BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

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| IN RE: PETITION FOR RATE INCREASE BY FLORIDA POWER & LIGHT COMPANY | ) ) | DOCKET NO. 050045-EI |

# DIRECT TESTIMONY

# AND EXHIBITS

# OF

# RICHARD A. BAUDINO

ON BEHALF OF THE

SOUTH FLORIDA HOSPITAL AND HEALTHCARE ASSOCIATION

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

JUNE 2005

**BEFORE THE**

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**IN RE: PETITION FOR RATE INCREASE BY FLORIDA POWER & LIGHT COMPANY ) DOCKET NO. 050045-EI**

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# DIRECT TESTIMONY OF RICHARD A. BAUDINO

## I. QUALIFICATIONS AND SUMMARY

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

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

**Q. What is your occupation and by whom are you employed?**

A. I am a utility rate and economic consultant holding the position of Director of Consulting with the firm of Kennedy and Associates.

**Q. Please describe your education and professional experience.**

A. I received my Master of Arts degree with a major in Economics and a minor in Statistics from New Mexico State University in 1982. I also received my Bachelor of Arts Degree with majors in Economics and English from New Mexico State in 1979.

I began my professional career with the New Mexico Public Service Commission Staff in October of 1982 and was employed there as a Utility Economist. During my employment with the Staff, my responsibilities included the analysis of a broad range of issues in the ratemaking field. Areas in which I testified included cost of service, rate of return, rate design, revenue requirements, analysis of sale/leasebacks of generating plants, utility finance issues, and generating plant phase-ins.

In October 1989 I joined the utility consulting firm of Kennedy and Associates as a Senior Consultant where my duties and responsibilities covered substantially the same areas as those during my tenure with the New Mexico Public Service Commission Staff. I became Manager in July 1992 and was named to my current position in January 1995.

Exhibit ____(RAB-1) summarizes my expert testimony experience.

**Q. On whose behalf are you testifying?**

A. I am offering testimony on behalf of the South Florida Hospital and Healthcare Association ("SFHHA") and individual healthcare institutions (collectively, the "Hospitals") taking electric service on the Florida Power & Light Company ("FPL" or "Company") system .

**Q. What is the purpose of your Direct Testimony?**

A. The purpose of testimony is to address the investor required return on equity for Florida Power and Light Company.

**Q. Please summarize your recommendation.**

A. I conclude that the investor required return on equity for FPL is 8.70%.

**Q. How is your testimony organized?**

A. Section II provides a summary of past and current economic conditions, which sets the backdrop for my rate of return analysis. Section III contains a discussion of my approach to estimating the cost of equity and the results of the methodologies that I utilize. Section IV contains my response to the Direct Testimony of Dr. William Avera, witness for FPL.

## II. REVIEW OF ECONOMIC AND FINANCIAL CONDITIONS

**Q. Please describe the general economic trends that have affected utilities in the last few years.**

A. The trend for the stock and bond markets was quite positive through the '90s. Although there was a recession in late 1990 through early 1991, the markets continued to post strong, above average gains through 1999. During the period from 1990 - 1999, the S&P 500 posted an average annual gain of 18.2%, still well above the long-term average stock market return of 12.4%[1]. Long-term government bonds also provided excellent returns during the '90s, averaging 8.8% per year compared to the long-run average of 5.8%. During the 1990s, inflation remained moderate, averaging 2.9%.

In 2000, the stock and bond markets substantially diverged. The total return for the S&P 500 was –9.11%, while the return for small company stocks was –3.59%. Bond prices, however, staged a strong rally despite two interest rate increases by the Federal Reserve. The total return for long-term government bonds for the year was 21.48%, with the yield falling from 6.82% at the end of 1999 to 5.58% at the end of December 2000. The inflation rate rose to 3.39% for the year.

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1 *Stocks, Bonds Bills, and Inflation 2004 Yearbook*, Ibbotson Associates, pages 19 and 33.

During 2001, the economy slowed considerably and was affected drastically by the terrorist attacks of September 11. The unemployment rate rose to 5.8% and GDP growth slowed to only 1.1% for the year. Stock and bond markets again showed divergent returns. The Standard and Poor's 500 returned –11.88% for the year, while small company stocks actually did quite well, posting a total return of 22.77%. Long-term government bonds returned 3.70% during 2001. For 2002, Ibbotson Associates reported that the unemployment rate rose to 6.0% and GDP grew at an inflation-adjusted rate of 2.4%. This compares to the 0.3% growth rate for GDP in 2001. The S&P 500 returned –22.10% for the year, the third straight yearly loss for large-company stocks. However, long-term government bond returned 17.84%, well above the long-run average yearly return. 2003 was a much better year for the stock market in general as the U.S. economy staged a recovery. Ibbotson Associates reported that GDP grew at an inflation-adjusted rate of 3.1% and the unemployment rate fell to 5.7%. In a huge rebound from the losses sustained in 2002, the S&P 500 gained 28.70%, while small-company stocks surged to a total return of 60.70%. Long-term government bonds only returned a modest 1.45% for the year. Utility stocks also did well during 2003, with prices staging a significant rally during the year. The Dow Jones Utility Average began the year at 215.16 and closed the year at 266.9, an increase of 24%.

In 2004, the stock market has had somewhat mixed results. Ibbotson Associates reported that the S&P 500 index produced a total return for the year of 10.87%. Value Line's *Selection and Opinion* for January 14, 2005 indicated that the Dow Jones Utility Average gained 25.5% and the Value Line Utilities index increased 10.1%. Long-term government and corporate bonds also did quite well in 2004. Ibbotson Associates reported that the total returns for long-term government and corporate bonds were 8.51% and 8.72%, respectively. These returns were significantly higher than the average annual returns for long-term bonds. The U.S. unemployment rate eased to 5.4% for December, according to the U.S. Department of Labor's Bureau of Labor Statistics.

**Q. What has the trend in capital costs been over the last few years?**

A. Exhibit____(RAB-2) presents a graphic depiction of the trend in interest rates from January 1995 through May 2005. The interest rates shown are for the 20-year U.S. Treasury Bond and the average public utility bond from the Mergent Bond Record. Exhibit____(RAB-2) shows that the yields on long-term treasury and utility bonds have declined significantly since early 1995, although rates have been quite volatile. Increased bond market volatility actually began in the early 1970s, when inflation became more of a sustained long-term concern.

Yields have trended downward from 2002 through 2005, with the 20-year bond yield declining from 5.69% to 4.56% at the end of May 2005. The yield on the average public utility bond also decreased significantly over the last two years, falling from 7.83% in March 2002 to 5.60% in May 2005, a decline of over 220 basis points. Public utility bond yields fell far more than long-term Treasury yields over this two-year period.

Moody's reported that as of June 10, 2005, the average public utility bond yield was 5.34%.

Current bond yields are either at or near their lowest levels in recent history. Exhibit____(RAB-2) shows that since 1995 public utility bond yields are at their lowest level over that ten-year historical period. I also reviewed the Mergent *Public Utility Manual* and found that average public utility bond yields have not been as low as they are now since the 1968 – 1969 time period, almost 36 years ago.

**Q. Mr. Baudino, in your opinion what effect does the current interest rate environment have on utility stocks?**

A. In my view, the currently low bond yields strongly suggest lower return on equity requirements on the part on the investing public. The results of my return on

equity analysis in the subsequent section of my Direct Testimony are consistent with these historically low bond yields.

**Q. In 2003, Congress enacted a change in tax policy that lowered the tax rate on dividends and capital gains. Please explain the effect of this tax change on utility common stocks and on investor required returns for utilities.**

A. Other things being equal, the dividend tax rate reduction means that investors should require lower pre-tax rates of return for utilities. This is because the after-tax dividend streams have now become more valuable due to the reduction in federal taxation. Thus, for a given stock price investors will discount the future dividend payments at a lower return on equity. The stock prices that I use in my cost of equity analyses fully incorporate the effects of this change in tax rates and on the expected returns for utilities. This also means that investors require *lower* risk premiums for stocks compared to utility bonds.

