11.3%

Based on these figures, he concludes that the appropriate equity cost rate for FPL is 11.8%.

Q. WHAT ARE THE PRIMARY ERRORS IN DR. AVERA'S ANALYSES.

A. Dr. Avera's recommended return on equity of 11.8% is unreasonably high due to (1) an upwardly-biased expected growth rate in his DCF equity cost rate, (2) the use of forecasted interest

rates that are well in excess of the current long-term market yields, (3) excessive risk premium estimates in his various risk premium approaches, and (4) the lack of a financial risk adjustment as well as an inappropriate flotation cost adjustment.

Q. PLEASE INITIALLY ADDRESS ISSUE (4) INVOLVING THE ADJUSTMENTS. DOES DR. AVERA MAKE A FINANCIAL RISK ADJUSTMENT FOR FPL?

A. No. Furthermore, as discussed above, since his financial risk study is so flawed, he does not even acknowledge or recognize the difference in financial risk between FPL and his group of electric utilities. The bottom line is that FPL's has less financial risk than the electric utility group, and hence Dr. Avera should recognize the difference and provide for a lower return on common equity.

Q. PLEASE ADDRESS DR. AVERA'S CONTENTION THAT FPL REQUIRES A 30 BASIS POINT ADJUSTMENT TO THE OVERALL ROE FOR EQUITY FLOTATION COSTS.

A. Dr. Avera also argues that FPL deserves an extra 30 basis points for flotation costs. Based on FPL's proposed rate base and rate of return, this adds about $20M in revenues annually to account for flotation cost. Such an adjustment is totally unwarranted. Flotation costs are one-time expenses which are incurred when a Company sells additional stock. They are not a recurring annual item. Furthermore, Dr. Avera has not even indicated if FPL intends to sell additional shares to investors. If so, the flotation costs should be accounted for and added to the Company's rate request just like other expenses.

Q. PLEASE SUMMARIZE DR. AVERA'S DCF ESTIMATES.

A. On pages 30 to 41 of his testimony and in Documents WEA-3, WEA-4, and WEA-5, Dr. Avera performs a DCF analysis using his electric utility proxy group The three models and their results are summarized below.

. DCF Results
Electric Company Proxy Group

		Model (1) L-T Growth GDP Forecasts
Dividend Yield		4.1%
Growth		
Projected EPS Growth	4.9%	
Sustainable Growth	5.6%	
Average		5.3%
DCF Equity Cost Rate		**9.4%**

Q. PLEASE ASSESS DR. AVERA'S DCF APPROACH.

A. Initially it should be highlighted that Dr. Avera appears to have given little weight to his DCF results in arriving at his recommended equity cost rate for FPL. His overall designated range of 10.0-12.0 percent is above the results of his DCF study. Furthermore, his DCF study is subject

to errors that inflate his results. His specific errors include: (1) he has relied on analysis' forecasts of EPS growth and (2) his sustainable growth figure is excessive and overstated.

Q. PLEASE DISCUSS GROWTH AS INDICATED BY ANALYSTS' EPS GROWTH RATE FORECASTS.

A. Dr. Avera has used the EPS growth rate forecasts of Wall Street analysts. He has ignored other indicators of expected growth, especially historic growth. It seems highly unlikely that investors today would rely exclusively on the forecasts of securities firms and analysts, and ignore historic growth, in arriving at expected growth. In the academic world, the fact that the EPS forecasts of securities' analysts are overly optimistic and biased upwards has been known for years.

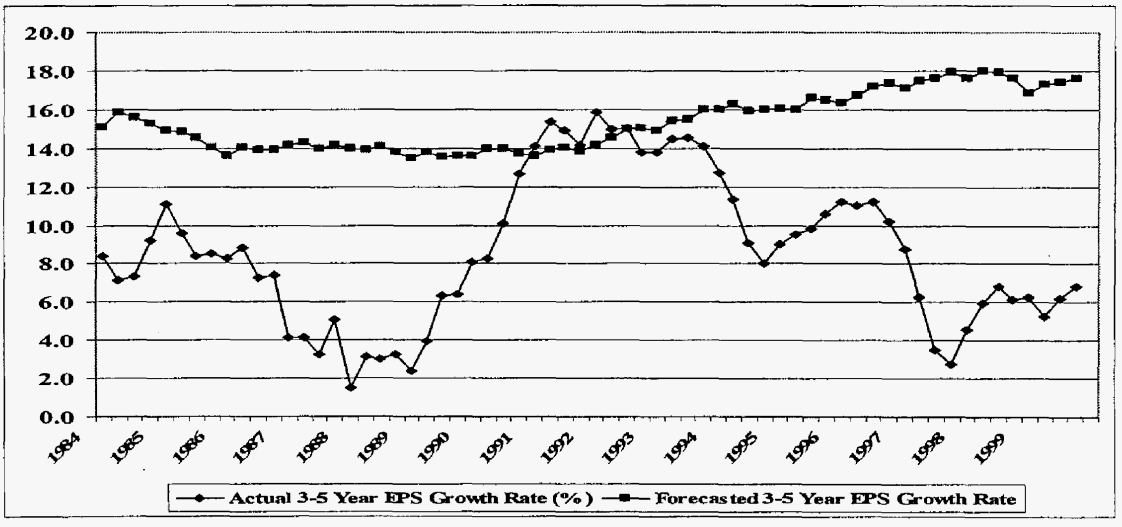
Q. PLEASE REVIEW THE BIAS IN ANALYSTS' GROWTH RATE FORECASTS.

A. Analysts' growth rate forecasts are collected and published by Zacks, First Call, I/B/E/S, and Reuters. These services retrieve and compile EPS forecasts from Wall Street Analysts. These analysts come from both the sell side (Merrill Lynch, Paine Webber) and the buy side (Prudential Insurance, Fidelity).

The problem with using these forecasts to estimate a DCF growth rate is that the objectivity of Wall Street research has been challenged, and many have argued that analysts' EPS forecasts are overly optimistic and biased upwards. To evaluate the accuracy of analysts' EPS forecasts, I have compared actual 3-5 year EPS growth rates with forecasted EPS growth rates on a quarterly basis over the past 20 years for all companies covered by the I/B/E/S data base. In the graph below, I show the average analysts' forecasted 3-5 year EPS growth rate with the average

actual 3-5 year EPS growth rate. Because of the necessary 3-5 year follow-up period to measure actual growth, the analysis in this graph only (1) covers forecasted and actual EPS growth rates through 1999, and (2) includes only companies that have 3-5 years of actual EPS data following the forecast period. The following example shows how the results can be interpreted. As of the first quarter of 1995, analysts were projecting an average 3-5-year annual EPS growth rate of 15.98%, but companies only generated an average annual EPS growth rate over the next 3-5 years of 8.14%. This 15.98% figure represented the average projected growth rate for 1,115 companies, with an average of 4.70 analysts' forecasts per company. The only periods when firms met or exceeded analysts' EPS growth rate expectations were for six consecutive quarters in 1991-92 following the one-year economic downturn at the turn of the decade. Over the entire time period, Wall Street analysts have continually forecasted 3-5-year EPS growth rates in the 14-18 percent range (mean = 15.32%), but these firms have only delivered an average EPS growth rate of 8.75%.

Analysts' Forecasted 3-5-Year Forecasted Versus Actual EPS Growth Rates
1984-1999



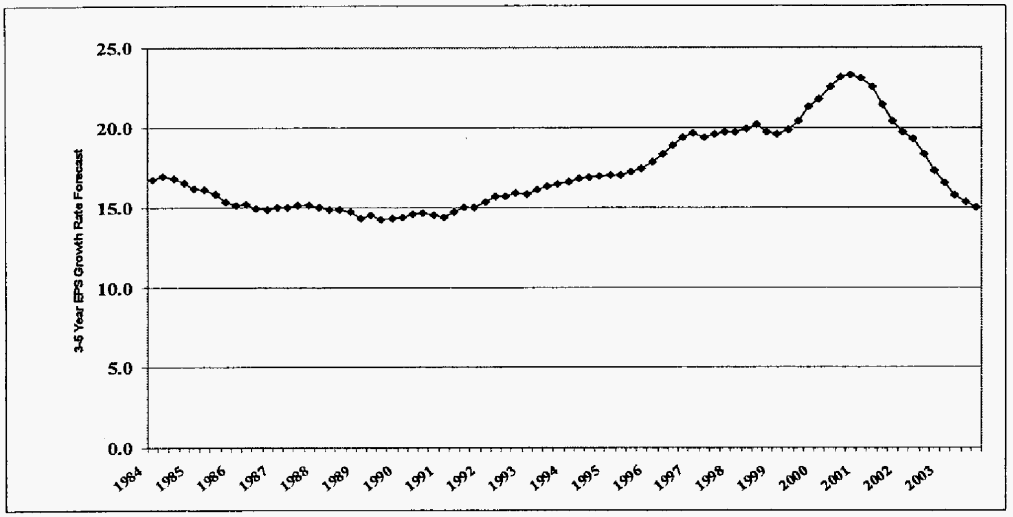
Source: J. Randall Woolridge.

The post-1999 period has seen the boom and then the bust in the stock market, an economic recession, 9/11, and the Iraq war. Furthermore, and highly significant in the context of this study, we have also had the Elliott Spitzer investigation of Wall Street firms and the subsequent Global Securities Settlement in which nine major brokerage firms paid a fine of $1.5B for their biased investment research.

To evaluate the impact of these events on analysts' forecasts, the graph below provides the average 3-5-year EPS growth rate projections for all companies provided in the I/B/E/S database on a quarterly basis from 1985 to 2004. In this graph, no comparison to actual EPS growth rates is made and hence there is no follow-up period. Therefore, 3-5 year growth rate forecasts are shown until 2004 and, since companies are not lost due to a lack of follow-up EPS

data, these results are for a larger sample of firms.[19] Analysts' forecasts for EPS growth were higher for this larger sample of firms, with a more pronounced run-up and then decline around the stock market peak in 2000. The average projected growth rate hovered in the 14.5%-17.5% range until 1995, and then increased dramatically over the next five years to 23.3% in the fourth quarter of the year 2000. Forecasted growth has since declined to the 15.0% range.

Mean Analysts' 3-5-Year Forecasted EPS Growth Rates
1985-2004



Source: J. Randall Woolridge.

While analysts' EPS growth rates forecasts have subsided since 2000, these results suggest that, despite the Elliot Spitzer investigation and the Global Securities Settlement, analysts' EPS forecasts are still upwardly biased. The actual 3-5 year EPS growth rate over time has been about one half the projected 3-5 year growth rate forecast of 15.0%. Furthermore, as discussed above,

[19] The number of companies in the sample grows from 2,220 in 1984, peaks at 4,610 in 1998, and then declines to 3,351 in 2004. The number of analysts' forecasts per company averages between 3.75 to 5.10, with an overall mean of 4.37.

historic growth in GNP and corporate earnings has been in the 7% range. As such, an EPS growth rate forecast of 15% does not reflect economic reality. This observation is support by a *Wall Street Journal* article entitled "Analysts Still Coming Up Rosy – Over-Optimism on Growth Rates is Rampant – and the Estimates Help to Buoy the Market's Valuation." The following quote provides insight into the continuing bias in analysts' forecasts:

> Hope springs eternal, says Mark Donovan, who manages Boston Partners Large Cap Value Fund. 'You would have thought that, given what happened in the last three years, people would have given up the ghost. But in large measure they have not.'
>
> These overly optimistic growth estimates also show that, even with all the regulatory focus on too-bullish analysts allegedly influenced by their firms' investment-banking relationships, a lot of things haven't changed: Research remains rosy and many believe it always will.[20]

Q. ARE *VALUE LINE*'S GROWTH RATE FORECASTS SIMILARILY UPWARDLY BIASED?

A. I am not aware of any studies that test for a bias in *Value Line*'s forecasts. However, it is my experience that *Value Line*'s projected EPS and overall market return forecasts are inflated and unrealistic. I believe that it is because *Value Line* rarely projects a decline in EPS and/or the market, despite the fact that the economy and stock market go through cycles over time.

Q. PLEASE DISCUSS THE ISSUES WITH DR. AVERA'S SUSTAINABLE GROWTH

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[20] Ken Brown, "Analysts Still Coming Up Rosy – Over-Optimism on Growth Rates is Rampant – and the Estimates Help to Buoy the Market's Valuation." *Wall Street Journal*, (January 27, 2003), p. C1.

ANALYSIS.

A. Dr. Avera's sustainable growth rate analysis, as found in Document WEA-5, indicates a growth rate for the group of 5.6%. I have three issues with this analysis: (1) his average growth rate figure of 5.6% is affected by outliers such as Sempra's 10.7%. In such cases, one uses the median and not the mean as a measure of central tendency. The median figure for his group is only 4.9%; (2) his sustainable growth rate figures (column h in WEA-5) are higher than *Value Line*'s projected annual change figures (column h in WEA-5), which suggests that his methodology is flawed in that it produces higher sustainable growth rates (using *Value Line* data) than *Value Line* actually is forecasting. For example, the median 'Annual Change' figure is only 4.7%; and (3) Dr. Avera's sustainable growth rates are even higher than analysts' projected EPS growth rate figures and, as indicated above, it is well known analysts' growth rates are upwardly biased. Hence, it is unlikely that investors would expect growth to be even higher than analysts' EPS growth rate estimates.

Q. PLEASE PROVIDE A SUMMARY OF DR. AVERA'S VARIOUS RISK PREMIUM APPROACHES, INCLUDING THE CAPM.

A. The tables below provide the results of Dr. Avera's applications of the risk premium approach. Since the CAPM is simply a special form of the risk premium approach, I will critique these approaches and results jointly. These tables provide the group of companies employed, the individual inputs, and the overall results.