**Q. How does the investment community regard the electric utility industry as a whole?**

A. The Value Line Investment Survey reported the following in its October 1, 2004 report on the electric utility industry (central):

**"The Electric Utility Industry's finances have undergone dramatic changes since the start of the 21st century. Through the 1990s, returns on total capital, share equity, and common equity showed relatively little change. But starting with the year 2000, as retail competition spread, many utilities were confronted with reduced earnings from basic operations. This induced company managements to look for investments elsewhere to shore up profits. Though many of these investments were initially successful, several eventually turned sour. That led to a weakening of finances and a reduction in earnings.**

* * * * *

**The power glut in 2002 resulted in a slowdown in new plant construction the following year. This reduced borrowing needs and lowered interest expense. In turn, it led to a rise in common equity ratios and fixed charge coverages. Company managements initiated additional steps to improve finances by selling unprofitable assets, canceling acquisitions, and focusing on core business operations.**

* * * * *

**By the end of the current year, industry finances will probably recover to the level attained at the start of the century. Over the next 3 to 5 years, further progress is likely. Based on our projection of steady profit growth for the industry to 2007 to 2009, we look for solid improvement in free cash flow."**

Value Line also noted that available funds could be used by utilities to buy back stock, increase dividend payments, or both.

The March 4, 2005 Value Line profile of the electric utility industry (east) noted the following:

> **"For a period of several years, beginning in the mid-1990s, many electric utilities eschewed dividend increases in favor of investing in nonregulated operations or M&A activity with another utility ... Many of these nonregulated investments turned sour, or time proved that some of the acquiring utilities in mergers had overpaid. As a result, some companies had little choice but to cut or suspend their common dividends.**
>
> **Utilities began to take another look at raising the dividend after the federal government cut the tax rate on dividends in 2003. Some were still getting their finances in order as part of their "back to basics" strategies, so noteworthy dividend boosts didn't start to occur until 2004.**

* * * *

> **The good news of dividends has continued in early 2005. A few companies that cut or suspended the dividend in the late 1990s or early 2000s have reinstated it, increased it, or stepped up the growth rate."**

The April 1, 2005 Value Line profile of the electric utility industry (central) noted the following:

> **"...utility profits slumped in 2002. This was due largely to unsuccessful investments abroad and overbuilding domestically. These missteps resulted in heavy write-offs, weakened capital structures, and debt rating reductions by major rating organizations. Starting in 2003, managements began taking steps to reverse course. Overseas assets were sold and plant construction was scaled back. That began a profit rebound. By the end of 2004, most previous mistakes had been overcome, and 2005 began with a relatively clean slate."**

On May 2, 2005, Standard and Poor's published an article entitled "U.S. Utility Rating Actions Continued Their Slow-Down In First Quarter 2005". This article covered ratings actions for the utility industry as a whole (electric, gas, pipeline, and water companies). S&P noted that for the investor-owned utility industry, ratings activities moderated in the first quarter of 2005 and were balanced between negative and positive actions. The article noted that the "main drivers

of negative rating actions were continued erosion in financial credit measures, increasing business risk, aggressive financial policies, and uncertainty regarding funding of accelerating capital programs." S&P noted in this article that the outlook for the utility industry was relatively stable and that the average rating for the industry was BBB. Looking ahead at the utility industry, S&P noted that "[t]raditional, nondiversified utilities should remain relatively stable, with little of the downside pressure experienced elsewhere in the industry."

**Q. What conclusions do you draw from Value Line's and S&P's comments regarding the state of the electric industry today?**

A. In my opinion, it appears that the electric industry is entering a more stable, less risky environment than it experienced during the last few years. Companies that focus on core electric operations will be lower risk than those with unregulated and/or deregulated operations and investments.

**Q. How does the investment community view FPL?**

A. FPL carries senior secured debt ratings of A from Standard and Poor's and Aa3 from Moody's.

S&P published its most recent detailed research report on FPL on April 1, 2005. S&P noted in this report that the Company's strengths are as follows:

- FPL adds stability to FPL Group Inc.'s consolidated cash flow.
- FPL's strong customer growth with a primarily residential base.
- Parent FPL Group's adequate financial performance.

FPL's weaknesses are as follows:

- *Higher risk unregulated generation portfolio at FPL Energy contributes less certain cash flow* (italics added).
- FPL's increased exposure to natural gas to serve its load.
- Uncertainty regarding several regulatory issues at FPL.
- FPL Group's high consolidated leverage.

My review of S&P's report on FPL indicates that the Company adds a stable, lower risk financial profile to FPL Group compared to the higher risk and less stable FPL Energy subsidiary. S&P currently assigns a negative outlook to FPL Group and its subsidiaries due mostly to pending resolution of regulatory issues, such as the current rate proceeding. However, despite the negative outlook,

FPL's current bond ratings of Aa3/A are higher than the average utility bond rating of BBB. This indicates that FPL is a lower risk company than the average regulated utility company.

For purposes of estimating the cost of equity for FPL in this case, it is important to note that the Company's cost of equity would be lower than FPL Group as a whole. This is because the more risky and highly leveraged unregulated operations of FPL Energy increase the risk and the required rate of return of FPL Group. Florida ratepayers should not have to support the higher cost of capital associated with FPL Group's unregulated operations. The fair rate of return granted to FPL by the Florida Public Service Commission should only consider the lower risk regulated electric operations of the Company.

## III. DETERMINATION OF FAIR RATE OF RETURN

**Q. Please describe the methods you employed in estimating a fair rate of return for FPL.**

A. I employed a Discounted Cash Flow ("DCF") analysis for a group of comparison electric companies to estimate the cost of equity for FPL's regulated electric operations. I also employed two Capital Asset Pricing Model ("CAPM") analyses, although I did not incorporate these results into my recommendation.

**Q. What are the main guidelines to which you adhere in estimating the cost of equity for a firm?**

A. Generally speaking, the estimated cost of equity should be comparable to the returns of other firms with similar risk structures and should be sufficient for the firm to attract capital. These are the basic standards set out in Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944) and Bluefield W.W. & Improv. Co. v. Public Service Comm'n., 262 U.S. 679 (1922).

From an economist's perspective, the notion of "opportunity cost" plays a vital role in estimating the cost of equity. One measures the opportunity cost of an investment equal to what one would have obtained in the next best alternative.

For example, let us suppose that an investor decides to purchase the stock of a publicly traded electric utility. That investor made the decision based on the expectation of dividend payments and perhaps some appreciation in the stock's value over time. However, that investor's opportunity cost is measured by what she or he could have invested in as the next best alternative. That alternative could have been another utility stock, a utility bond, a mutual fund, a money market fund, or any other number of investment vehicles.

The key determinant in deciding whether to invest, however, is based on comparative levels of risk. Our hypothetical investor would not invest in a particular electric company stock if it offered a return lower than other investments of similar risk. The opportunity cost simply would not justify such an investment. Thus, the task for the rate of return analyst is to estimate a return that is equal to the return being offered by other risk-comparable firms. Failing this, the subject firm will be impaired in its ability to attract capital.

**Q. What are the major types of risk faced by utility companies?**

A. In general, risk associated with the holding of common stock can be separated into three major categories: business risk, financial risk, and liquidity risk. Business risk refers to risks inherent in the operation of the business. Volatility of the firm's sales, long-term demand for its product(s), the amount of operating

leverage, and quality of management are all factors that affect business risk. The quality of regulation at the state and federal levels also plays an important role in business risk for regulated utility companies.

Financial risk refers to the impact on a firm's future cash flows from the use of debt in the capital structure. Interest payments to bondholders represent a prior call on the firm's cash flows and must be met before income is available to the common shareholders. Additional debt means additional variability in the firm's earnings, leading to additional risk.

Liquidity risk refers to the ability of an investor to quickly sell an investment without a substantial price concession. The easier it is for an investor to sell an investment for cash, the lower the liquidity risk will be. Stock markets, such as the New York and American Stock Exchanges, help ease liquidity risk substantially. Investors who own stocks that are traded in these markets know on a daily basis what the market prices of their investments are and that they can sell these investments fairly quickly. Many electric utility stocks are traded on the New York Stock Exchange and are considered liquid investments.

**Q. Are there any indices available to investors that quantify the total risk of a company?**

A. Yes. Published measures exist that categorize companies based on various measures of risk. One of the best-known and most widely available sources is from Value Line. Each company on which Value Line reports is assigned a Safety Rank. The Safety Rank consists of a number from 1 to 5, with 1 being the highest - meaning least risky - and 5 being the lowest - meaning most risky. The Safety Rank measures the total risk of a stock and encompasses a wide array of factors that affect financial and business risk. These factors include:

- Stock price volatility
- Fixed charge coverage ratio
- Quality of earnings
- Capitalization ratio
- Earnings on common stock
- Payout ratio
- Regulatory risk

By selecting companies with the same Safety Rank, investors may rely upon a widely-read third party assessment of which investments are similarly risky.

Bond ratings are another good tool that investors may utilize to determine the risk comparability of firms. Bond rating agencies such as Moody's and Standard and Poor's perform detailed analyses of factors that contribute to the business and financial risk of a particular investment. The end result of their analyses is a bond rating that reflects these risks.

**Discounted Cash Flow Method**

**Q. Please describe the basic DCF approach.**

A. The basic DCF approach is rooted in valuation theory. It is based on the premise that the value of a financial asset is determined by its ability to generate future net cash flows. In the case of a common stock, those future cash flows take the form of dividends and appreciation in price. The value of the stock to investors is the discounted present value of future cash flows. The general equation then is:

$$V = \frac{R}{(1+r)} + \frac{R}{(1+r)^2} + \frac{R}{(1+r)^3} + .... \frac{R}{(1+r)^n}$$

*Where:* $V$ = *asset value*
$R$ = *yearly cash flows*
$r$ = *discount rate*

This is no different from determining the value of any asset from an economic point of view. However, the commonly employed DCF model makes certain simplifying assumptions. One is that the stream of income from the equity share is assumed to be perpetual; that is, there is no salvage or residual value at

the end of some maturity date (as is the case with a bond). Another important assumption is that financial markets are reasonably efficient; that is, they correctly evaluate the cash flows relative to the appropriate discount rate, thus rendering the stock price efficient relative to other alternatives. Finally, the model I employ also assumes a constant growth rate in dividends. The fundamental relationship employed in the DCF method is described by the formula:

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

*Where:* $D_1$ = *the next period dividend*
$P_0$ = *current stock price*
$g$ = *expected growth rate*
$k$ = *investor-required return*

It is apparent that the "k" so determined must relate to the investors' expected return. Use of the discounted cash flow method to determine an investor-required return is complicated by the need to express investors' expectations relative to dividends, earnings, and book value over an infinite time horizon. Financial theory suggests that stockholders purchase common stock on the assumption that there will be some change in the rate of dividend payments

over time. We assume that the rate of growth in dividends is constant over the assumed time horizon, but the model could easily handle varying growth rates if we knew what they were. Finally, the relevant time frame is prospective rather than retrospective.

**Q. What was your first step in conducting your DCF analysis for FPL?**

A. My first step was to construct a comparison group of companies that has a risk profile that is reasonably similar to FPL. Since FPL is a wholly owned subsidiary of FPL Group and does not have publicly traded common stock, FPL's cost of equity cannot be estimated directly using the DCF model. As a result, it is necessary to construct a group of comparison companies that has a risk profile that is reasonably similar to FPL.

**Q. Please describe your approach for selecting a comparison group of electric companies.**

A. As my starting point in this proceeding, I reviewed the group of companies used by FPL witness William Avera in his cost of equity analysis. On page 33 of his

Direct Testimony, Dr. Avera explained that his electric utility proxy group was comprised of electric utilities that had an S&P corporate credit rating of BBB+ or higher and total revenues exceeding $1.0 billion. After excluding ALLETE, Dr. Avera's proxy group consisted of 21 companies that are presented on his Document WEA-3.

My review of Dr. Avera's group indicates that a significant number of companies should be excluded.

First, CINergy Corp. recently agreed to a merger with Duke Energy and Exelon recently announced a proposed merger with Public Service Enterprise Group. The CINergy/Duke merger was announced after Dr. Avera filed his Direct Testimony. However, the Exelon/PSEG merger was announced in December 2004, which was before Dr. Avera filed his testimony. Companies that have pending mergers are not appropriate candidates for a cost of equity analysis since their corporate profiles are subject to significant future changes, which influence investors' expectations, stock prices, and future dividends and earnings. CINergy's and Exelon's mergers would render their historical stock price and earnings forecasts irrelevant for purposes of a cost of equity analysis. Thus, CINergy and Exelon should be eliminated from the proxy group.

Second, Dr. Avera included numerous companies that derive a minority of their revenues from regulated utility operations. For example, Constellation Energy and MDU Resources are involved in significant unregulated operations. MDU

Resources also operates an interstate natural gas pipeline that is regulated by the FERC. *AUS Utility Reports* indicated that the percentage of total revenues from regulated electric operations for these companies was only 15% and 6%, respectively. Unregulated operations are likely fueling higher expected earnings growth rates for both of these companies. On Document WEA-4, Dr. Avera presented forecasted earnings growth rates for Constellation Energy that ranged from 7.09% to 13.0%. For MDU Resources, his earnings growth forecasts ranged from 7.5% to 8.0%. These rates are greatly in excess of the average growth rates for his proxy group of 4.9% to 5.3%. Inclusion of these companies would inflate the investor required return calculation for FPL.

Based on my review of the June 2005 issue of *AUS Utility Reports*, the following companies in Dr. Avera's group have less that half of their revenues coming from regulated utility operations. The percentage after each company's name represents the percentage of total revenues from regulated electric operations.

1. Constellation Energy – 15%
2. Dominion Resources – 35%
3. DTE Energy – 18%
4. MDU Resource Group – 6%
5. OGE Energy Group – 30%
6. SCANA – 43%
7. Sempra Energy – 48%
8. Vectren Corporation – 22%
9. WPS Resources – 18%

In my opinion, companies that have significant unregulated operations or other operations that are not related to regulated electric utility services are not appropriate candidates for inclusion in a proxy group. One of the criteria I have used in constructing a comparison group of companies is to include companies that have at least 50% of their operations coming from regulated electric utility services. Of course, even at that level unregulated activities can have a significant effect on a company's financial profile, but at least that effect is reduced. On this basis, the nine companies I listed above should be excluded from the proxy group.

Using Dr. Avera's proxy group as a starting point, the resulting group of comparison electric companies I used in my analysis is:

1. Alliant Energy
2. Ameren Corp.
3. Consolidated Edison
4. Energy East Corp.
5. FPL Group, Inc.
6. Northeast Utilities
7. NSTAR
8. Pepco Holdings
9. Southern Company
10. Wisconsin Energy

**Q. Are the bond ratings of the companies in your comparison group comparable to FPL's bond ratings?**

A. Yes. Please refer to Exhibit____(RAB-3), which lists the bond ratings for each of these companies. These bond ratings were taken from the June 2005 issue of *AUS Utility Reports.* As a group, the average bond rating is around a mid to low A. These bond ratings suggest that the comparison group of companies that I have selected provides a reasonable basis for estimating the cost of equity for FPL.

**Q. What was your first step in determining the DCF return on equity for the comparison group?**

A. I first determined the current dividend yield, $D_0/P_0$, from the basic equation. My general practice is to use six months as the most reasonable period over which to estimate the dividend yield. The six-month period I used covered the months from December 2004 through May 2005. I obtained historical prices and dividends from Yahoo! Finance. The annualized dividend divided by the average monthly price represents the average dividend yield for each month in the period.

The resulting average dividend yield for the group is 4.12%. These calculations are shown in Exhibit____(RAB-4).