Allowed Risk Premium Results
Electric Utility Companies

	Electric Utility Companies Current	Electric Utility Companies 2006 Estimate
Moody's A Bond Rate	5.8%	7.0%
Allowed Return Premium	4.8 %	4.29 %
Allowed RP Equity Cost Rate	**10.6%**	**11.3%**

Historic Risk Premium Results
Moody's Electric Utility Stocks

	Moody's Electric Utility Stocks Current	Moody's Electric Utility Stocks 2006
	5.8%	7.0%
Historic Return Premium	3.87%	3.78%
Hist Equity Cost Rate	9.7%	10.9%

CAPM Forward Results
Electric Utility Proxy Group

	Electric Utility Proxy Group Current	Electric Utility Proxy Group 2006
Risk-Free Rate	4.6%	5.8%
Average Beta	.77	.77
Market Risk Premium	9.3%	8.1%
Equity Cost Rate	11.8%	12.0%

CAPM Historic Results
Electric Utility Proxy Group

	Electric Utility Proxy Group Current	Electric Utility Proxy Group 2006
Risk-Free Rate	4.6%	5.8%
Average Beta	.77	.77
Market Risk Premium	7.2%	7.2%
Equity Cost Rate	10.1%	11.3%

Q. HOW ARE YOU EVALUATING THESE APPROACHES?

A. There are certain common elements to these approaches that I am initially discussing. Then I provide additional commentary on the individual approaches. The common elements include the base interest rate and the use of historic risk premiums.

Q. PLEASE DISCUSS THE BASE INTEREST RATE IN DR. AVERA'S VARIOUS RISK PREMIUM APPROACHES.

A. Dr. Avera uses the 30-tear Treasury rate as well as the 30-year Moody's A bond rate as the base yield in his various risk premium approaches. These are summarized below. The 'Current' column is the rate when he filed his testimony, the '2006' column is projected for 2006, and 'May 31, 2006' column is as of that date.

Base Interest Rate in Risk Premium Approaches

	Approach	Current	2006	May 31, 2006*
30-Year Moody's A Bond Rate	Auth. Returns Historic Ret.	5.8%	7.0%	5.16%
30-Year Treasury Rate	CAPM Forward CAPM Historic	4.6%%	5.8%	4.31%

*** Source: Bloomberg**

Q. ARE THESE BASE YIELDS APPROPRIATE AT THIS TIME?

A. No. They are well in excess of today's interest rates. Contrary to many interest rate forecasts, concerns over the direction of the economy have led to declines in interest rates in recent months. The 'May 31, 2006' column shows that the 30-Year public utility A rate has declined to 5.16% and the 30-year Treasury rate has declined to 4.31%. Hence, his base yields and therefore overall risk premium equity cost rates are grossly overstated. Given the uncertainty over the

economy and interest rates, he should be employing the current 30-year public utility and Treasury yields.

Q. PLEASE ADDRESS THE ISSUE INVOLVING THE USE OF HISTORIC STOCK AND BOND RETURNS TO COMPUTE A FORWARD-LOOKING OR EX ANTE RISK PREMIUM.

A. In his Realized Rate of Return (RRR) and 'CAPM Historic' approaches Dr. Avera has used historic stock and bond returns to compute an expected market risk premium. In his RRR approach, he computes a risk premium as the difference between the returns on the Moody Electric Utility stocks and the yield on 'A' rated Moody's bonds. In his CAPM Historic approach, he computes the equity risk premium as the historic arithmetic mean difference between stock and bond returns over the 1926-2003 period bonds. This historic evaluation of stock and bond returns is often called the "Ibbotson approach" after Professor Roger Ibbotson who popularized this method of assessing historic financial market returns

Using the historic relationship between stock and bond returns to measure an ex ante equity risk premium is erroneous and, especially in this case, overstates the true market equity risk premium. The equity risk premium is based on expectations of the future and when past market conditions vary significantly from the present, historic data does not provide a realistic or accurate barometer of expectations of the future. At the present time, using historic returns to measure the ex ante equity risk premium ignores current market conditions and masks the dramatic change in the risk and return relationship between stocks and bonds. This change suggests that the equity risk

premium has declined.

Q. PLEASE DISCUSS THE ERRORS IN USING HISTORIC STOCK AND BOND RETURNS TO ESTIMATE AN EQUITY RISK PREMIUM.

A. There are a number of flaws in using historic returns over long time periods to estimate expected equity risk premiums. These issues include:

(A) Biased historic bond returns;

(B) The arithmetic versus the geometric mean return;

(C) Unattainable and biased historic stock returns;

(D) Survivorship bias;

(E) The "Peso Problem;"

(F) Market conditions today are significantly different than the past; and

(G) Changes in risk and return in the markets.

These issues will be addressed in order.

Biased Historic Bond Returns

Q. HOW ARE HISTORIC BOND RETURNS BIASED?

A. An essential assumption of these studies is that over long periods of time investors' expectations are realized. However, the experienced returns of bondholders in the past violate this critical assumption. Historic bond returns are biased downward as a measure of expectancy because of capital losses suffered by bondholders in the past. As such, risk premiums derived from

this data are biased upwards.

The Arithmetic versus the Geometric Mean Return

Q. PLEASE DISCUSS THE ISSUE RELATING TO THE USE OF THE ARITHMETIC VERSUS THE GEOMETRIC MEAN RETURNS IN THE IBBOTSON METHODOLOGY.

A. The measure of investment return has a significant effect on the interpretation of the risk premium results. When analyzing a single security price series over time (i.e., a time series), the best measure of investment performance is the geometric mean return. Using the arithmetic mean overstates the return experienced by investors. In a study entitled "Risk and Return on Equity: The Use and Misuse of Historical Estimates," Carleton and Lakonishok make the following observation: "The geometric mean measures the changes in wealth over more than one period on a buy and hold (with dividends invested) strategy."[21] Since Dr. Avera's study covers more than one period (and he assumes that dividends are reinvested), he should be employing the geometric mean and not the arithmetic mean.

Q. PLEASE PROVIDE AN EXAMPLE DEMONSTRATING THE PROBLEM WITH USING THE ARITHMETIC MEAN RETURN.

A. To demonstrate the upward bias of the arithmetic mean, consider the following example. Assume that you have a stock (that pays no dividend) that is selling for $100 today, increases to

[21] Willard T. Carleton and Josef Lakonishok, "Risk and Return on Equity: The Use and Misuse of Historical Estimates," *Financial Analysts Journal* (January-February, 1985), pp. 38-47.

$200 in one year, and then falls back to $100 in two years. The table below shows the prices and returns.

Time Period	Stock Price	Annual Return
0	$100	
1	$200	100%
2	$100	-50%

The arithmetic mean return is simply (100% + (-50%))/2 = 25% per year. The geometric mean return is $((2 * .50)^{(1/2)}) - 1 = 0\%$ per year. Therefore, the arithmetic mean return suggests that your stock has appreciated at an annual rate of 25%, while the geometric mean return indicates an annual return of 0%. Since after two years, your stock is still only worth $100, the geometric mean return is the appropriate return measure. For this reason, when stock returns and earnings growth rates are reported in the financial press, they are generally reported using the geometric mean. This is because of the upward bias of the arithmetic mean. Therefore, Dr. Avera's arithmetic mean return measures are biased and should be disregarded.

Unattainable and Biased Historic Stock Returns

Q. YOU NOTE THAT HISTORIC STOCK RETURNS ARE BIASED USING THE IBBOTSON METHODOLOGY. PLEASE ELABORATE.

A. Returns developed using Ibbotson's methodology are computed on stock indexes and therefore (1) cannot be reflective of expectations because these returns are unattainable to investors,

and (2) produce biased results. This methodology assumes (a) monthly portfolio rebalancing and (b) reinvestment of interest and dividends. Monthly portfolio rebalancing presumes that investors rebalance their portfolios at the end of each month in order to have an equal dollar amount invested in each security at the beginning of each month. The assumption would obviously generate extremely high transaction costs and, as such, these returns are unattainable to investors. In addition, an academic study demonstrates that the monthly portfolio rebalancing assumption produces biased estimates of stock returns.[22]

Transaction costs themselves provide another bias in historic versus expected returns. The observed stock returns of the past were not the realized returns of investors due to the much higher transaction costs of previous decades. These higher transaction costs are reflected through the higher commissions on stock trades, and the lack of low cost mutual funds like index funds.

Survivorship Bias

Q. HOW DOES SURVIVORSHIP BIAS AFFECT DR. AVERA'S HISTORIC EQUITY RISK PREMIUM?

A. Using historic data to estimate an equity risk premium suffers from survivorship bias. Survivorship bias results when using returns from indexes like the S&P 500. The S&P 500 includes only companies that have survived. The fact that returns of firms that did not perform so well were dropped from these indexes is not reflected. Therefore these stock returns are upwardly

[22] See Richard Roll, "On Computing Mean Returns and the Small Firm Premium," *Journal of Financial Economics* (1983), pp. 371-86.

biased because they only reflect the returns from more successful companies.

The "Peso Problem"

Q. WHAT IS THE "PESO PROBLEM" AND HOW DOES IT AFFECT HISTORIC RETURNS AND EQUITY RISK PREMIUMS?

A. Dr. Avera's use of historic return data also suffers from the so-called "peso problem." The 'peso problem' issue was first highlighted by the Nobel laureate, Milton Friedman, and gets its name from conditions related to the Mexican peso market in the Dewhurst 1970s. This issue involves the fact that past stock market returns were higher than were expected at the time because despite war, depression, and other social, political, and economic events, the US economy survived and did not suffer hyperinflation, invasion, and the calamities of other countries. As such, highly improbable events, which may or may not occur in the future, are factored into stock prices, leading to seemingly low valuations. Higher than expected stock returns are then earned when these events do not subsequently occur. Therefore, the 'peso problem' indicates that historic stock returns are overstated as measures of expected returns.

Market Conditions Today are Significantly Different than in the Past

Q. FROM AN EQUITY RISK PREMIUM PERSPECTIVE, PLEASE DISCUSS HOW MARKET CONDITIONS ARE DIFFERENT TODAY.

A. The equity risk premium is based on expectations of the future. When past market conditions vary significantly from the present, historic data does not provide a realistic or

accurate barometer of expectations of the future. As noted previously, stock valuations (as measured by P/E) are relatively high and interest rates are relatively low, on a historic basis. Therefore, given the high stock prices and low interest rates, expected returns are likely to be lower on a going forward basis.

Changes in Risk and Return in the Markets

Q. PLEASE DISCUSS THE NOTION THAT HISTORIC EQUITY RISK PREMIUM STUDIES DO NOT REFLECT THE CHANGE IN RISK AND RETURN IN TODAY'S FINANCIAL MARKETS.

A. The historic equity risk premium methodology is unrealistic in that it makes the explicit assumption that risk premiums do not change over time based on market conditions such as inflation, interest rates, and expected economic growth. Furthermore, using historic returns to measure the equity risk premium masks the dramatic change in the risk and return relationship between stocks and bonds. The nature of the change, as I will discuss below, is that bonds have increased in risk relative to stocks. This change suggests that the equity risk premium has declined in recent years.

Page 1 of Exhibit_(JRW-10) provides the yields on long-term U.S. Treasury bonds from 1926 to 2004. One very obvious observation from this graph is that interest rates increase dramatically from the mid-1960s until the Dewhurst 1980s, and since have returned to their 1960 levels. The annual market risk premiums for the 1926 to 2004 period are provided on page 2 of Exhibit_(JRW-10). The annual market risk premium is defined as the return on common stock

minus the return on long-term Treasury Bonds. There is considerable variability in this series and a clear decline in recent decades. The high was 54% in 1933 and the low was -38% in 1931. Evidence of a change in the relative riskiness of bonds and stocks is provided on page 3 of Exhibit_(JRW-10) which plots the standard deviation of monthly stock and bond returns since 1930. The plot shows that, whereas stock returns were much more volatile than bond returns from the 1930s to the 1970s, bond returns became more variable than stock returns during the 1980s. In recent years stocks and bonds have become much more similar in terms of volatility, but stocks are still a little more volatile. The decrease in the volatility of stocks relative to bonds over time has been attributed to several stock related factors: the impact of technology on productivity and the new economy; the role of information (see Federal Reserve Chairman Greenspan's comments referred to earlier in this testimony) on the economy and markets; better cost and risk management by businesses; and several bond related factors; deregulation of the financial system; inflation fears and interest rates; and the increase in the use of debt financing. Further evidence of the greater relative riskiness of bonds is shown on page 4 of Exhibit_(JRW-10), which plots real interest rates (the nominal interest rate minus inflation) from 1926 to 2004. Real rates have been well above historic norms during the past 10-15 years. These high real interest rates reflect the fact that investors view bonds as riskier investments.

The net effect of the change in risk and return has been a significant decrease in the return premium that stock investors require over bond yields. In short, the equity or market risk premium has declined in recent years. This decline has been discovered in studies by leading academic

scholars and investment firms, and has been acknowledged by government regulators. As such, using a historic equity risk premium analysis is simply outdated and not reflective of current investor expectations and investment fundamentals.

Q. NOW TURN TO YOUR SPECIFIC COMMENTS ON DR. AVERA'S VARIOUS RISK PREMIUM APPROACHES. PLEASE INITIALLY ASSESS DR. AVERA'S EXAMINATION OF AUTHORIZED RETURNS ON EQUITY.

A. Dr. Avera provides his evaluation of allowed risk premiums on pages 42-46 of his testimony and in Document WEA-6. There are two major issues with this analysis: (1) his 30-year Moody's A rates of 5.8% current and 7.0% for 2006, and (2) his conclusion regarding the appropriate risk premium from the study. The base yield was addressed above as a common issue in his risk premium studies. On the second issue, Dr. Avera's approach involves circular reasoning since the results of other electric rate cases are employed to derive a risk premium in this proceeding. If such an approach is used in this and other jurisdictions, then no one will be testing to evaluate whether the ROE recommendation is above or below investors' required rate of return. Furthermore, Dr. Avera has not performed any analysis to examine whether the annual allowed ROEs are above, equal to, or below investors' required return. As discussed above, if a firm's return on equity is above (below) the return that investor's require, the market price of its stock will be above (below) the book value of the stock. Since Dr. Avera has not evaluated the market-to-book ratios for electric utilities involved in the annual rate cases, he cannot indicate whether these allowed ROEs are above or below investors' requirements. As a general notion, however, since the

market-to-book ratios for electric utility companies have been in excess of 1.0 for some time, it would indicate that the allowed ROE's are above equity cost rates.