**Q. Having established the average dividend yield, how did you determine the expected growth rate for the electric comparison group?**

A. "Expected" refers to the investor's expected growth rate. The task, in theory, is to use a growth rate that will correctly forecast the constant rate of growth in dividends. We refer to a perpetual growth rate since the DCF model has no arbitrary cut-off point. The obvious fact is that there is no way to know with absolute certainty what investors expect the growth rate to be in the short term, much less in perpetuity. The dividend growth rate is a function of earnings growth and the payout ratio, neither of which is known precisely for the future.

In this analysis, I relied on three major sources of analysts' forecasts for growth. These sources are Value Line, Zacks Investment Research ("Zacks"), and First Call/Thomson Financial.

**Q. Please briefly describe Value Line, Zacks, and First Call/Thomson Financial.**

A. Value Line is an investment survey that is published for approximately 1,700 companies, both regulated and unregulated. It is updated quarterly and probably

represents the most comprehensive and widely used of all investment information services. It provides both historical and forecasted information on a number of important data elements. Value Line neither participates in financial markets as a broker nor works for the utility industry in any capacity of which I am aware.

According to Zacks' website, Zacks "was formed in 1978 to compile, analyze, and distribute investment research to both institutional and individual investors." Zacks gathers opinions from a variety of analysts on earnings growth forecasts for numerous firms including regulated electric utilities. The estimates of the analysts responding are combined to produce consensus average and median estimates of earnings growth.

Like Zack's, First Call/Thomson Financial also provides detailed investment research on numerous companies. Thomson also compiles and reports consensus analysts' forecasts of earnings growth.

**Q. Why did you rely on analysts' forecasts in your analysis?**

A. The finance literature has shown that analysts' forecasts provide better predictions of future growth than do estimates based on historical growth alone[2].

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2 See Rozeff (Journal of Forecasting, Volume 2, Issue No. 4, 1983), Brown and Rozeff (Journal of

**Q. How did you utilize your data sources to estimate growth rates for the comparison group?**

A. Exhibit____(RAB-5), pages 1 and 2, presents the details of the calculations for the Value Line, Zacks, and Thomson Financial forecasted growth estimates. The Value Line growth estimates are based on five-year forecasts for dividend growth and six-year forecasts for earnings growth. The Zacks and First Call/Thomson Financial earnings growth estimates are forecasts for the next three to five years. These earnings and dividend growth estimates for the comparison group are summarized on Columns (1) through (4) of page 1 of Exhibit____(RAB-5).

I also utilized the sustainable growth formula in estimating the expected growth rate. The sustainable growth method, also known as the retention ratio method, recognizes that the firm retains a portion of its earnings fuels growth in dividends. These retained earnings, which are plowed back into the firm's asset base, are expected to earn a rate of return. This, in turn, generates growth in the firm's book value, market value, and dividends.

The sustainable growth method is calculated using the following formula:

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Finance, March 1978), Moyer, Chatfield and Kelley (International Journal of Forecasting, 1985), and a study by Vander Weide and Carleton that was incorporated as part of the Edison Electric Institute's comments in the Federal Energy Regulatory Commission's generic cost of capital proceedings.

$$G = B \times R$$

*Where:* *G = expected retention growth rate*
*B = the firm's expected retention ratio*
*R = the expected return*

In its proper form, this calculation is forward-looking. That is, the investors' expected retention ratio and return must be used in order to measure what investors anticipate will happen in the future. Data on expected retention ratios and returns may be obtained from Value Line.

The expected sustainable growth estimates for the comparison group are presented in Column (5) on page 1 of Exhibit____(RAB-5). The data came from the Value Line forecasts for the comparison group.

**Q. How did you proceed to determine the DCF cost of equity for the electric comparison group?**

A. To estimate the expected dividend yield ($D_1$) for the group, the current dividend yield must be moved forward in time to account for dividend increases over the next twelve months. I estimated the expected dividend yield by multiplying the current dividend yield by one plus one-half the expected growth rate.

I then added the expected growth rate ranges to the expected dividend yield for the comparison group. The calculation of the resulting DCF returns on equity is presented on page 3 of Exhibit____(RAB-5). The expected growth rates I utilized in this proceeding range from 4.19% to 4.80%. The retention growth method resulted in a growth rate of 3.87%, slightly below the low end of this range.

**Q. Please explain how you calculated your DCF cost of equity estimates.**

A. Page 3 of Exhibit____(RAB-5) shows four alternative DCF cost of equity calculations using the four growth estimates shown on page 1. The growth rates I used were the Value Line forecasts for dividend and earnings growth and the analysts' forecasts from Zack's and First Call/Thomson Financial.

The DCF returns range from 8.39% to 9.02%. The DCF return on equity utilizing the average of all four growth rates is 8.70%.

**Capital Asset Pricing Model**

**Q. Briefly summarize the Capital Asset Pricing Model ("CAPM") approach.**

A. The theory underlying the CAPM approach is that investors, through diversified portfolios, may combine assets to minimize the total risk of the portfolio. Diversification allows investors to diversify away all risks specific to a particular company and be left only with market risk that affects all companies. Thus, CAPM theory identifies two types of risks for a security: company-specific risk and market risk. Company-specific risk includes such events as strikes, management errors, marketing failures, lawsuits, and other events that are unique to a particular firm. Market risk includes inflation, business cycles, war, variations in interest rates, and changes in consumer confidence. Market risk tends to affect all stocks and cannot be diversified away. The idea behind the CAPM is that diversified investors are rewarded with returns based on market risk.

Within the CAPM framework, the expected return on a security is equal to the risk-free rate of return plus a risk premium that is proportional to the security's

market, or nondiversifiable risk. Beta is the factor that reflects the inherent market risk of a security. It measures the volatility of a particular security relative to overall market for securities. For example, a stock with a beta of 1.0 indicates that if the market rises by 15.00%, that stock will also rise by 15.00%. This stock moves in tandem with movements in the overall market. Stocks with a beta of 0.5 will only rise or fall 50.00% as much as the overall market. So with an increase in the market of 15.00%, this stock will only rise 7.50%. Stocks with betas greater than 1.0 will rise and fall more than the overall market. Thus, beta is the relevant measure of the risk of individual securities vis-à-vis the market.

Based on the foregoing discussion, the equation for determining the return for a security in the CAPM framework is:

$$K = Rf + \beta(MRP)$$

*Where:*
$K$ = *Required Return on equity*
$Rf$ = *Risk-free rate*
$MRP$ = *Market risk premium*
$\beta$ = *Beta*

This equation tells us about the risk/return relationship posited by the CAPM. Investors are risk averse and will only accept higher risk if they receive higher returns. These returns can be determined in relation to a stock's beta and the market risk premium. The general level of risk aversion in the economy

determines the market risk premium. If the risk-free rate of return is 3.00% and the required return on the total market is 15.00%, then the risk premium is 12.00%. Any stock's required return can be determined by multiplying its beta by the market risk premium. Stocks with betas greater than 1.0 are considered riskier than the overall market and will have higher required returns. Conversely, stocks with betas less than 1.0 will have required returns lower than the market as a whole.

**Q. In general, are there concerns regarding the use of the CAPM in estimating the return on equity?**

A. Yes. There is considerable controversy surrounding the use of the CAPM[3]. There is strong evidence that beta is not the primary factor in determining the risk of a security. For example, Value Line states that its Safety Rank is a measure of total risk, not its calculated beta coefficient. Beta coefficients usually describe only a small amount of total investment risk. Also, recent finance literature has questioned the usefulness of beta in predicting the relationship between risk and required return. Finally, a considerable amount of judgment must be employed in determining the risk-free rate and market return portions of the CAPM equation. The analyst's application of judgment can significantly influence the

3 For a more complete discussion of some of the controversy surrounding the use of the CAPM, refer to *A Random Walk Down Wall* Street by Burton Malkiel, pages 229 – 239, 1999 edition.

results obtained from the CAPM. My past experience with the CAPM indicates that it is prudent to use a wide variety of data in estimating returns. Of course, the range of results may also be wide, indicating the difficulty in obtaining a reliable estimate from the CAPM.