Q. PLEASE REVIEW DR. AVERA'S REALIZED RATE OF RETURN OR HISTORIC RISK PREMIUM ANALYSIS.

A. On pages 46 to 48 of his testimony and in Document WEA-8, Dr. Avera performs a realized rate of return or a historic risk premium analysis using Moody's Electric Utility stocks and A-rated bonds. There are three problems with his historic risk premium analysis: (1)) his 30-year Moody's A rates of 5.8% current and 7.0% for 2006, and (2) the historic risk premium methodology. These issues were addressed above as common issues in his risk premium studies.

Q. PLEASE DISCUSS DR. AVERA'S USE OF THE CAPITAL ASSET PRICING MODEL.

A. On pages 48 to 51 of his testimony and in Documents WEA-9 and WEA-10, Dr. Avera applies the CAPM his proxy group of electric utility companies. His CAPM-Historic uses the historic stock-bond return difference as the equity risk premium and his CAPM-Forward approach uses a forward looking equity risk premium. I have three concerns with Dr. Avera's CAPM analyses: (1) his risk-free interest rates of 4.6% current and 5.8% for 2006, (2) the historic risk premium in his CAPM-Historic approach, and (3) the expected risk premium in his CAPM-Forward approach. The first two issues were addressed above as common issues in his risk premium studies. The third is discussed below.

Q. PLEASE DISCUSS THE EXPECTED EQUITY RISK PREMIUM IN DR. AVERA'S

CAPM-FORWARD APPROACH.

A. Dr. Avera has computed an expected equity risk premium of 9.3% using the current risk-free rate of 4.6% and of 8.1% using a projected 2006 risk-free rate of 5.8%. The expected risk premium is based on an expected annual return for the S&P 500 of 13.9%.

Q. PLEASE SUMMARIZE DR. AVERA'S PROSPECTIVE MARKET RETURN OF 13.9%.

A. Dr. Avera computes an expected return of 13.9% for the S&P 500 using a dividend yield of 1.8% and an expected EPS growth rate of 12.1%. The growth rate represents the projected EPS growth rates as provided by IBES for the stocks in the S&P 500.

Q. PLEASE EVALUATE THIS EXPECTED MARKET RETURN of 13.9%.

A. An expected annual market return of 13.9% is out of line with historic norms and is inconsistent with current market conditions. The primary reason is that the expected growth rate of 12.1% is clearly excessive and inconsistent with economic and earnings growth in the U.S.

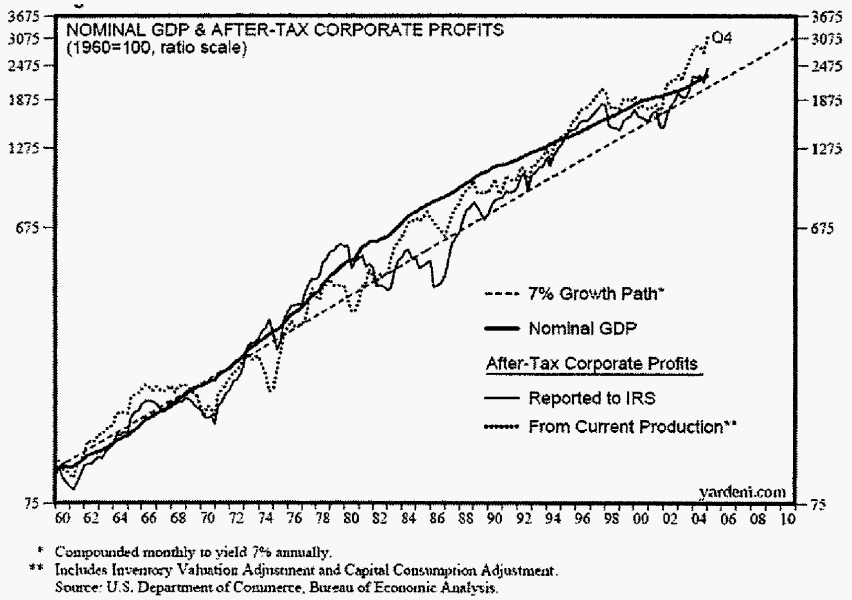
The average historic compounded return on large company stocks in the U.S. has been 10.4% according to the 2005 SBBI Yearbook. To suggest that investors are going to expect a return that is 300 basis points above this is not logical. This is especially so given current market conditions. As discussed above, at the present time stock prices (relative to earnings and dividends) are high while interest rates are historic lows. Major stock market upswings which produce above average returns tend to occur when stock prices are low and interest rates are high. Thus, historic norms and current market conditions do not suggest above average stock returns. Consistent with

this observation, the financial forecasters in the Federal Reserve Bank of Philadelphia survey expect a market return of 7.00% over the next ten years.

Q. WHAT EVIDENCE CAN YOU PROVIDE THAT INDICATES DR. AVERA'S GROWTH RATES IS EXCESSIVE?

A. Dr. Avera's expected EPS growth rate of 12.1% for the S&P 500 is based on analysts' EPS growth rate forecasts, which I previously demonstrated are upwardly biased. Reflecting this upward bias, an expected EPS growth rate of 12.1% is grossly overstates historic economic and earnings growth in the U.S. This is especially true when you consider that in a DCF framework, the growth rate is for a long period of time. The long-term economic and earnings growth rate in the U.S. has only been about 7%. Edward Yardeni, a well-known Wall Street economist, calls this the "7% Solution" to growth in the U.S. The graph below comes from his analysis of GNP and profit growth since 1960.

The 7% Solution
Nominal GNP and Profit Growth since 1960



* Compounded monthly to yield 7% annually.
** Includes Inventory Valuation Adjustment and Capital Consumption Adjustment.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Source: Edward Yardeni, Strategists Handbook, Oak Associates, April 2005

As further evidence of the long-term growth rate in the U.S., I have performed a study of the growth in nominal GNP, S&P 500 stock price appreciation, and S&P 500 EPS and DPS growth since 1960. The results are provided on page 1 of Exhibit_(JRW-9) and a summary is given in the table below.

GNP, S&P 500 Stock Price, EPS, and DPS Growth
1960-Present

Nominal GNP	7.22%
S&P 500 Stock Price Appreciation	7.15%
S&P 500 EPS	7.23%
S&P 500 DPS	5.32%
Average	6.73%

The results offer compelling evidence that a long-run growth rate of about 7% is appropriate for

companies in the U.S. Dr. Avera's long-run growth rate projections are clearly not realistic. His estimates suggest that companies in the U.S. would be expected to (1) nearly double their growth rate of EPS in the future, and (2) maintain that growth indefinitely in an economy that is expected to growth at about one half his projected growth rates. Such a scenario lacks rationale.

Q. PLEASE SUMMARIZE YOUR ASSESSMENT OF DR. AVERA'S CAPM AND RISK PREMIUM ANALYSES.

A. Dr. Avera's risk premium studies are flawed and exaggerate the required return and equity cost rate for FPL. In general, he uses an inflated base yield or interest rate that is well in excess of current market interest rates and his equity risk premium estimates are excessive and do not reflect the realities of the economy and the stock and bond markets. Hence, Dr. Avera's risk premium analyses are erroneous and should be disregarded in estimating FPL's equity cost rate.

Q. PLEASE SUMMARIZE DR. AVERA'S RISK PREMIUM STUDIES IN LIGHT OF THE EVIDENCE ON RISK PREMIUMS IN TODAY'S MARKETS.

A. The primary issue in both his risk premium and CAPM analyses is the magnitude of the equity or market risk premium. Dr. Avera's risk premium estimates should be ignored because they are totally out of line with the equity risk premium estimates (1) discovered in recent academic studies by leading finance scholars and (2) employed by leading investment banks, management consulting firms, financial forecasters and corporate CFOs. In both his risk premium and CAPM studies, a more realistic market risk premium is in the 2-4 percent range above Treasury yields.

Q. PLEASE DISCUSS DR. AVERA'S COMPARABLE EARNINGS ANALYSIS.

A. On page 84 of his testimony, Dr. Avera attempts to justify FPL's equity cost rate request of 12.3% using the comparable earnings (CE) approach. His methodology involves observing the prospective returns on common equity for a group of companies "comparable" in risk to his group of electric utility companies. To determine comparable risk, Dr. Avera used Value Line's 'Safety Ranking" system, and screened *Value Line's* database for companies with a Safety Ranking of 1 or 2 (the average for his electric utility group is 2). In response to OPC POD No. 208, Dr. Avera provided the list of over 283 companies that met the Safety Rank criteria along with the returns on equity projected for 2007-2009.

Q. PLEASE CRITIQUE DR. AVERA'S COMPARABLE EARNINGS ANALYSIS.

A. There are several problems with this methodology and approach. First, it must be emphasized that Dr. Avera has provided no studies to demonstrate why *Value Line*'s safety ranking system is likely to produce a group of companies that are comparable to FPL. A brief review of the companies he viewed as "comparable" to FPL highlights this flaw. These companies include Allergan, Amgen, Baxter International, Bed, Bath, and Beyond, BRE Properties, First Data, Goldman Sachs, IBM, Medtronic, Microsoft, Pitney Bowes, Polaris, Stryker, UnitedHealth Group, and Wyeth. These companies are not only diverse in terms of business but also in terms of size, growth, risk, and performance. It is inconceivable that any investor would conclude that they are 'comparable' to FPL. Furthermore, Dr. Avera has performed no other studies to demonstrate that these companies are comparable to FPL. As such, his methodology is defective.

Furthermore, the CE approach itself is fundamentally flawed. Since Dr. Avera has not

evaluated the market-to-book ratios for these companies, he cannot indicate whether the past and projected returns on common equity are above or below investors' requirements. These returns on common equity are excessive if the market-to-book ratios for these companies are above 1.0. For example, Coca-Cola and Kellogg are two of the 'comparable' companies identified by Dr. Avera. The projected returns on equity for these two companies are 33.0% and 47.0%, respectively. But, it is doubtful that any financial analyst, including Dr. Avera, would suggest that this is the equity cost rates for the company. Indeed, the market-to-book ratio for these companies are in excess of 10X which indicates that the company's return on equity is well above its equity cost rate.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

EDUCATIONAL BACKGROUND, RESEARCH, AND RELATED BUSINESS EXPERIENCE

J. RANDALL WOOLRIDGE

J. Randall Woolridge is a Professor of Finance and the Goldman, Sachs & Co. and Frank P. Smeal Endowed Faculty Fellow in Business Administration in the College of Business Administration of the Pennsylvania State University in University Park, PA. In addition, Professor Woolridge is Director of the Smeal College Trading Room and President and CEO of the Nittany Lion Fund, LLC. He is also a Vice President of the Columbia Group, a public utility consulting firm based in Georgetown, CT, and serves on the Investment Committee of ARIS Corporation, an asset management firm based in State College, PA.

Professor Woolridge received a Bachelor of Arts degree in Economics from the University of North Carolina, a Master of Business Administration degree from the Pennsylvania State University, and a Doctor of Philosophy degree in Business Administration (major area-finance, minor area-statistics) from the University of Iowa. At Iowa he received a Graduate Fellowship and was awarded membership in Beta Gamma Sigma, a national business honorary society. He has taught Finance courses at the University of Iowa, Cornell College, and the University of Pittsburgh, as well as the Pennsylvania State University. These courses include corporation finance, commercial and investment banking, and investments at the undergraduate, graduate, and executive MBA levels.

Professor Woolridge's research has centered on the theoretical and empirical foundations of corporation finance and financial markets and institutions. He has published over 25 articles in the best academic and professional journals in the field, including the *Journal of Finance,* the *Journal of Financial Economics,* and the *Harvard Business Review.* His research has been cited extensively in the business press. His work has been featured in the *New York Times, Forbes, Fortune, The Economist, Financial World, Barron's, Wall Street Journal, Business Week, Washington Post, Investors' Business Daily, Worth Magazine, USA Today*, and other publications. In addition, Dr. Woolridge has appeared as a guest on CNN's *Money Line* and CNBC's *Morning Call* and *Business Today.*

The second edition of Professor Woolridge's popular stock valuation book, *The StreetSmart Guide to Valuing a Stock* (McGraw-Hill, 2003), was recently released. He has also co-authored *Spinoffs and Equity Carve-Outs: Achieving Faster Growth and Better Performance* (Financial Executives Research Foundation, 1999) as well as a new textbook entitled *Modern Corporate Finance, Capital Markets, and Valuation* (Kendall Hunt, 2003). Dr. Woolridge is a founder and a managing director of www.valuepro.net - a stock valuation website.

Professor Woolridge has also consulted with and prepared research reports for major corporations, financial institutions, and investment banking firms, and government agencies. In addition, he has directed and participated in over 500 university- and company- sponsored professional development programs for executives in 25 countries in North and South America, Europe, Asia, and Africa.