**Q. How did you estimate the market return portion of the CAPM?**

A. The first source I used was the Value Line Investment Survey for Windows for May 2005. Value Line provides a summary statistical report detailing, among other things, forecasted growth in dividends, earnings, and book value for the companies Value Line follows. I have presented these three growth rates and the average on page 2 of Exhibit ____(RAB-6). The average growth rate is 12.70%. Combining this growth rate with the average expected dividend yield of the Value Line companies of 1.18% results in an expected market return of 13.88%. The detailed calculations are shown on page 1 of Exhibit ____(RAB-6).

I also considered a supplemental check to this market estimate. Ibbotson Associates published a study of historical returns on the stock market in its *Stocks, Bonds, Bills, and Inflation 2005 Yearbook.* Some analysts employ this historical data to estimate the market risk premium of stocks over the risk-free rate. The assumption is that a risk premium calculated over a long period of time

is reflective of investor expectations going forward. Exhibit ____(RAB-7) presents the calculation of the market return using the Ibbotson historical data.

**Q. Please address the use of historical earned returns to estimate the market risk premium.**

A. The use of historic earned returns on the Standard and Poor 500 to estimate the current market risk premium is rather suspect because it naively assumes that investors currently expect historical risk premiums to continue unchanged into the future forever regardless of present or forecasted economic conditions. Brigham, Shome and Vinson noted the following with respect to the use of historic risk premiums calculated using the returns as reported by Ibbotson and Sinquefield (referred to in the quote as "I&S"):

> **"There are both conceptual and measurement problems with using I&S data for purposes of estimating the cost of capital. Conceptually, there is no compelling reason to think that investors expect the same relative returns that were earned in the past. Indeed, evidence presented in the following sections indicates that relative expected returns should, and do, vary significantly over time. Empirically, the measured historic premium is sensitive both to the choice of estimation horizon and to the end points. These choices are essentially arbitrary, yet can result in significant differences in the final outcome."**[4]

4 Brigham, E.F., Shome, D.K. and Vinson, S.R., "The Risk Premium Approach to Measuring a

In summary, the use of historic earned returns should be viewed with a great deal of caution. There is no real support for the proposition that an unchanging, mechanistically applied historical risk premium is representative of current investor expectations and return requirements.

**Q. How did you determine the risk free rate?**

A. I used the average yields on the 20-year Treasury bond and five-year Treasury note over the six-month period from December 2004 through May 2005. The 20-year Treasury bond is often used by rate of return analysts as the risk-free rate, but it contains a significant amount of interest rate risk. The five-year Treasury note carries less interest rate risk than the 20-year bond and is more stable than three-month Treasury bills. Therefore, I have employed both of these securities as proxies for the risk-free rate of return. This approach provides a reasonable range over which the CAPM may be estimated.

**Q. What is your estimate of the market risk premium?**

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Utility's Cost of Equity", *Financial Management*, Spring 1985, pp. 33-45.

A. Exhibit ____(RAB-6), line 9 of page 1, presents my estimates of the market risk premium based on a DCF analysis applied to current market data. The market risk premium is 9.14% using the 20-year Treasury bond and 10.03% using the five-year Treasury bond.

Utilizing the historical Ibbotson data on market returns, the market risk premium ranges from 5.20% to 7.20%. This is shown on Exhibit ____(RAB-7).

**Q. How did you determine the value for beta?**

A. I obtained the betas for the companies in the electric company comparison group from most recent Value Line reports. The average of the Value Line betas for the electric group is .75.

**Q. Please summarize the CAPM results.**

A. Please refer to line 14 of page 1 of Exhibit ____(RAB-6) for the CAPM results for the 20-year and five-year Treasury bond yields. For the electric comparison group, the CAPM returns are 11.32% (five-year bond) and 11.55% (20-year bond).

The CAPM results using the historical Ibbotson data range from 8.62% to 10.11%. These results are shown on Exhibit ____(RAB-7).

## Conclusions and Recommendations

**Q. Please summarize the cost of equity estimates you have developed up to this point in your testimony.**

A. Utilizing the DCF model, I developed cost of equity estimates for a comparison group of electric utility companies. The results for the electric company comparison group using the constant-growth DCF model ranged from 8.39% to 9.02%. The results using the CAPM ranged from 8.62% to 11.55%.

**Q. What is your recommendation for a fair rate of return on equity for FPL?**

A. My recommended rate of return on equity for the Company is 8.70%. This recommendation is based on the average of the four DCF cost of equity estimates. Given current market conditions, I believe this value is the most representative of the investor-required return on equity for an Aa3/A-rated company such as FPL.

I also believe that my recommended fair rate of return of 8.70% reflects the investor required returns for the regulated electric operations of FPL. As I mentioned earlier in my testimony, FPL Group's more risky unregulated operations should not be included in the consideration of the cost of equity for FPL.

**Q. Your CAPM results are higher than your DCF results. Why didn't you take this into account in your recommended return on equity for FPL?**

A. It is my opinion that the CAPM results for the comparison group may be overstated at this time. This is due, in part, to the application of Value Line's beta for the group of .75. Value Line determines its betas based on five years of historical price data. Over the last five years, utility share prices in general have been quite volatile due to restructuring, deregulation, and the increase of unregulated investments that were more risky than core electric operations. These factors likely increased the historical betas for electric utilities, other things being equal. It now appears that the industry will be more stable going forward and, in my opinion, historical betas are therefore likely to fall from their current level.

Second, the expected return on the market based on Value Line's most recent forecasts appears to be quite volatile at this time. In a piece of return on equity testimony I filed in 2004 for Aquila Networks – WPC, the expected return on the market was 11.70%. Later that year, I filed return on equity testimony for Southwestern Electric Power Company ("SWEPCO") in which the market return jumped substantially to 13.38%. Now in this proceeding, the Value Line market return jumped once again to 13.88%. This change substantially increased the CAPM results in this proceeding compared to my Aquila and SWEPCO testimonies. However, my DCF results have remained fairly stable and are consistent with interest rates trends throughout 2004 and 2005.

Thus, I believe the CAPM results will likely overstate the investors' required return for FPL in this proceeding.

**Q. In Section II of your Direct Testimony, you mentioned the passage of the 2003 tax bill that reduced taxes on qualifying dividends to 15%. Do you believe that this reduced tax rate on dividends has affected the investor required returns for electric utilities companies?**

A. Yes. As I stated earlier, I believe that the new favorable tax rate on dividends has reduced the investors' required pre-tax cost of equity for electric utilities. Basic economic theory supports this proposition.

Prior to the passage of the 2003 tax bill, dividends were taxed at the normal tax rates, which could be as high as 35%. These same dividends are now being taxed at a much lower 15% rate. What this means is that for a given after-tax rate of return, such as 7% for example, an investor would now require a lower pretax return in order to earn that 7% after-tax return. In the realm of regulation, experts must estimate, and commissions must set, a pretax rate of return on equity that will be applied to a company's rate base. With lower tax rates on dividends, these pretax returns will inevitably decline.

In conclusion, other things being equal, the reduction in dividend taxation should lead to lower required returns for investors. When viewed from this perspective, an 8.70% return on equity for FPL is quite reasonable.

**Q. Have you reviewed Mr. Kollen's Direct Testimony with respect to the appropriate capital structure for FPL?**

A. Yes. I reviewed Mr. Kollen's testimony regarding the appropriate capital structure for FPL. For ratemaking purposes, Mr. Kollen recommended that FPL's equity ratio be set at the midpoint of the S&P range for a single A utility, with the capital structure reflecting the imputed value of the purchased power agreements as an increase in debt.

**Q. Do you agree with Mr. Kollen's recommended adjustment to FPL's capital structure?**

A. Yes. Mr. Kollen's recommended capital structure is reasonable in light of the excessive equity ratio being requested by the Company in this proceeding. Further, Mr. Kollen's recommendation is consistent with FPL's current bond ratings and with the bond ratings of the companies in my comparison group.

## IV. RESPONSE TO DR. WILLIAM AVERA

**Q. Have you reviewed the Direct Testimony and Exhibit of FPL witness Avera?**

A. Yes.

**Q. Please summarize your conclusions with respect to Dr. Avera's testimony and return on equity recommendation.**

A. My conclusions regarding Dr. Avera's testimony and return on equity recommendation are as follows.

Dr. Avera's recommended 11.8% return on equity is grossly overstated. Further, Dr. Avera recommended the adoption of a 50 basis point "incentive" adder that further inflates his recommendation to 12.30%. Dr. Avera's return on equity recommendation should be rejected.

Dr. Avera included a number of inappropriate companies in his proxy group. Two companies are engaged in pending merger activity, while nine other companies have a minority of their revenues derived from regulated electric operations. These companies should be excluded from his proxy group for the

purpose of estimating the return on equity for FPL regulated electric utility operations.

Dr. Avera improperly used forecasted interest rates in his risk premium analyses. These forecasted interest rates significantly overstated his cost of equity results. For the reasons I discussed earlier in my testimony, risk premium methods are less reliable than the DCF model, which employs current market data in the estimation of the current cost of equity. Thus, I recommend that the FPSC place primary reliance on the DCF model in setting a fair rate of return for FPL in this proceeding.

Dr. Avera's discussion of the current economic environment for electric utilities is overly pessimistic and heavily laden with detailed descriptions of how risky regulated electric operations are. I believe that an objective reading of current market information suggests that the regulated electric utility industry is stabilizing. Further, it should be noted that FPL's Aa3/A bond rating exceeds the average S&P utility bond rating of BBB. This suggests that in comparison to the average utility, FPL is a less risky company.

Dr. Avera's recommended 11.80% return on equity, before the addition of a 50 basis point "incentive adjustment", was taken from the high end of his range of estimates. This unsubstantiated judgment further overstates Dr. Avera's return on equity recommendation.

Dr. Avera's recommended adder of 50 basis points for an incentive adjustment should be rejected. Such an adjustment is inappropriate, merely inflates the investor required return on equity, and harms ratepayers by unjustly increasing rates. Of course, if FPL operates efficiently and reduces costs below test period levels, it will in fact receive an "incentive adjustment" because the Company and its shareholders will be able to keep all such cost reductions.

**DCF Analyses**

**Q. Please summarize Dr. Avera's approach to the DCF model and its results.**

A. Dr. Avera utilized the constant growth form of the DCF model to estimate the fair return on equity. He employed analysts' forecasts from Value Line, First Call, IBES, and Zack's to estimate the growth component of the model. In calculating forecasted dividend growth from Value Line, Dr. Avera omitted zero growth rates as not meaningful. After calculating all the forecasted growth estimates, Dr. Avera concluded that the expected growth rate for his proxy group fell within a range of 4.9% to 5.6%.

On page 41 of his Direct Testimony, Dr. Avera concluded that the implied cost of equity using a 5.3% midpoint of his growth rate range resulted in a DCF cost of equity of 9.4%.

**Q. Are the results and recommendations from Dr. Avera's DCF analyses reasonable?**

A. No. Dr. Avera's DCF results are significantly overstated.

**Q. Please explain why Dr. Avera's DCF results are overstated.**

A. First, as I mentioned in Section III of my Direct Testimony, Dr. Avera's proxy group contains eleven companies that should not be included. Two companies have recently announced mergers and nine companies have a minority of their revenues derived from regulated electric operations. My analysis of Dr. Avera's DCF results indicates that including these companies overstated Dr. Avera's results.

Exhibit ____(RAB-8) presents the results of Dr. Avera's DCF analyses excluding the eleven companies that I discussed in Section III of my Direct Testimony. For the remaining ten companies, the dividend yield is 4.2% and the

growth rates range from 4.25% to 5.33%. The DCF cost of equity results range from 8.48% to 9.56%, with an average of all results of 8.81%. This result is almost 60 basis points lower than Dr. Avera's DCF cost of equity recommendation.

My review of Dr. Avera's DCF analysis indicates that excluding Constellation Energy and MDU Resources made a significant difference in the DCF results. Both of these companies have extensive unregulated operations that appear to be driving high expected growth rates. Inclusion of these companies overstated Dr. Avera's DCF results.

**Q. Dr. Avera omitted dividend growth rates of zero from his analysis. Is this appropriate?**

A. No. Dr. Avera selectively excluded zero growth rates but failed to consider excluding unsustainably high dividend growth rates for certain companies. For example, forecasted earnings growth rates suggest that dividend growth rates of 9.5% for Northeast Utilities and 13.5% for Pepco Holdings are not expected to hold for the longer term. Yet, Dr. Avera gave no consideration to excluding these high near-term dividend growth rates.

If both the high (13.5%) and low (0.0%) dividend growth rates are excluded from the analysis, the average dividend growth rate for the proxy group is 4.93%, with a resulting cost of equity using forecasted dividend growth of 9.16%.

**Risk Premium Analyses**

**Q. Please summarize Dr. Avera's risk premium analyses.**

A. Dr. Avera used three different risk premium approaches. The first approach employed allowed returns from regulatory commissions. The second approach estimated an equity risk premium from historical utility stock and bond returns. The third approach utilized the CAPM. Dr. Avera's CAPM models employed both current and historical market risk premiums and an average beta from his proxy group.

In each of his three risk premium approaches, Dr. Avera used both current and projected interest rates to determine the risk premium cost of equity. Projected interest rates were taken from interest rate forecasts for 2006.

Using current interest rates, Dr. Avera's risk premium results ranged from 9.7% to 11.8%. Using forecasted interest rates, his results ranged from 10.9% to 12.0%.

**Q. Was it appropriate for Dr. Avera to use projected interest rates in his risk premium analyses?**

A. No. In my opinion it is more appropriate to use current interest rates than forecasted rates. This is because current interest rates incorporate all information available in the marketplace, including investor expectations on the course of future interest rates. Those expectations carry some weight in terms of the price investors are currently willing to pay for bonds. Interest rates may be forecasted to rise, as they indeed were at the beginning of 2005. However, interest rates declined through May of this year, highlighting the fact that there are great uncertainties associated with those forecasts. That uncertainty is discounted in current bond prices and interest rates.

In my view, if investors knew for a fact that utility bond yields were going to rise to the 7.0% level contained in Dr. Avera's analysis, then they already

would have adjusted the prices they are currently willing to pay for those bonds and yields would quickly rise to 7.0%. That is because with certain knowledge, it is unlikely a rational investor today would knowingly accept a certain future capital loss and not discount the price of his or her utility bond. Thus, current bond yields are the best measure of investors' expectations of economic trends since they reflect all currently available market information.

**Q. What is your response to Dr. Avera's historical risk premium studies?**

A. The problem with Dr. Avera's historical risk premium analysis is similar to the problem with using historical earned returns in the CAPM analysis, which I described earlier in my testimony. This approach naively assumes that earned returns and the resulting risk premiums in an historical period are reflective of current investor expectations. Such an assumption should be viewed with a good deal of skepticism. Given changing investor expectations over time, it is somewhat risky to assume that investors base their current required returns on an unchanging historical risk premium. Finance literature has shown that historical risk premiums change over time. Although historical risk premiums may provide rough guides to estimating current required returns, I believe that it is

preferable to place greater weight on DCF calculations that employ current, rather than historic data.

It should also be noted that the recent change in dividend taxation should reduce the expected risk premium of stocks over bonds going forward, other things being equal. As I stated earlier in my testimony, reduced taxation on dividends should lower the investor's required pretax return on equity, other things being equal. Since there was no change in the tax treatment of bond income, the required equity premium over bonds should decline going forward. Thus, historical risk premiums could overstate the current required risk premiums of utility stocks over bonds.