Dr. Woolridge has prepared testimony and/or provided consultation services in the following cases:

Pennsylvania: Dr. Woolridge has prepared testimony on behalf of the Pennsylvania Office of Consumer Advocate in the following cases before the Pennsylvania Public Utility Commission:
Bell Telephone Company (R-811819), Peoples Natural Gas Company (R-832315), Pennsylvania Power Company (R-832409), Western Pennsylvania Water Company (R-832381), Pennsylvania Power Company (R-842740), Pennsylvania Gas and Water Company (R-850178), Metropolitan Edison Company (R-860384), Pennsylvania Electric

Company (R-860413), North Penn Gas Company (R-860535), Philadelphia Electric Company (R-870629), Western Pennsylvania Water Company (R-870825), York Water Company (R-870749), Pennsylvania-American Water Company (R-880916), Equitable Gas Company (R-880971), the Bloomsburg Water Co. (R-891494), Columbia Gas of Pennsylvania, Inc. (R-891468), Pennsylvania-American Water Company (R-90562), Breezewood Telephone Company (R-901666), York Water Company (R-901813), Columbia Gas of Pennsylvania, Inc. (R-901873), National Fuel Electric utility Company (R-911912), Pennsylvania-American Water Company (R-911909), Borough of Media Water Fund (R-912150), UGI Utilities, Inc. - Electric Utility Division (R-922195), Dauphin Consolidated Water Supply Company - General Waterworks of Pennsylvania, Inc, (R-932604), National Fuel Electric utility Company (R-932548), Commonwealth Telephone Company (I-920020), Conestoga Telephone and Telegraph Company (I-920015), Peoples Natural Gas Company (R-932866), Blue Mountain Consolidated Water Company (R-932873), National Fuel Gas Company (R-942991), UGI - Gas Division (R-953297), UGI - Electric Division (R-953534), Pennsylvania-American Water Company (R-973944), Pennsylvania-American Water Company (R-994638), Philadelphia Suburban Water Company (R-994868;R-994877;R-994878; R-9948790), Philadelphia Suburban Water Company (R-994868), Wellsboro Electric Company (R-00016356), Philadelphia Suburban Water Company (R-00016750), National Fuel Electric utility Company (R-00038168), Pennsylvania-American Water Company (R-00038304), York Water Company (R-00049165), Valley Energy Company (R-00049345), Wellsboro Electric Company (R-00049313), and National Fuel Electric utility Corporation (R-00049656).

New Jersey: Dr. Woolridge prepared testimony for the New Jersey Department of the Public Advocate, Division of Rate Counsel: New Jersey-American Water Company (R-91081399J), New Jersey-American Water Company (R-92090908J), and Environmental Disposal Corp (R-94070319).

Hawaii: Dr. Woolridge prepared testimony for the Hawaii Office of the Consumer Advocate: East Honolulu Community Services, Inc. (Docket No. 7718).

Delaware: Dr. Woolridge prepared testimony for the Delaware Division of Public Advocate: Artesian Water Company (R-00-649).

Ohio: Dr. Woolridge prepared testimony for the Ohio Office of Consumers' Council: SBC Ohio (Case No. 02-1280-TP-UNC R-00-649).

New York: Dr. Woolridge prepared testimony for the County of Nassau in New York State: Long Island Lighting Company (PSC Case No. 942354).

Connecticut: Dr. Woolridge prepared testimony for the Office of Consumer Counsel in Connecticut: United Illuminating (Docket No. 96-03-29) and Yankee Gas Company (Docket No. 04-06-01).

Kentucky: Dr. Woolridge prepared testimony for the Office of Attorney General in Kentucky: Kentucky-American Water Company (Case No. 2004-00103).

Washington, D.C.: Dr. Woolridge prepared testimony for the Office of the People's Counsel in the District of Columbia: Potomac Electric Power Company (Formal Case No. 939).

Washington: Dr. Woolridge consulted with trial staff of the Washington Utilities and Transportation Commission on the following cases: Puget Energy Corp. (Docket Nos. UE-011570 and UG-011571); and Avista Corporation (Docket No. UE-011514).

Kansas: Dr. Woolridge prepared testimony on behalf of the Kansas Citizens' Utility Ratepayer Board Utilities in the following cases: Western Resources Inc. (Docket No. 01-WSRE-949-GIE) and UtiliCorp (Docket No. 02-UTCG701-CIG).

FERC: Dr. Woolridge has prepared testimony on behalf of the Pennsylvania Office of Consumer Advocate in the following cases before the Federal Energy Regulatory Commission: National Fuel Gas Supply Corporation (RP-92-73-000) and Columbia Gulf Transmission Company (RP97-52-000).

Vermont: Dr. Woolridge prepared testimony for the Department of Public Service in the Central Vermont Public Service Case (Docket No. 6988).

Docket Nos. 050045-EI &
050188-EI

EXHIBITS

Exhibit_(JRW-1)

Florida Power & Light Company

Cost of Capital and Fair Rate of Return

Capital Source	Capitalization Ratio (1)	Cost Rate (1)	Weighted Cost Rate
Short-Term Debt	0.55%	8.73%	0.05%
Long-Term Debt	43.62%	5.45%	2.38%
Common Equity	55.83%	8.80%	4.91%
Total	100.00%		7.34%

The Impact of the 2003 Tax Legislation
On the Cost of Equity Capital

On May 28, 2003, President Bush signed the *Jobs and Growth Tax Relief Reconciliation Act of 2003.* The primary purpose of this legislation was to reduce taxes to enhance economic growth. A primary component of the new tax law was a significant reduction in the taxation of corporate dividends for individuals. Dividends have been described as "double-taxed." First, corporations pay taxes on the income they earn before they pay dividends to investors, then investors pay taxes on the dividends that they receive from corporations. One of the implications of the double taxation of dividends is that, all else equal, it results in a high cost of raising capital for corporations.

The new tax legislation reduces the double taxation of dividends by lowering the tax rate on dividends from the 30 percent range (the average tax bracket for individuals) to 15 percent. This reduction in the taxation of dividends for individuals enhances their after-tax returns and thereby reduces their pre-tax required returns. This reduction in pre-tax required returns (due to the lower tax on dividends) effectively reduces the cost of equity capital for companies. The new tax law also reduced the tax rate on long-term capital gains from 20% to 15%.

To demonstrate the effect of the new legislation, assume that a utility has a 10% expected return – 5.0% in dividends and 5.0% in capital gains. The new tax law reduces the double-taxation by reducing the tax rate on dividends from the 30 percent range (the marginal tax bracket for the average individual taxpayer) to 15 percent. The table

below illustrates the effect of the new tax law. Panel A shows that under the old tax law a 10.0% pre-tax return provided for a 7.5% after tax return. Panel B shows that under the new tax law, with tax rates of 15% on both dividends and capital gains, the 10% pre-tax return is worth 8.5% on an after-tax basis. In Panel C, I have held the after-tax return constant (at 7.5%) to illustrate the effect of the new tax law on required pre-tax returns. Assuming that the entire after-tax 1% return difference (7.5% to 8.5%) is attributed to the lower taxation of dividends, the 10.0% pre-tax return under the new law is now only 8.82%. In other words, to generate an after-tax return of 7.5%, the new tax law reduced the required pre-tax return from 10.0% to 8.82%.

The Impact of the New Tax Law on Pre- and After- Tax Returns

Panel A
Old Tax Law
10% Pre-Tax Return - 5% Dividend Yield & 5% Capital Gain
Tax Rates - Dividends 30% & Capital Gains 20%

	Pre-Tax Return	Tax Rate	After-Tax Return
Dividends	5.00%	30.00%	3.50%
Capital Gain	5.00%	20.00%	4.00%
Total	10.00%		7.50%

Panel B
New Tax Law
10% Pre-Tax Return - 5% Dividend Yield & 5% Capital Gain
Tax Rates - Dividends 15% & Capital Gains 15%

	Pre-Tax Return	Tax Rate	After-Tax Return
Dividends	5.00%	15.00%	4.25%
Capital Gain	5.00%	15.00%	4.25%
Total	10.00%		8.50%

Panel C
The Effect of the New Tax Law on Pre-Tax Returns
7.50% After-Tax Return - 3.25% Dividend Yield & 4.25% Capital Gain
Tax Rates - Dividends 15% & Capital Gains 15%

	Pre-Tax Return	Tax Rate	After-Tax Return
Dividends	3.82%	15.00%	3.25%
Capital Gain	5.00%	15.00%	4.25%
Total	8.82%		7.50%

Exhibit_(JRW-3)

Summary Financial Statistics

Twenty One Company Electric Utility Group

Company	S&P Bond Rating	Operating Revenue ($mil)	Percent Elec Revenue	Net Plant ($mil)	Pre-Tax Interest Coverage	Primary Service Area	Common Equity Ratio*	Return on Equity	Price/ Earnings Ratio	Market to Book Ratio
Alliant Energy	A-	3,067.4	70%	4,422.3	2.3	WI,IA,MN,IL	47%	6.8%	18.0	118
Ameren Corp.	A-	5,160.0	83%	13,297.0	4.0	MO,IL	49%	10.4%	17.8	168
CINergy Corp.	BBB-	4,688.0	77%	9,929.5	3.3	OH,KY,IN	43%	10.8%	17.2	180
Consolidated Edison	A	9,778.0	58%	15,168.0	2.9	NY	49%	8.0%	18.6	145
Constellation Energy	A	12,549.7	16%	10,086.6	3.7	MD	46%	13.3%	15.3	193
Dominion Resources	A-	13,972.0	37%	26,716.0	3.2	VA,NC,OH,PA,WV	39%	11.6%	19.1	213
DTE Energy	BBB+	7,114.0	19%	10,491.0	2.1	MI	39%	8.2%	17.7	142
Energy East Corp.	BBB+	4,803.4	58%	5,662.2	3.3	NY	39%	9.1%	15.8	143
Exelon Corp.	A-	14,515.0	70%	21,482.0	4.9	IL,PA	41%	20.5%	16.8	325
FPL Group, Inc.	A	10,522.0	83%	21,226.0	3.7	FL	44%	12.2%	16.5	200
MDU Resources Group	A-	2,719.3	7%	2,572.7	5.9	ND,MT,SD,WY,MN	64%	13.3%	15.2	189
Northeast Utilities	BBB+	6,686.7	60%	5,864.2	1.5	CT,NH,MA	33%	7.1%	14.5	104
NSTAR	A	2,954.3	80%	3,580.0	3.1	MA	37%	13.4%	15.5	202
OGE Energy Corp.	BBB+	4,926.6	32%	3,581.0	3.7	OK,AR	75%	5.0%	15.4	49
Pepco Holdings	A-	7,221.8	61%	7,088.0	2.7	DC,MD,DE,VA	36%	8.1%	14.2	117
SCANA Corp.	A-	3,885.0	43%	6,762.0	2.2	NC,SC,GA	40%	10.6%	16.2	18
Sempra Energy	A+	9,410.0	48%	11,086.0	5.6	CA	48%	21.0%	9.9	187
Southern Co.	A+	11,925.9	92%	28,361.0	4.5	GA,AL,FL,MS	42%	15.4%	15.4	229
Vectren Corp.	A-	1,689.7	38%	2,156.2	3.4	IN	10%	7.4%	18.5	185
Wisconsin Energy	A-	3,431.1	62%	5,903.1	2.7	WI,MI	40%	5.0%	34.0	165
WPS Resources	AA-	4,890.6	18%	2,002.6	4.3	WI	47%	14.3%	12.8	180
Average		**6,948.1**	**53%**	**10,354.2**	**3.5**		**43%**	**11.0%**	**16.9**	**164**

Data Source: *C.A. Turner Utility Reports*, May, 2005, *Value Line Investment Survey*, 2005.

Exhibit_(JRW-4)

Florida Power & Light Company

Capital Structure Ratios and Senior Capital Cost Rates

FP&L PROPOSED RATE OF RETURN	Ratios	Cost Rates	Weighted Cost Rates
	(1)	(1)	(1)
Short-Term Debt	0.550%	8.730%	0.048%
Long-Term Debt	43.620%	5.890%	2.569%
Common Equity	55.830%		
Total	100.000%		

OPC's RECOMMENDED RATE OF RETURN	Ratios	Cost Rates	Weighted Cost Rates
	(2)	(2)	(2)
Short-Term Debt	0.550%	8.730%	0.048%
Long-Term Debt	43.620%	5.450%	2.377%
Common Equity	55.830%		
Total	100.000%		

(1) Filing Schedule J-1, page 2.

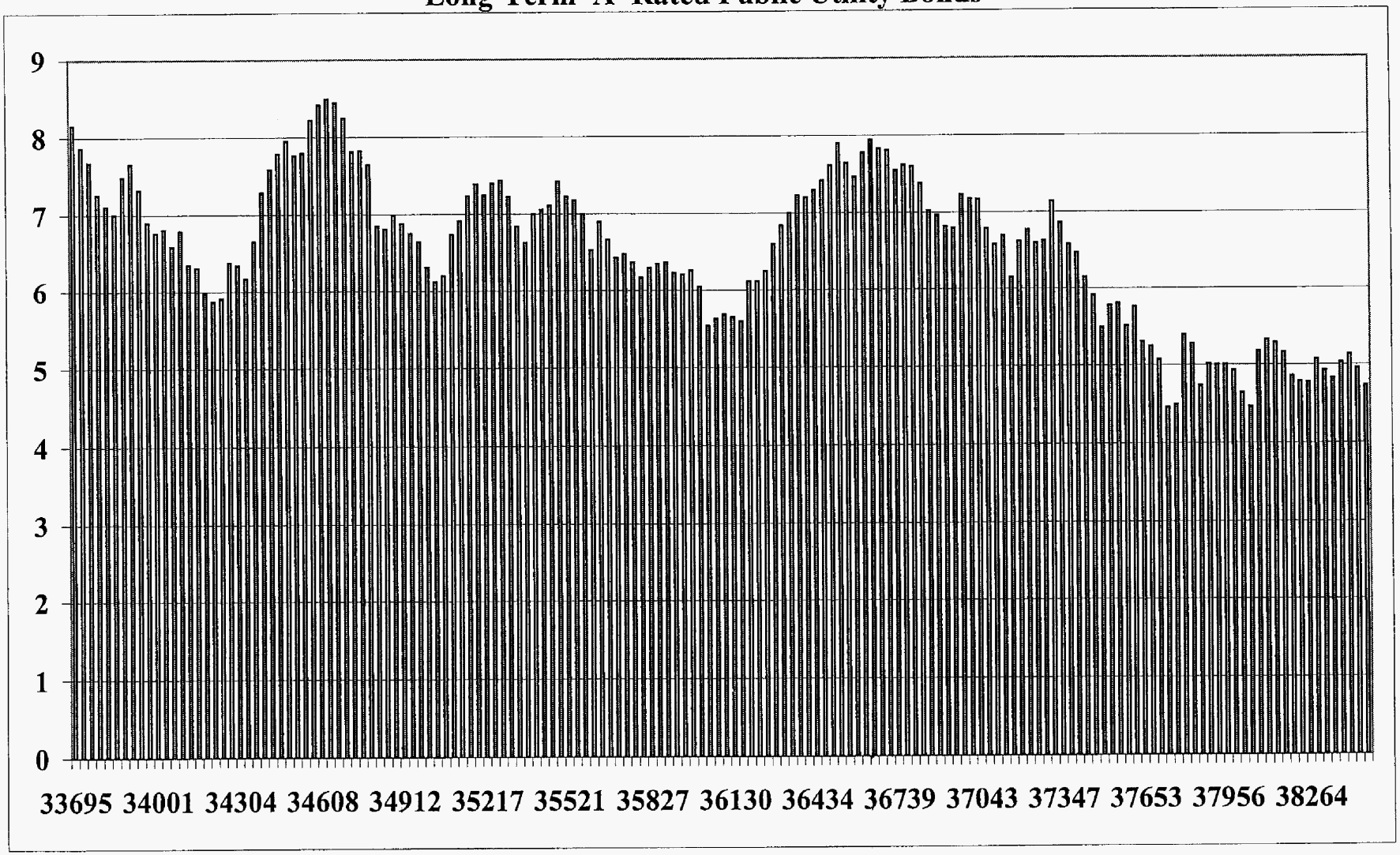
(2) Response to PSC-2-21, p. 39 of 40.