**Q. Please comment on Dr. Avera's allowed risk premium analysis which he presented beginning on page 43 of his Direct Testimony.**

A. Dr. Avera employed a risk premium approach by using Commission-allowed returns during the period from 1974 through 2004. In addition to the aforementioned weaknesses associated with the risk premium approach in general, using Commission-allowed returns implies that the FPSC should base its

return on equity award on what commissions have done in years past in other jurisdictions. The problem here is that other Commissions may include adjustments in their allowed returns on equity such as incentive mechanisms, performance rewards and/or penalties, and other items that are unique to the individual cases in other jurisdictions and may have nothing to do with a straight return on equity. Further, these equity returns may reflect utilities that are more leveraged than FPL, faced greater business risks than FPL (e.g., restructuring or deregulation), or had other circumstances that are not comparable to FPL. Using allowed returns also implies that the FPSC should rely on decisions in other jurisdictions rather than evaluate the specific evidence on return on equity in this proceeding. I recommend that the FPSC reject Dr. Avera's allowed risk premium approach.

**Implications for Financial Integrity**

**Q. Beginning on page 73 of his Direct Testimony, Dr. Avera discusses his views on an adequate rate of return and the implications for financial integrity. Please summarize your position with respect to this section of Dr. Avera's testimony.**

A. Dr. Avera has included a number of extreme examples of situations with troubled utilities to bolster his position that FPL should be allowed to earn a fair return on equity. In his discussion, Dr. Avera cites the following examples:

- The California energy crisis.
- The "plight" of PG&E and Sierra Resources.
- The financial problems of El Paso Electric Company in the late 1970s.

The problem with these extreme examples cited by Dr. Avera is that none of these situations pertain in any way to FPL. FPL is a below average risk regulated electric utility as I have pointed out elsewhere in my Direct Testimony. Florida regulation has been supportive to its electric utilities and FPL has an above average Aa3/A bond rating. FPL's financial profile looks nothing like the profiles of the troubled utilities Dr. Avera chose to cite in his Direct Testimony. Thus there is little basis for the concerns Dr. Avera expressed on pages 73 through 75 of his Direct Testimony.

I agree with Dr. Avera that FPL should be allowed the opportunity to earn a fair rate of return. However, I do not believe that the Company's allowed return should be inflated in order to protect against risks that FPL does not face.

**Dr. Avera's ROE Range and Recommendation**

**Q. Please summarize the basis of Dr. Avera's recommended return on equity for FPL.**

A. Dr. Avera described how he reached his conclusion as to a fair return on equity for FPL on page 82 of his Direct Testimony. Dr. Avera based his 11.8% recommendation on the upper end of his range. He chose the upper end of the range after considering "the potential exposures faced by FPL and the economic requirements necessary to maintain access to capital even under adverse circumstances."

**Q. Is it reasonable for Dr. Avera to base his recommended return on equity on the upper end of his ROE range?**

A. No. Dr. Avera's selection of the upper end of his ROE range as the basis for his fair rate of return is unreasonable and should be rejected by the Commission.

FPL's bond ratings of Aa3/A are higher than S&P's average rating for the utility industry, which currently stands at BBB. This means that FPL is a lower risk company than the average utility company. Since Dr. Avera used a proxy group of A-rated utility companies to estimate the cost of equity, it is inappropriate for him to select a rate of return from the upper end of his range. FPL's regulated electric operations do not constitute a high-risk investment, in fact quite the contrary. Even with the Company's current regulatory uncertainties, FPL's regulated electric operations contribute financial stability and steady cash flows to FPL Group. FPL's rate of return does not need unnecessary padding going forward.

Dr. Avera's recommendation has the effect of harming ratepayers because they would have to support unreasonably high rates associated with his overstated cost of equity. I recommend that the FPSC reject his proffered cost of equity because it is not a fair rate of return.

**50 Basis Point "Incentive" Adder**

**Q. On page 82 of his Direct Testimony, Dr. Avera stated that an incentive to recognize exemplary performance and efficient and economic management should be included in his cost of equity recommendation. On page 83, Dr. Avera recommended that the FPSC adopt a 50 basis point adder to recognize these factors. Please address the inclusion of a 50 basis point adder to FPL's cost of equity.**

A. The 50 basis point adder proposed by Dr. Avera and Mr. Dewhurst should be rejected by the Commission.

The Commission and FPL's ratepayers are already entitled to "exemplary performance and efficient and economic management" from the Company. FPL has a duty to provide reliable service to customers at just and reasonable rates as part of the "regulatory compact" between the Commission, the Company, and ratepayers. This 50 basis point adder proposed by Dr. Avera and Mr. Dewhurst would merely enrich the Company's shareholders at the expense of ratepayers.

It should also be noted that the Company's management has apparently provided excellent service and cost reductions in the past without an explicit incentive adder to its return on equity. Thus, management already had all the incentive it required to provide such service. FPL's witnesses have provided no foundation to suggest that such service would cease if the Commission does not provide the requested 50 basis point adder.

**Q. Does this conclude your direct testimony?**

A. Yes.

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

IN RE: PETITION FOR RATE INCREASE BY ) DOCKET NO. 050045-EI
FLORIDA POWER & LIGHT COMPANY )

# EXHIBITS

# OF

# RICHARD A. BAUDINO

ON BEHALF OF

SOUTH FLORIDA HOSPITAL AND HEALTHCARE ASSOCIATION

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

JUNE 2005

# RESUME OF RICHARD A. BAUDINO, DIRECTOR OF CONSULTING

## EDUCATION

**New Mexico State University, M.A.**
Major in Economics
Minor in Statistics

**New Mexico State University, B.A.**
Economics
English

Twenty two years of experience in utility ratemaking. Broad based experience in revenue requirement analysis, cost of capital, utility financing, phase-ins, auditing and rate design. Has designed revenue requirement and rate design analysis programs.

## REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Electric and Gas Utility Rate Design
Cost of Capital for Electric, Gas and Water Companies
Ratemaking Treatment of Generating Plant Sale/Leasebacks
Electric and Gas Utility Cost of Service
Revenue Requirements
Gas industry restructuring and competition
Fuel cost auditing

# RESUME OF RICHARD A. BAUDINO, DIRECTOR OF CONSULTING

## EXPERIENCE

**1989 to Present:** Kennedy and Associates: **Director of Consulting** - Responsible for consulting assignments in the area of revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, gas industry restructuring and competition.

**1982 to 1989:** New Mexico Public Service Commission Staff: **Utility Economist** - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

## CLIENTS SERVED

### Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

### Industrial Groups

Ad Hoc Committee for a Competitive Electric Supply System
Air Products and Chemicals, Inc.
Arkansas Electric Energy Consumers
Arkansas Gas Consumers
Armco Steel Company, L.P.
Association of Business Advocating Tariff Equity
General Electric Company
Industrial Energy Consumers
Kentucky Industrial Utility Consumers
Large Electric Consumers Organization
Newport Steel
Northwest Arkansas Gas Consumers
Maryland Industrial Group
Occidental Chemical
PSI Industrial Group
Taconite Intervenors (Minnesota)
Tyson Foods