Exhibit_(JRW-4)
Florida Power & Light Company
Capital Structure Ratios and Senior Capital Cost Rates

		Issue Date	Maturity Date	Principal	13 Month Avg.Outst. Principal	Discount (Premium)	Issuing Expense	Life	Annual Amort.	Interest Expense	Total Annual Cost	Unamort. Discount (Premium)	
First Mortgage Bonds:													
1	4.850%	Dec-02	Feb-13	$400,000	$400,000	$2,630	$1,850	10.25	$437	$19,400	$19,837	$1,689	$1,188
2	5.625%	Apr-03	Apr-34	$500,000	$500,000	$6,480	$2,188	31.00	$280	$28,125	$28,405	$5,801	$1,958
3	5.650%	Jan-04	Feb-35	$240,000	$240,000	$2,686	$1,210	30.08	$129	$13,560	$13,689	$2,552	$1,149
4	5.850%	Dec-02	Feb-33	$200,000	$200,000	$2,212	$914	30.25	$104	$11,700	$11,804	$1,952	$803
5	5.875%	Apr-99	Apr-09	$225,000	$225,000	$810	$1,261	10.00	$207	$13,219	$13,426	$223	$347
6	5.950%	Oct-03	Oct-33	$300,000	$300,000	$5,802	$1,524	30.00	$244	$17,850	$18,094	$5,270	$1,384
7	6.000%	Jun-98	Jun-08	$200,000	$200,000	$1,798	$833	10.00	$263	$12,000	$12,263	$345	$160
8	5.100%	Mar-05	Mar-15	$300,000	$300,000		$1,950	10.00	$195	$15,300	$15,495		$1,690
9	5.250%	Dec-05	Dec-35	$400,000	$400,000		$3,500	30.00	$117	$21,000	$21,117		$3,432
10	5.250%	Oct-05	Oct-35	$400,000	$400,000		$3,500	30.00	$117	$21,000	$21,117		$3,413
11	5.250%	Mar-06	Mar-36	$300,000	$230,769		$2,625	30.00	$73	$13,125	$13,198		$1,988
12	5.250%	Dec-06	Dec-36	$300,000	$23,077		$2,625	30.00	$7	$1,313	$1,320		$201
Unsecured Pollution Control and Industrial Development Bonds:				$15,000	$15,000		$147	31.50	$14	$545	$559		$235
13	Var Dade County	Aug-91	Feb-23										
14	Var Jacksonville	May-92	May-27	$28,300	$28,300		$378	35.00	$11	$1,070	$1,081		$225
15	Var Dade County	Dec-93	Jun-21	$45,750	$45,750		$711	27.50	$26	$1,729	$1,755		$386
16	Var Jacksonville	Mar-94	Sep-24	$45,960	$45,960		$397	30.50	$13	$1,737	$1,750		$236
17	Var Manatee	Mar-94	Sep-24	$16,510	$16,510		$132	30.50	$4	$624	$628		$78
18	Var Putnam	Mar-94	Sep-24	$4,480	$4,480		$83	30.50	$3	$169	$172		$49
19	Var Dade County	Mar-95	Apr-20	$8,635	$8,635		$181	25.00	$7	$326	$334		$100
20	Var Jacksonville	Jun-95	May-29	$51,940	$51,940		$346	34.00	$10	$1,963	$1,974		$233
21	Var Martin	Apr-00	Jul-22	$95,700	$95,700		$498	22.25	$22	$3,617	$3,640		$358
22	Var St. Lucie	Jun-00	May-24	$78,785	$78,785		$810	24.00	$34	$2,978	$3,012		$602
23	Var St. Lucie	Sep-00	Sep-28	$242,210	$242,210		$570	28.00	$20	$9,156	$9,176		$452
24	Gain/Loss on reacquired debt								$2,739		$2,739		$36,647
25	Total				$4,052,116				$5,076	$211,506	$216,585	$17,831	$57,315
26	Less Unamortized Premium, Discount, Issue and Loss (12) + (13).				($75,146)								
27	Net				$3,976,970								
28	Embedded Cost of Long-term Debt (11)/Net				5.45%								

Exhibit_(JRW-5)

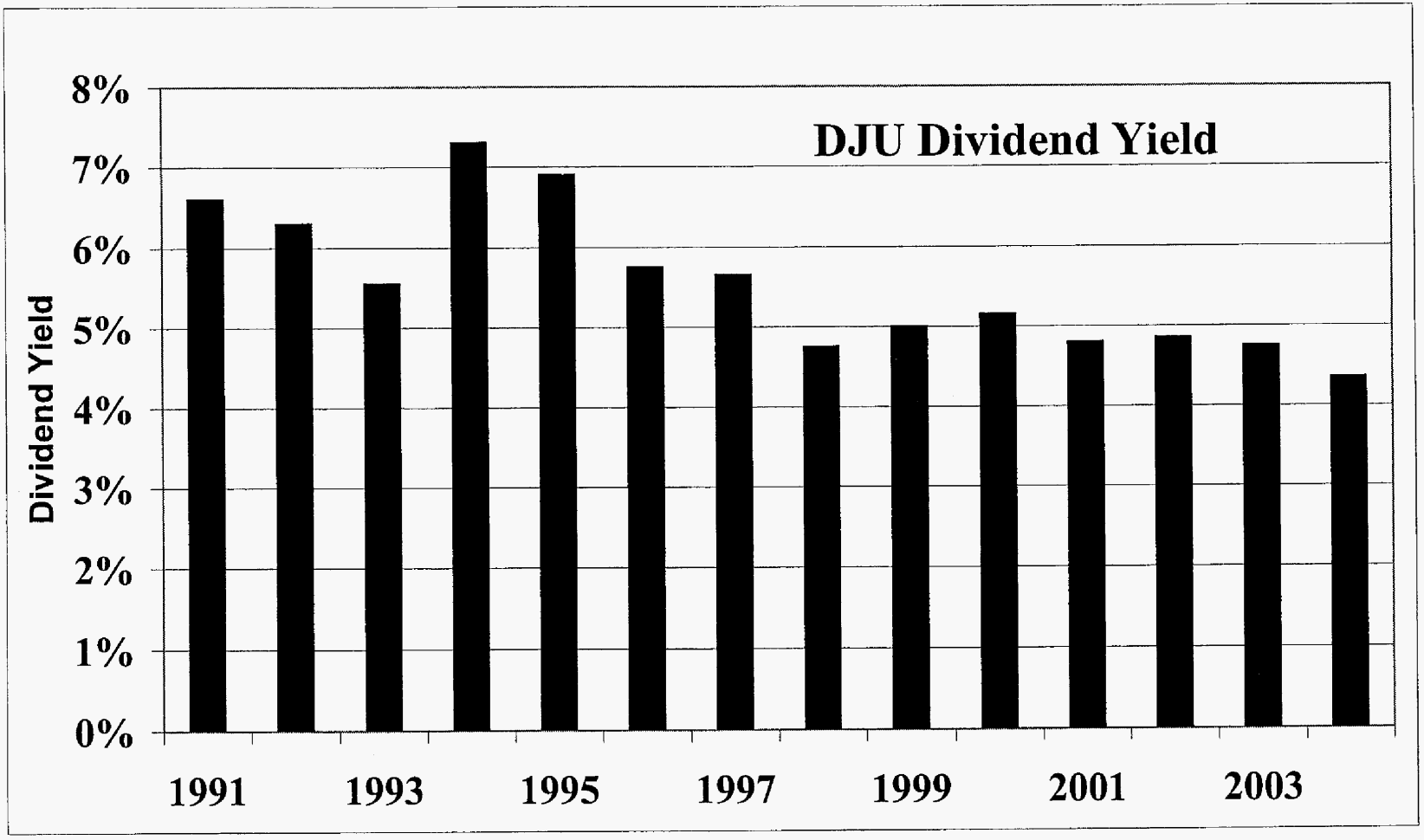
Long-Term 'A' Rated Public Utility Bonds



Data Source: Bloomberg (FMCI Function).

Exhibit_(JRW-5)

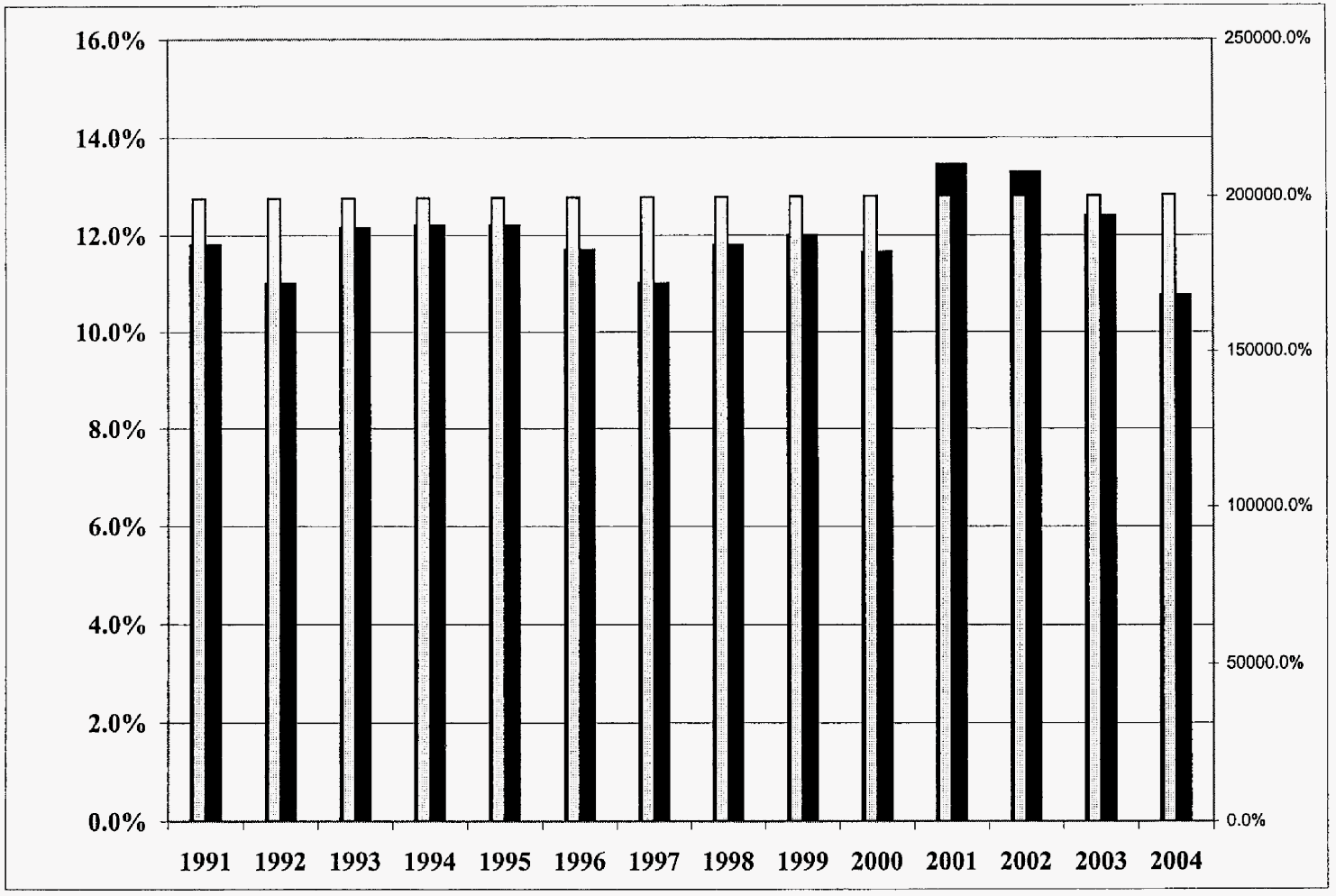
Dow Jones Utilities Dividend Yield



Data Source: Value Line Investment Survey

Exhibit_(JRW-5)

Dow Jones Utilities - Market to Book and ROE



Data Source: Value Line Investment Survey

Exhibit_(JRW-6)

Industry Average Betas

Industry Name	Number of Firms	Beta	Industry Name	Number of Firms	Beta	Industry Name	Number of Firms	Beta
E-Commerce	52	3.07	Manuf. Housing/RV	19	1.00	Machinery	133	0.77
Semiconductor	124	2.64	Metals & Mining (Div.)	76	0.99	Bank (Canadian)	7	0.77
Internet	297	2.63	Oilfield Svcs/Equip.	93	0.98	Home Appliance	16	0.76
Semiconductor Equip	16	2.51	Shoe	24	0.98	Apparel	65	0.76
Wireless Networking	66	2.38	Retail Store	49	0.97	Electric Util. (Central)	25	0.76
Telecom. Equipment	120	2.26	Office Equip/Supplies	28	0.94	Coal	11	0.76
Computers/Peripherals	143	2.06	Information Services	33	0.94	Diversified Co.	117	0.75
Computer Software/Svcs	389	1.90	Recreation	78	0.93	Insurance (Life)	43	0.75
Entertainment Tech	31	1.87	Chemical (Basic)	16	0.91	Publishing	43	0.74
Foreign Telecom.	21	1.76	Retail Automotive	14	0.90	Hotel/Gaming	77	0.74
Cable TV	21	1.75	Retail Building Supply	9	0.88	Household Products	30	0.74
Power	24	1.56	Paper/Forest Products	39	0.86	Building Materials	49	0.74
Precision Instrument	104	1.52	Medical Supplies	262	0.85	Toiletries/Cosmetics	23	0.72
Electronics	179	1.45	Homebuilding	34	0.85	Electric Utility (East)	31	0.72
Electrical Equipment	93	1.40	Utility (Foreign)	6	0.85	Bank (Midwest)	38	0.71
Entertainment	88	1.40	Petroleum (Integrated)	34	0.85	Environmental	85	0.69
Bank (Foreign)	5	1.36	Industrial Services	200	0.85	Restaurant	84	0.69
Air Transport	46	1.34	Natural Gas (Div.)	38	0.84	Maritime	28	0.67
Securities Brokerage	26	1.32	Newspaper	20	0.84	Railroad	18	0.67
Telecom. Services	137	1.32	Medical Services	195	0.82	Insurance (Prop/Cas.)	78	0.67
Biotechnology	90	1.30	Furn/Home Furnishings	38	0.82	Natural Gas (Distrib.)	30	0.65
Drug	305	1.30	Steel (General)	24	0.81	Investment Co.	21	0.64
Steel (Integrated)	14	1.26	Metal Fabricating	38	0.80	R.E.I.T.	135	0.63
Advertising	35	1.23	Packaging & Container	35	0.80	Food Wholesalers	20	0.63
Human Resources	28	1.14	Aerospace/Defense	67	0.80	Petroleum (Producing)	145	0.62
Foreign Electronics	12	1.12	Electric Utility (West)	16	0.79	Canadian Energy	11	0.62
Educational Services	38	1.10	Chemical (Specialty)	92	0.79	Water Utility	17	0.60
Investment Co.(Foreign)	17	1.08	Chemical (Diversified)	31	0.79	Tobacco	13	0.59
Auto & Truck	25	1.08	Cement & Aggregates	13	0.78	Food Processing	104	0.58
Auto Parts	60	1.06	Trucking	36	0.78	Beverage (Alcoholic)	22	0.58
Healthcare Information	32	1.06	Grocery	23	0.78	Bank	499	0.53
Tire & Rubber	14	1.02	Financial Svcs. (Div.)	233	0.78	Thrift	222	0.48
Retail (Special Lines)	175	1.01	Pharmacy Services	14	0.78	Beverage (Soft Drink)	17	0.41
						Precious Metals	61	0.41
						Market	**7091**	1.00

Data Source: http://www.stern.nyu.edu/~adamodar/

Exhibit_(JRW-7)

DCF Equity Cost Rate
Florida Power & Light Company

Twenty One Company Electric Utility Group

Dividend Yield*	4.00%
Adjustment Factor	1.02375
Adjusted Dividend Yield	4.10%
Growth Rate	4.75%
Equity Cost Rate	8.8%

* Page 2 of Exhibit_(JRW-7)

** Based on data provided on pages 3-4, Exhibit_(JRW-7)

Exhibit_(JRW-7)

Monthly Dividend Yields
January-May, 2005

Twenty One Company Electric Utility Group

Company	Jan	Feb	Mar	Apr	May	Mean
Alliant Energy	3.8%	3.7%	3.9%	3.9%	4.0%	3.9%
Ameren Corp.	5.1%	5.1%	4.9%	4.9%	5.1%	5.0%
CINergy Corp.	4.4%	4.7%	4.7%	4.7%	4.9%	4.7%
Consolidated Edison	5.1%	5.2%	5.3%	5.3%	5.4%	5.3%
Constellation Energy	2.6%	2.5%	2.6%	2.6%	2.6%	2.6%
Dominion Resources	3.9%	3.9%	3.7%	3.7%	3.6%	3.8%
DTE Energy	1.6%	4.7%	4.7%	4.7%	4.6%	4.1%
Energy East Corp.	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%
Exelon Corp.	3.7%	3.8%	3.5%	3.5%	3.5%	3.6%
FPL Group, Inc.	3.6%	3.7%	3.6%	1.8%	3.5%	3.2%
MDU Resources Group	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
Northeast Utilities	3.6%	3.6%	3.5%	3.5%	3.5%	3.5%
NSTAR	4.3%	4.3%	4.2%	4.2%	4.2%	4.2%
OGE Energy Corp.	5.0%	5.2%	5.1%	5.1%	5.0%	5.1%
Pepco Holdings	4.7%	4.7%	4.5%	4.5%	4.8%	4.6%
SCANA Corp.	3.8%	3.8%	4.1%	4.1%	4.2%	4.0%
Sempra Energy	2.8%	2.7%	2.5%	2.9%	3.0%	2.8%
Southern Co.	4.3%	4.3%	4.5%	4.5%	4.5%	4.4%
Vectren Corp.	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%

Exhibit_(JRW-7)

DCF Equity Cost Growth Rate Measures
Value Line Historic and Projected Rates

Panel A

Twenty One Company Electric Utility Group

Company	*Value Line* Historic Growth					
	Past 10 Years			Past 5 Years		
	Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
Alliant Energy	-2.5%	-1.0%	1.5%	-1.0%	-3.5%	1.0%
Ameren Corp.	1.0%	1.0%	2.0%	2.5%	n/a	2.5%
CINergy Corp.	2.0%	1.0%	2.0%	1.5%	0.5%	5.0%
Consolidated Edison	n/a	1.5%	2.5%	-2.0%	1.0%	2.0%
Constellation Energy	4.5%	-3.5%	3.5%	6.5%	-9.0%	4.5%
Dominion Resources	4.0%	0.5%	2.5%	11.0%	n/a	4.5%
DTE Energy	-2.0%	0.5%	3.5%	n/a	n/a	3.5%
Energy East Corp.	3.0%	-0.5%	4.5%	-0.5%	5.5%	5.5%
Exelon Corp.	n/a	n/a	n/a	6.5%	n/a	n/a
FPL Group, Inc.	5.5%	-0.5%	5.5%	4.5%	4.0%	6.0%
MDU Resources Group	10.5%	4.0%	10.0%	10.5%	5.0%	13.0%
Northeast Utilities	-6.0%	-10.5%	n/a	n/a	37.5%	2.0%
NSTAR	4.5%	2.5%	3.0%	5.0%	2.5%	1.5%
OGE Energy Corp.	2.0%	n/a	2.0%	-2.5%	n/a	1.0%
Pepco Holdings	n/a	n/a	n/a	n/a	n/a	n/a
SCANA Corp.	4.5%	n/a	4.0%	6.5%	-1.0%	3.0%
Sempra Energy	6.0%	-4.0%	3.0%	14.0%	-8.5%	6.0%
Southern Co.	2.5%	2.0%	1.0%	2.5%	1.0%	-1.5%
Vectren Corp.	n/a	n/a	n/a	n/a	n/a	n/a
Wisconsin Energy	2.0%	-5.0%	2.5%	9.5%	-12.0%	3.5%
WPS Resources	1.5%	2.0%	3.5%	7.0%	2.0%	5.0%
Mean	**2.5%**	**-0.6%**	**3.3%**	**4.8%**	**1.8%**	**3.8%**
Median	**2.5%**	**0.5%**	**3.0%**	**5.0%**	**1.0%**	**3.5%**
	Average of Mean and Median Figures =			**2.6%**		

Panel B

Twenty One Company Electric Utility Group

Company	*Value Line* Projected Growth Est'd. '02-'04 to '08-'10			*Value Line* Internal Growth		
	Earnings	Dividends	Book Value	Return on Equity	Retention Rate	Internal Growth
Alliant Energy	3.0%	-3.5%	3.5%	8.0%	3.5%	3.0%
Ameren Corp.	5.0%	0.0%	4.0%	9.0%	2.8%	2.0%
CINergy Corp.	5.5%	2.0%	5.5%	11.0%	3.0%	3.5%
Consolidated Edison	1.5%	1.0%	2.5%	9.0%	3.4%	2.0%
Constellation Energy	12.5%	12.5%	9.0%	14.0%	1.1%	8.5%
Dominion Resources	9.0%	3.0%	8.0%	14.0%	0.9%	8.0%
DTE Energy	7.0%	0.5%	5.0%	12.0%	1.7%	6.5%
Energy East Corp.	4.5%	6.5%	3.0%	9.5%	4.5%	2.5%
Exelon Corp.	6.5%	11.0%	10.0%	16.0%	1.9%	7.5%
FPL Group, Inc.	7.5%	10.5%	8.5%	11.5%	2.5%	4.5%
MDU Resources Group	6.5%	5.0%	9.0%	10.5%	2.2%	6.5%
Northeast Utilities	11.0%	9.0%	2.5%	10.0%	5.4%	5.0%
NSTAR	2.5%	3.0%	4.5%	12.5%	3.6%	4.5%
OGE Energy Corp.	3.5%	1.0%	4.0%	12.5%	3.7%	4.0%
Pepco Holdings	7.0%	6.0%	3.0%	11.0%	3.4%	5.5%
SCANA Corp.	4.5%	5.5%	6.0%	11.0%	2.1%	4.5%
Sempra Energy	3.5%	4.5%	11.5%	12.0%	0.9%	8.5%
Southern Co.	4.0%	3.5%	6.0%	13.5%	3.3%	4.5%
Vectren Corp.	4.5%	3.5%	4.0%	11.5%	4.7%	3.5%
Wisconsin Energy	4.0%	4.5%	6.5%	9.5%	2.1%	6.0%
WPS Resources	6.5%	2.0%	6.0%	11.5%	1.4%	5.0%
Mean	**5.7%**	**4.3%**	**5.8%**	**11.4%**	**2.8%**	**5.0%**
Median	**5.0%**	**3.5%**	**5.5%**	**11.5%**	**2.8%**	**4.5%**
Average of Mean and Median Figures =		**5.0%**	**Average of Mean and Median Figures =**			**4.8%**

Data Source: *Value Line Investment Survey.*

Exhibit_(JRW-7)

DCF Equity Cost Growth Rate Measures
Analysts Projected EPS Growth Rate Estimates

Twenty One Company Electric Utility Group

Company	Yahoo First Call	Reuters	Zack's	Average
Alliant Energy	3.0%	3.3%	4.0%	3.4%
Ameren Corp.	3.0%	4.4%	4.9%	4.1%
CINergy Corp.	5.0%	4.5%	4.6%	4.7%
Consolidated Edison	3.0%	3.0%	3.0%	3.0%
Constellation Energy	9.5%	10.1%	9.8%	9.8%
Dominion Resources	5.0%	6.3%	6.3%	5.9%
DTE Energy	4.0%	4.5%	4.0%	4.2%
Energy East Corp.	4.0%	3.3%	5.0%	4.1%
Exelon Corp.	5.0%	6.4%	6.1%	5.8%
FPL Group, Inc.	5.0%	4.7%	5.3%	5.0%
MDU Resources Group	8.0%	8.0%	7.7%	7.9%
Northeast Utilities	5.0%	4.2%	4.5%	4.6%
NSTAR	5.0%	4.3%	4.8%	4.7%
OGE Energy Corp.	3.0%	3.0%	3.5%	3.2%
Pepco Holdings	4.0%	3.9%	4.4%	4.1%
SCANA Corp.	4.5%	4.4%	4.6%	4.5%
Sempra Energy	6.0%	6.8%	5.3%	6.0%
Southern Co.	5.0%	4.7%	4.5%	4.7%
Vectren Corp.	4.0%	6.7%	5.2%	5.3%
Wisconsin Energy	6.5%	6.3%	6.1%	6.3%
WPS Resources	4.5%	4.5%	4.7%	4.6%
Mean	**4.9%**	**5.1%**	**5.2%**	**5.0%**

Data Sources: www.zacks.com, www.investor.reuters.com,
http://quote.yahoo.com, May, 2005.

Florida Power & Light Company
CAPM Equity Cost Rate

Twenty One Company Electric Utility Group

Risk-Free Interest Rate*	**4.50%**
Beta**	**0.78**
Ex Ante Equity Risk Premium***	**3.70%**
CAPM Cost of Equity	**7.39%**

* As of May, 2005.
** See page 2 of Exhibit_(JRW-8)
*** Ex Ante Equity Risk Premiums

Average Ex Ante Equity Risk Premiums from Derrig and Orr Study (2003)	**4.00%**
Ex Ante Equity Risk Premium from Building Blocks Approach"	**3.40%**
Average	**3.70%**

Exhibit_(JRW-8)

Florida Power & Light Company
CAPM
Beta

Twenty One Company Electric Utility Group

Company	Beta
Alliant Energy	0.80
Ameren Corp.	0.75
CINergy Corp.	0.85
Consolidated Edison	0.60
Constellation Energy	0.90
Dominion Resources	0.90
DTE Energy	0.70
Energy East Corp.	0.85
Exelon Corp.	0.75
FPL Group, Inc.	0.75
MDU Resources Group	0.85
Northeast Utilities	0.80
NSTAR	0.70
OGE Energy Corp.	0.70
Pepco Holdings	0.90
SCANA Corp.	0.75
Sempra Energy	0.95

Derrig-Orr (2003) Ex Ante Equity Risk Premium Studies
Appendix B

Source	Risk-free-Rate	ERP Estimate	Real risk-free rate	Nominal risk-free rate	Geometric	Arithmetic	Long-horizon	Short-horizon	Short-run expectation	Long-run expectation	Conditional	Unconditional
Historical												
Ibbotson Associates	3.8% [1]	8.4% [31]		X		X		X		X		X
Social Security												
Office of the Chief Actuary [4]	2.3%,3.0% [5]	4.7%,4.0% [32]	X		X		X			X		X
John Campbell [2]	3% to 3.5% [6]	1.5-2.5%, 3-4% [33]	X		X	X	X	X		X	X	
Peter Diamond	2.2% [10]	~4.8% [34]	X		X		X			X	X	
Peter Diamond [3]	3.0% [11]	3.0% to 3.5% [35]	X		X		X			X	X	
John Shoven [4]	3.0%,3.5% [12]	3.0% to 3.5% [36]	X		X		X			X	X	
Puzzle Research												
Robert Arnott and Peter Bernstein	3.7% [13]	2.4% [37]	X		X		X			X	X	
Robert Arnott and Ronald Ryan	4.1% [14]	-0.9% [38]	X		X		X			X	X	
John Campbell and Robert Shiller	N/A	Negative [39]	X		?		?		X		X	
James Claus and Jacob Thomas	7.64% [15]	3.39% or less [40]		X		X	X			X	X	
George Constantinides	2.0% [16]	6.9% [41]	X			X		X		X		X
Bradford Cornell	5.6%, 3.8% [17]	3.5-5.5%, 5-7% [42]		X		X	X	X		X	X	
Dimson, Marsh, & Staunton	1.0% [18]	5.4% [43]	X			X		X		X	X	
Eugene Fama and Kenneth French	3.24% [19]	3.83% & 4.76% [44]	X			X		X		X		X
Robert Harris and Felicia Marston	6.53% [20]	7.14% [45]		X		X	X		X		X	
Roger Ibbotson and Peng Chen	2.05% [21]	4% and 6% [46]	X		X	X	X			X		X
Jeremy Siegel	4.0% [22]	-0.3% to -0.3% [47]	X		X		X			X	X	
Jeremy Siegel	3.5% [23]	2-3% [48]	X		X		X			?	X	
Surveys												
John Graham and Campbell Harvey	? by survey [24]	3-4.7% [49]		X		?	X		X		X	
Ivo Welch	N/A [25]	7% [50]		X		X		X		X	X	
Ivo Welch [5]	5% [26]	5.0% to 5.5% [51]		X		X		X		X	X	
Misc.												
Barclays Global Investors	5% [27]	2.5%, 3.25% [52]		X	X		X		X		X	
Richard Brealey and Stewart Myers	N/A [28]	6 to 8.5% [53]		X		X		X		X		X
Burton Malkiel	5.25% [29]	2.75% [54]		X	X		X			X	X	
Richard Wendt [6]	5.5% [30]	3.3% [55]		X		X	X			X	X	

Long-run expectation considered to be a forecast of more than 10 years.
Short-run expectation considered to be a forecast of 10 years or less.

Richard Derrig and Elisha Orr, "Equity Risk Premium: Expectations Great and Small," Working Paper (version 3.0), Automobile Insurers Bureau of Massachusetts, August 28, 2003.

Survey of Professional Forecasters
Philadelphia Federal Reserve Bank
Long-Term Forecasts

LONG-TERM (10 YEAR) FORECASTS

SERIES: CPI INFLATION RATE

STATISTIC	
MINIMUM	1.700
LOWER QUARTILE	2.300
MEDIAN	2.450
UPPER QUARTILE	2.650
MAXIMUM	4.500
MEAN	2.479
STD. DEV.	0.439
N	33
MISSING	3

SERIES: REAL GDP GROWTH RATE

STATISTIC	
MINIMUM	2.100
LOWER QUARTILE	3.000
MEDIAN	3.300
UPPER QUARTILE	3.500
MAXIMUM	4.400
MEAN	3.259
STD. DEV.	0.448
N	33
MISSING	3

SERIES: PRODUCTIVITY GROWTH

STATISTIC	
MINIMUM	1.000
LOWER QUARTILE	2.100
MEDIAN	2.500
UPPER QUARTILE	2.800
MAXIMUM	5.000
MEAN	2.451
STD. DEV.	0.843
N	32
MISSING	4

SERIES: STOCK RETURNS (S&P 500)

STATISTIC	
MINIMUM	5.000
LOWER QUARTILE	6.400
MEDIAN	7.000
UPPER QUARTILE	8.250
MAXIMUM	12.500
MEAN	7.553
STD. DEV.	1.475
N	26
MISSING	10

SERIES: BOND RETURNS (10-YEAR)

STATISTIC	
MINIMUM	4.000
LOWER QUARTILE	4.900
MEDIAN	5.000
UPPER QUARTILE	5.700
MAXIMUM	6.700
MEAN	5.193
STD. DEV.	0.698
N	31
MISSING	5

SERIES: BILL RETURNS (3-MONTH)

STATISTIC	
MINIMUM	2.900
LOWER QUARTILE	3.300
MEDIAN	3.700
UPPER QUARTILE	4.100
MAXIMUM	5.000
MEAN	3.684
STD. DEV.	0.824
N	31
MISSING	5

Source: Philadelphia Federal Resaerve Bank, Survey of Professional Forecasters, February 14, 2005.
http://www.phil.frb.org/files/spf/spfq105.pdf

Union Light, Heat, and Power Company

CAPM

Real S&P 500 EPS Growth Rate

Year	S&P 500 EPS	Annual Inflation CPI	Inflation Adjustment Factor	Real S&P 500 EPS	
1960	3.10	1.4		3.10	
1961	3.37	0.7	1.0070	3.35	
1962	3.67	1.3	1.0201	3.59	
1963	4.13	1.6	1.0364	3.99	
1964	4.76	1	1.0468	4.55	
1965	5.30	1.9	1.0667	4.97	
1966	5.41	3.5	1.1040	4.90	
1967	5.46	3	1.1371	4.80	
1968	5.72	4.7	1.1906	4.81	
1969	6.10	6.2	1.2644	4.83	10-Year
1970	5.51	5.6	1.3352	4.13	2.9%
1971	5.57	3.3	1.3792	4.04	
1972	6.17	3.4	1.4261	4.33	
1973	7.96	8.7	1.5502	5.13	
1974	9.35	12.3	1.7409	5.37	
1975	7.71	6.9	1.8610	4.14	
1976	9.75	4.9	1.9522	4.99	
1977	10.87	6.7	2.0830	5.22	
1978	11.64	9	2.2705	5.13	
1979	14.55	13.3	2.5724	5.66	10-Year
1980	14.99	12.5	2.8940	5.18	2.3%
1981	15.18	8.9	3.1516	4.82	
1982	13.82	3.8	3.2713	4.23	
1983	13.29	3.8	3.3956	3.91	
1984	16.84	3.9	3.5281	4.77	
1985	15.68	3.8	3.6621	4.28	
1986	14.43	1.1	3.7024	3.90	
1987	16.04	4.4	3.8653	4.15	
1988	22.77	4.4	4.0354	5.64	
1989	24.03	4.6	4.2210	5.69	10-Year
1990	21.73	6.1	4.4785	4.85	-0.7%
1991	19.10	3.1	4.6173	4.14	
1992	18.13	2.9	4.7512	3.81	
1993	19.82	2.7	4.8795	4.06	
1994	27.05	2.7	5.0113	5.40	
1995	35.35	2.5	5.1365	6.88	
1996	35.78	3.3	5.3061	6.74	
1997	39.56	1.7	5.3963	7.33	
1998	38.23	1.6	5.4826	6.97	
1999	45.17	2.7	5.6306	8.02	10-Year
2000	52.00	3.4	5.8221	8.93	6.3%
2001	44.23	1.6	5.9152	7.48	
2002	47.24	2.4	6.0572	7.80	3-Year
2003	54.15	1.9	6.1723	8.77	-0.6%
Data Source: http://pages.stern.nyu.edu/~adamodar/				Real EPS Growth	2.45%

Exhibit_(JRW-9)

Florida Power & Light Company

Capital Structure Ratios and Senior Capital Cost Rates

Twenty One Company Electric Utility Group

Average Totals	2005 1st Quarter	2004 4th Quarter	2004 3rd Quarter	2004 2nd Quarter	2004 1st Quarter	2003 4th Quarter	2003 3rd Quarter	2003 2nd Quarter	2003 1st Quarter
Short-term debt	267,849	452,272	270,080	268,897	329,676	374,732	390,320	358,088	415,870
Current portion of long-term debt	180,316	229,319	195,311	204,941	217,153	293,122	226,392	234,780	204,093
Long-term debt	3,150,059	4,572,140	3,617,786	3,538,614	3,572,899	4,473,049	3,456,469	3,307,586	3,210,839
Common shareholder's equity	2,791,856	4,078,513	3,569,629	3,563,739	3,372,348	3,717,708	3,241,143	3,113,485	3,059,436
Total Average Capital	6,390,081	9,332,244	7,652,807	7,576,190	7,492,076	8,858,610	7,314,324	7,013,939	6,890,238

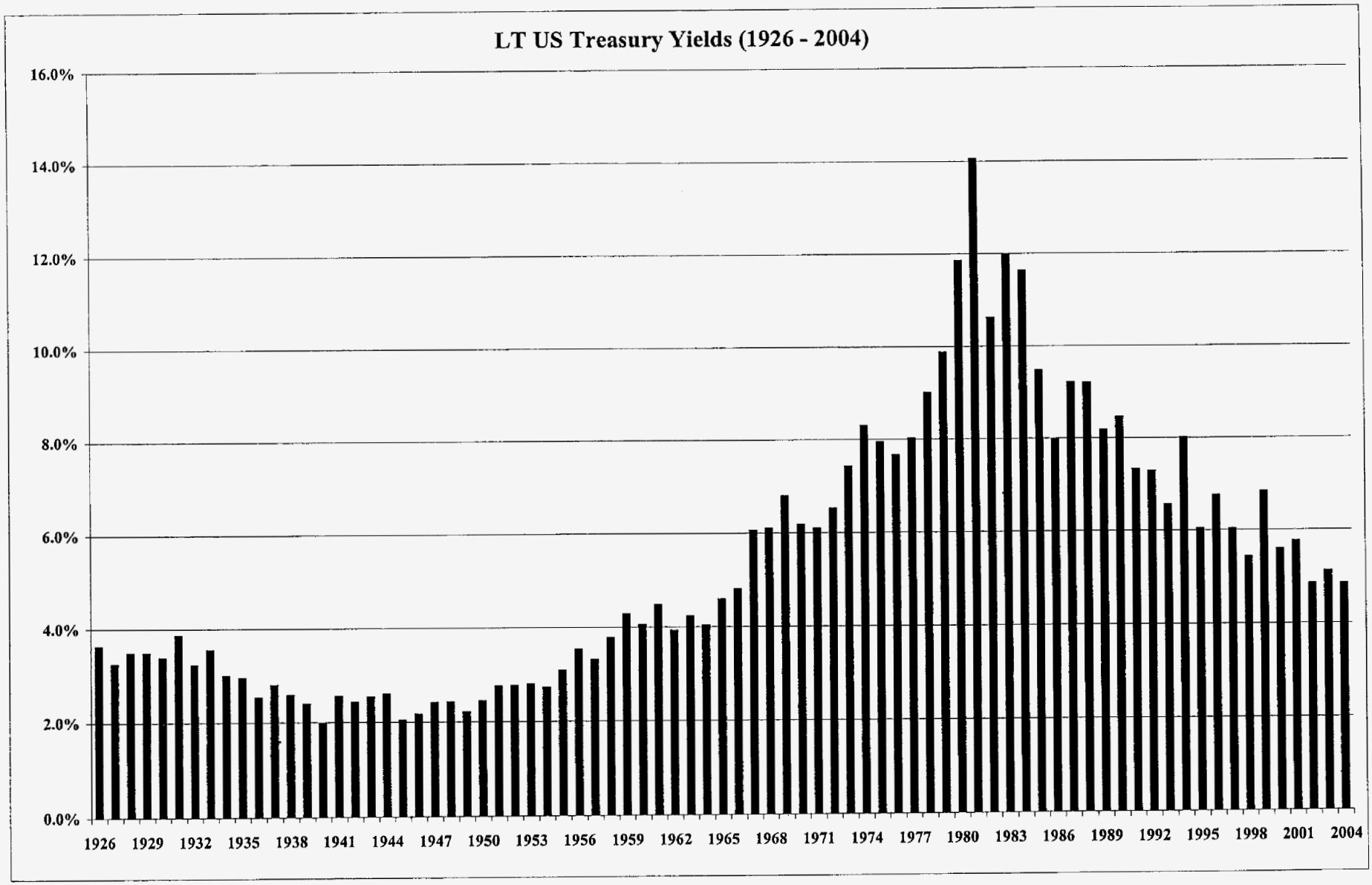
Ratios	2005 1st Quarter	2004 4th Quarter	2004 3rd Quarter	2004 2nd Quarter	2004 1st Quarter	2003 4th Quarter	2003 3rd Quarter	2003 2nd Quarter	2003 1st Quarter
Short-term debt	4.24%	5.22%	3.56%	3.59%	4.45%	4.57%	5.40%	5.17%	6.10%
Current portion of long-term debt	1.77%	1.89%	1.60%	1.69%	1.81%	2.38%	1.94%	2.10%	1.85%
Long-term debt	49.83%	50.28%	47.74%	47.19%	48.22%	51.99%	47.82%	47.77%	47.13%
Common shareholder's equity	44.17%	42.61%	47.10%	47.53%	45.51%	41.05%	44.84%	44.96%	44.91%
Total Average Capital	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Average Ratios	
Short-term debt	4.7%
Current portion of long-term debt	1.9%
Long-term debt	48.7%
Common shareholder's equity	44.7%
Average Totals	100.0%

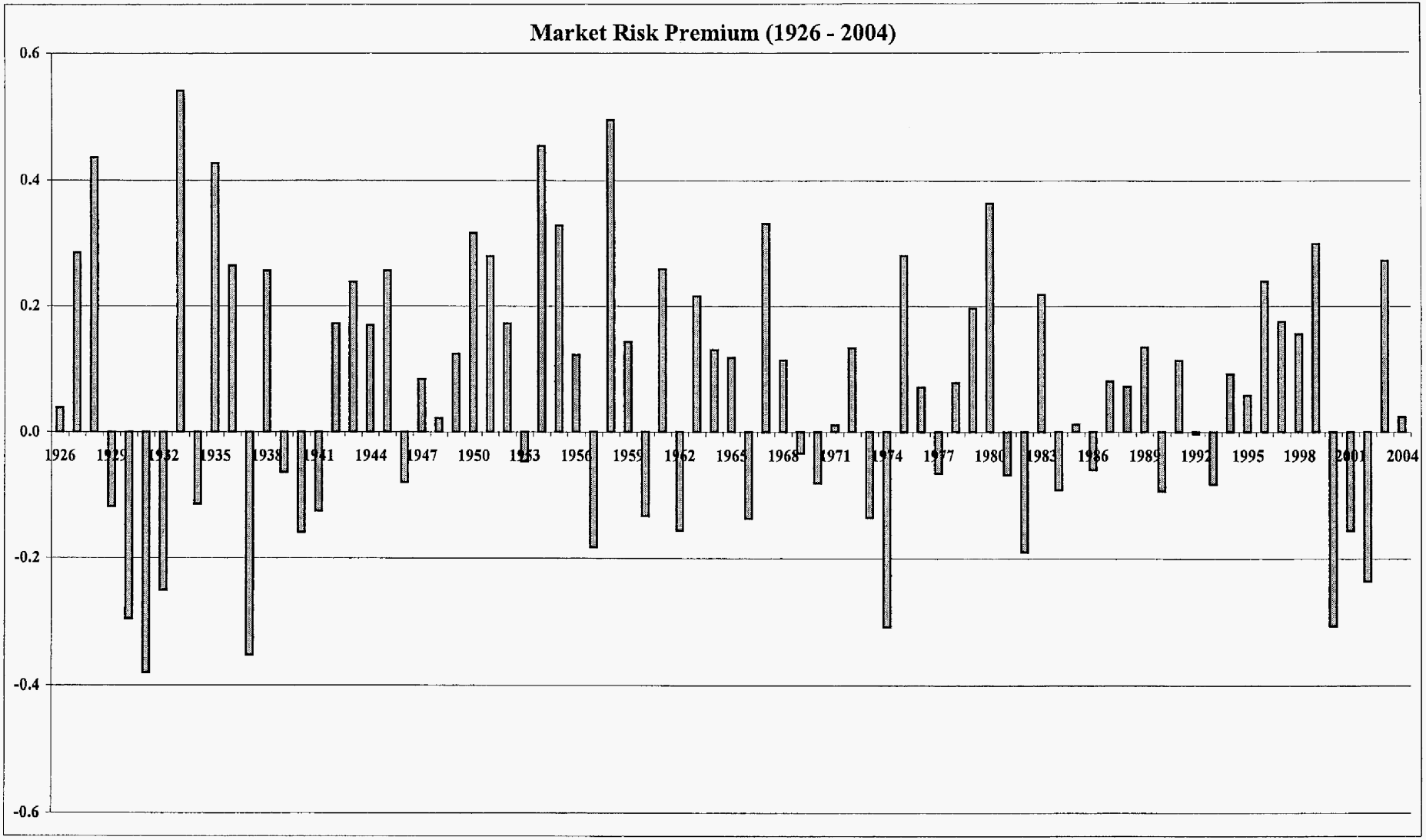
Exhibit_(JRW-9)
Rebuttal Exhibits
Growth rates
GNP, S&P 500 Price, EPS, and DPS

	GNP	*S&P 500*	Earnings	Dividends	
1960	529.8	58.11	3.10	1.98	
1961	531.5	71.55	3.37	2.04	
1962	579.6	63.1	3.67	2.15	
1963	606.9	75.02	4.13	2.35	
1964	654.6	84.75	4.76	2.58	
1965	701.1	92.43	5.30	2.83	
1966	775.8	80.33	5.41	2.88	
1967	823.2	96.47	5.46	2.98	
1968	885.7	103.86	5.72	3.04	
1969	967.3	92.06	6.10	3.24	
1970	1023.6	92.15	5.51	3.19	
1971	1105.8	102.09	5.57	3.16	
1972	1198.7	118.05	6.17	3.19	
1973	1346.2	97.55	7.96	3.61	
1974	1464.0	68.56	9.35	3.72	
1975	1581.4	90.19	7.71	3.73	
1976	1788.3	107.46	9.75	4.22	
1977	1960.1	95.1	10.87	4.86	
1978	2172.1	96.11	11.64	5.18	
1979	2490.1	107.94	14.55	5.97	
1980	2763.2	135.76	14.99	6.44	
1981	3084.1	122.55	15.18	6.83	
1982	3222.8	140.64	13.82	6.93	
1983	3416.9	164.93	13.29	7.12	
1984	3846.6	167.24	16.84	7.83	
1985	4145.8	211.28	15.68	8.20	
1986	4409.4	242.17	14.43	8.19	
1987	4628.2	247.08	16.04	9.17	
1988	4977.6	277.72	22.77	10.22	
1989	5390.9	353.4	24.03	11.73	
1990	5746.9	330.22	21.73	12.35	
1991	5926.3	417.09	19.10	12.97	
1992	6227.2	435.71	18.13	12.64	
1993	6580.0	466.45	19.82	12.69	
1994	6940.2	459.27	27.05	13.36	
1995	7335.8	615.93	35.35	14.17	
1996	7666.2	740.74	35.78	14.89	
1997	8142.6	970.43	39.56	15.52	
1998	8615.1	1229.23	38.23	16.20	
1999	9097.2	1469.25	45.17	16.71	
2000	9661.9	1320.28	52.00	16.27	
2001	10060.2	1148.09	44.23	15.74	
2002	10361.7	879.82	47.24	16.08	
2003	10781.3	1111.91	54.15	17.88	
2004	11546.1	1211.92	67.01	19.41	
2005	**12225.0**				**Average**
Growth	**7.22%**	**7.15%**	**7.23%**	**5.32%**	**6.73%**

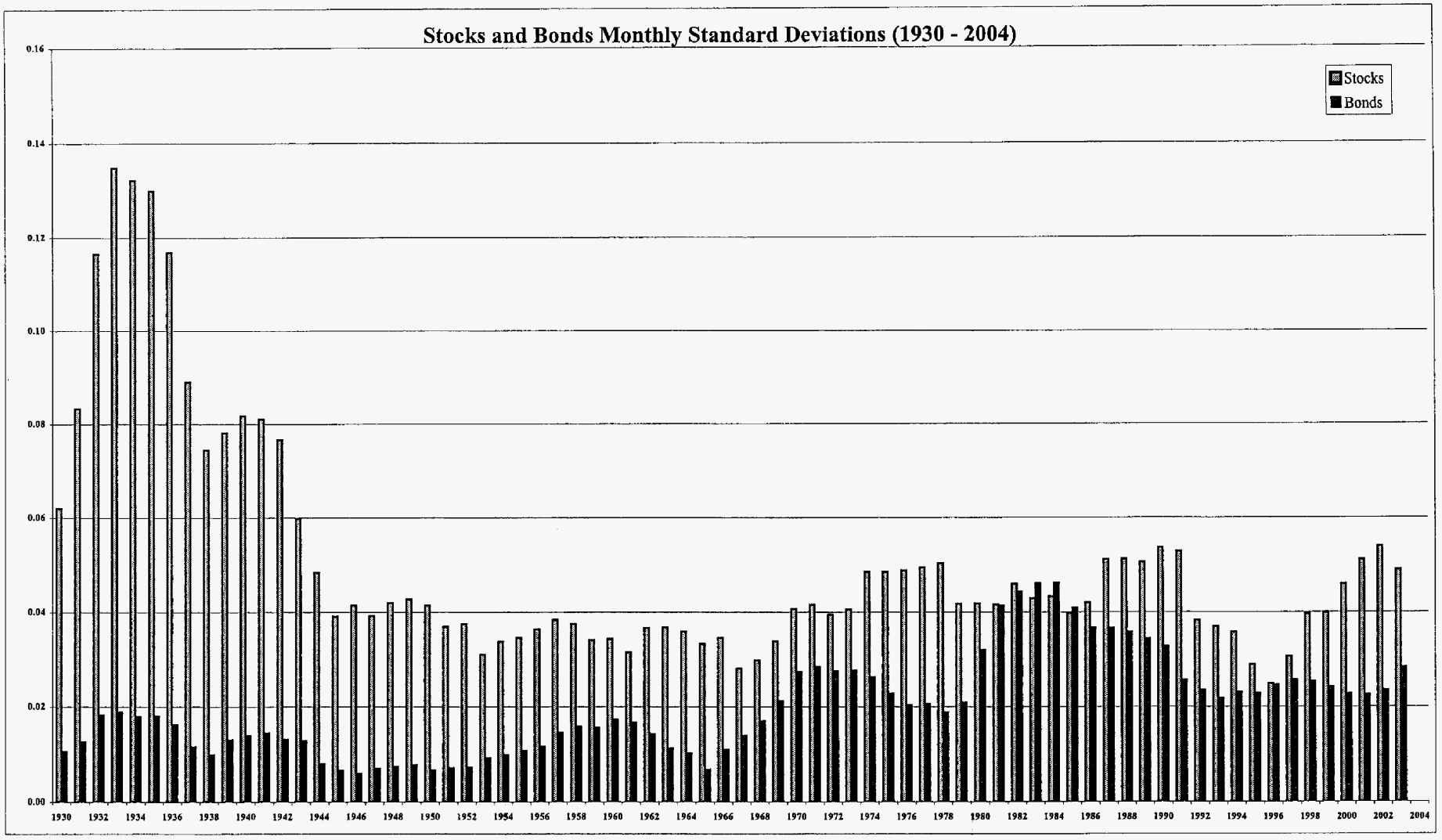
Data Sources: GNP - http://research.stlouisfed.org/fred2/categories/106
S&P 500, EPS and DPS - http://pages.stern.nyu.edu/~adamodar/



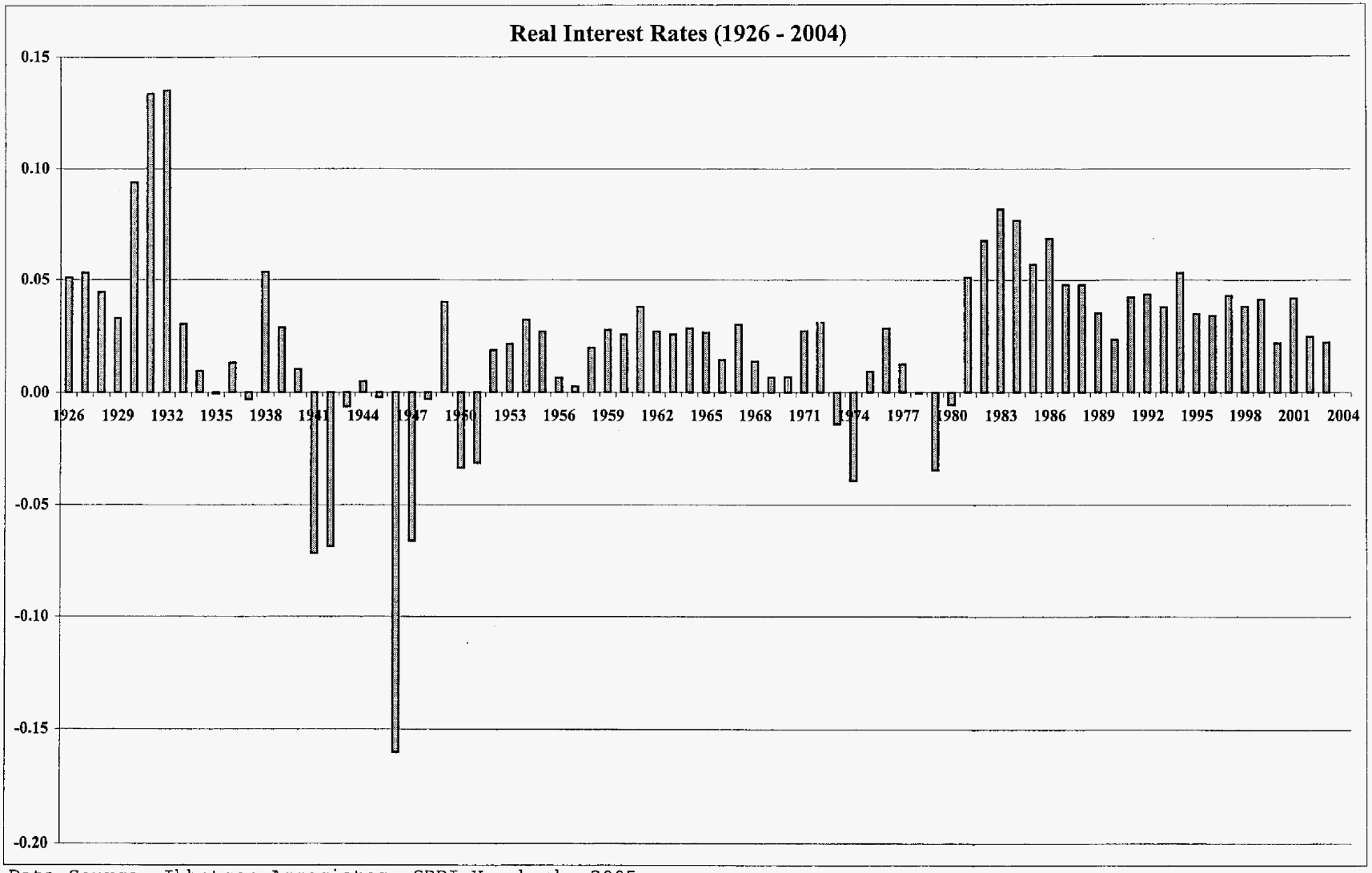
Data Source: Ibbotson Associates, SBBI Yearbook, 2005.



Data Source: Ibbotson Associates, SBBI Yearbook, 2005.



Data Source: Ibbotson Associates, SBBI Yearbook, 2005.



Data Source: Ibbotson Associates, SBBI Yearbook, 2005.

DOCKET NOS. 050045-EI and 050188-EI
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished by U.S. Mail or hand-delivery to the following parties on this 27th day of June, 2005.

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