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 3/83 | 1780 | NM | New Mexico Public Service Commission | Boles Water Co. | Rate design, rate of return. |
| 10/83 | 1803, 1817 | NM | New Mexico Public Service Commission | Southwestern Electric Coop | Rate design. |
| 11/84 | 1833 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Service contract approval, rate design, performance standards for Palo Verde nuclear generating system |
| 1983 | 1835 | NM | New Mexico Public Service Commission | Public Service Co. of NM | Rate design. |
| 1984 | 1848 | NM | New Mexico Public Service Commission | Sangre de Cristo Water Co. | Rate design. |
| 02/85 | 1906 | NM | New Mexico Public Service Commission | Southwestern Public Service Co. | Rate of return. |
| 09/84 | 1907 | NM | New Mexico Public Service Commission | Jornada Water Co. | Rate of return. |
| 11/85 | 1957 | NM | New Mexico Public Service Commission | Southwestern Public Service Co. | Rate of return. |
| 04/86 | 2009 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Phase-in plan, treatment of sale/leaseback expense. |
| 06/86 | 2032 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Sale/leaseback approval. |
| 09/86 | 2033 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Order to show cause, PVNGS audit. |
| 02/87 | 2074 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Diversification. |
| 05/87 | 2089 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Fuel factor adjustment. |
| 08/87 | 2092 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Rate design. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 10/88 | 2146 | NM | New Mexico Public Service Commission | Public Service Co. of New Mexico | Financial effects of restructuring, reorganization. |
| 07/88 | 2162 | NM | New Mexico Public Service Commission | El Paso Electric Co. | Revenue requirements, rate design, rate of return. |
| 01/89 | 2194 | NM | New Mexico Public Service Commission | Plains Electric G&T Cooperative | Economic development. |
| 1/89 | 2253 | NM | New Mexico Public Service Commission | Plains Electric G&T Cooperative | Financing. |
| 08/89 | 2259 | NM | New Mexico Public Service Commission | Homestead Water Co. | Rate of return, rate design. |
| 10/89 | 2262 | NM | New Mexico Public Service Commission | Public Service Co. of New Mexico | Rate of return. |
| 09/89 | 2269 | NM | New Mexico Public Service Commission | Ruidoso Natural Gas Co. | Rate of return, expense from affiliated interest. |
| 12/89 | 89-208-TF | AR | Arkansas Electric Energy Consumers | Arkansas Power & Light Co. | Rider M-33. |
| 01/90 | U-17282 | LA | Louisiana Public Service Commission | Gulf States Utilities | Cost of equity. |
| 09/90 | 90-158 | KY | Kentucky Industrial Utility Consumers | Louisville Gas & Electric Co. | Cost of equity. |
| 09/90 | 90-004-U | AR | Northwest Arkansas Gas Consumers | Arkansas Western Gas Co. | Cost of equity, transportation rate. |
| 12/90 | U-17282 Phase IV | LA | Louisiana Public Service Commission | Gulf States Utilities | Cost of equity. |
| 04/91 | 91-037-U | AR | Northwest Arkansas Gas Consumers | Arkansas Western Gas Co. | Transportation rates. |
| 12/91 | 91-410-EL-AIR | OH | Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers | Cincinnati Gas & Electric Co. | Cost of equity. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 05/92 | 910890-EI | FL | Occidental Chemical Corp. | Florida Power Corp. | Cost of equity, rate of return. |
| 09/92 | 92-032-U | AR | Arkansas Gas Consumers | Arkansas Louisiana Gas Co. | Cost of equity, rate of return, cost-of-service. |
| 09/92 | 39314 | ID | Industrial Consumers for Fair Utility Rates | Indiana Michigan Power Co. | Cost of equity, rate of return. |
| 09/92 | 92-009-U | AR | Tyson Foods | General Waterworks | Cost allocation, rate design. |
| 01/93 | 92-346 | KY | Newport Steel Co. | Union Light, Heat & Power Co. | Cost allocation. |
| 01/93 | 39498 | IN | PSI Industrial Group | PSI Energy | Refund allocation. |
| 01/93 | U-10105 | MI | Association of Businesses Advocating Tariff Equality (ABATE) | Michigan Consolidated Gas Co. | Return on equity. |
| 04/93 | 92-1464-EL-AIR | OH | Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers | Cincinnati Gas & Electric Co. | Return on equity. |
| 09/93 | 93-189-U | AR | Arkansas Gas Consumers | Arkansas Louisiana Gas Co. | Transportation service terms and conditions. |
| 09/93 | 93-081-U | AR | Arkansas Gas Consumers | Arkansas Louisiana Gas Co. | Cost-of-service, transportation rates, rate supplements; return on equity; revenue requirements. |
| 12/93 | U-17735 | LA | Louisiana Public Service Commission Staff | Cajun Electric Power Cooperative | Historical reviews; evaluation of economic studies. |
| 03/94 | 10320 | KY | Kentucky Industrial Utility Customers | Louisville Gas & Electric Co. | Trimble County CWIP revenue refund. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 4/94 | E-015/ GR-94-001 | MN | Large Power Intervenors | Minnesota Power Co. | Evaluation of the cost of equity, capital structure, and rate of return. |
| 5/94 | R-00942993 | PA | PG&W Industrial Intervenors | Pennsylvania Gas & Water Co. | Analysis of recovery of transition costs. |
| 5/94 | R-00943001 | PA | Columbia Industrial Intervenors | Columbia Gas of Pennsylvania | Evaluation of cost allocation, rate design, rate plan, and carrying charge proposals. |
| 7/94 | R-00942986 | PA | Armco, Inc., West Penn Power Industrial Intervenors | West Penn Power Co. | Return on equity and rate of return. |
| 7/94 | 94-0035-E-42T | WV | West Virginia Energy Users' Group | Monongahela Power Co. | Return on equity and rate of return. |
| 8/94 | 8652 | MD | Westvaco Corp. | Potomac Edison Co. | Return on equity and rate of return. |
| 9/94 | 930357-C | AR | West Central Arkansas Gas Consumers | Arkansas Oklahoma Gas Corp. | Evaluation of transportation service. |
| 9/94 | U-19904 | LA | Louisiana Public Service Commission | Gulf States Utilities | Return on equity. |
| 9/94 | 8629 | MD | Maryland Industrial Group | Baltimore Gas & Electric Co. | Transition costs. |
| 11/94 | 94-175-U | AR | Arkansas Gas Consumers | Arkla, Inc. | Cost-of-service, rate design, rate of return. |
| 3/95 | RP94-343-000 | FERC | Arkansas Gas Consumers | NorAm Gas Transmission | Rate of return. |
| 4/95 | R-00943271 | PA | PP&L Industrial Customer Alliance | Pennsylvania Power & Light Co. | Return on equity. |
| 6/95 | U-10755 | MI | Association of Businesses Advocating Tariff Equity | Consumers Power Co. | Revenue requirements. |
| 7/95 | 8697 | MD | Maryland Industrial Group | Baltimore Gas & Electric Co. | Cost allocation and rate design. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 8/95 | 95-254-TF U-2811 | AR | Tyson Foods, Inc. | Southwest Arkansas Electric Cooperative | Refund allocation. |
| 10/95 | ER95-1042 -000 | FERC | Louisiana Public Service Commission | Systems Energy Resources, Inc. | Return on Equity. |
| 11/95 | I-940032 | PA | Industrial Energy Consumers of Pennsylvania | State-wide - all utilities | Investigation into Electric Power Competition. |
| 5/96 | 96-030-U | AR | Northwest Arkansas Gas Consumers | Arkansas Western Gas Co. | Revenue requirements, rate of return and cost of service. |
| 7/96 | 8725 | MD | Maryland Industrial Group | Baltimore Gas & Electric Co., Potomac Electric Power Co. and Constellation Energy Corp. | Return on Equity. |
| 7/96 | U-21496 | LA | Louisiana Public Service Commission | Central Louisiana Electric Co. | Return on equity, rate of return. |
| 9/96 | U-22092 | LA | Louisiana Public Service Commission | Entergy Gulf States, Inc. | Return on equity. |
| 1/97 | RP96-199-000 | FERC | The Industrial Gas Users Conference | Mississippi River Transmission Corp. | Revenue requirements, rate of return and cost of service. |
| 3/97 | 96-420-U | AR | West Central Arkansas Gas Corp. | Arkansas Oklahoma Gas Corp. | Revenue requirements, rate of return, cost of service and rate design. |
| 7/97 | U-11220 | MI | Association of Business Advocating Tariff Equity | Michigan Gas Co. and Southeastern Michigan Gas Co. | Transportation Balancing Provisions |
| 7/97 | R-00973944 | PA | Pennsylvania American Water Large Users Group | Pennsylvania-American Water Co. | Rate of return, cost of service, revenue requirements. |
| 3/98 | 8390-U | GA | Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc. | Atlanta Gas Light | Rate of return, restructuring issues, unbundling, rate design issues. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

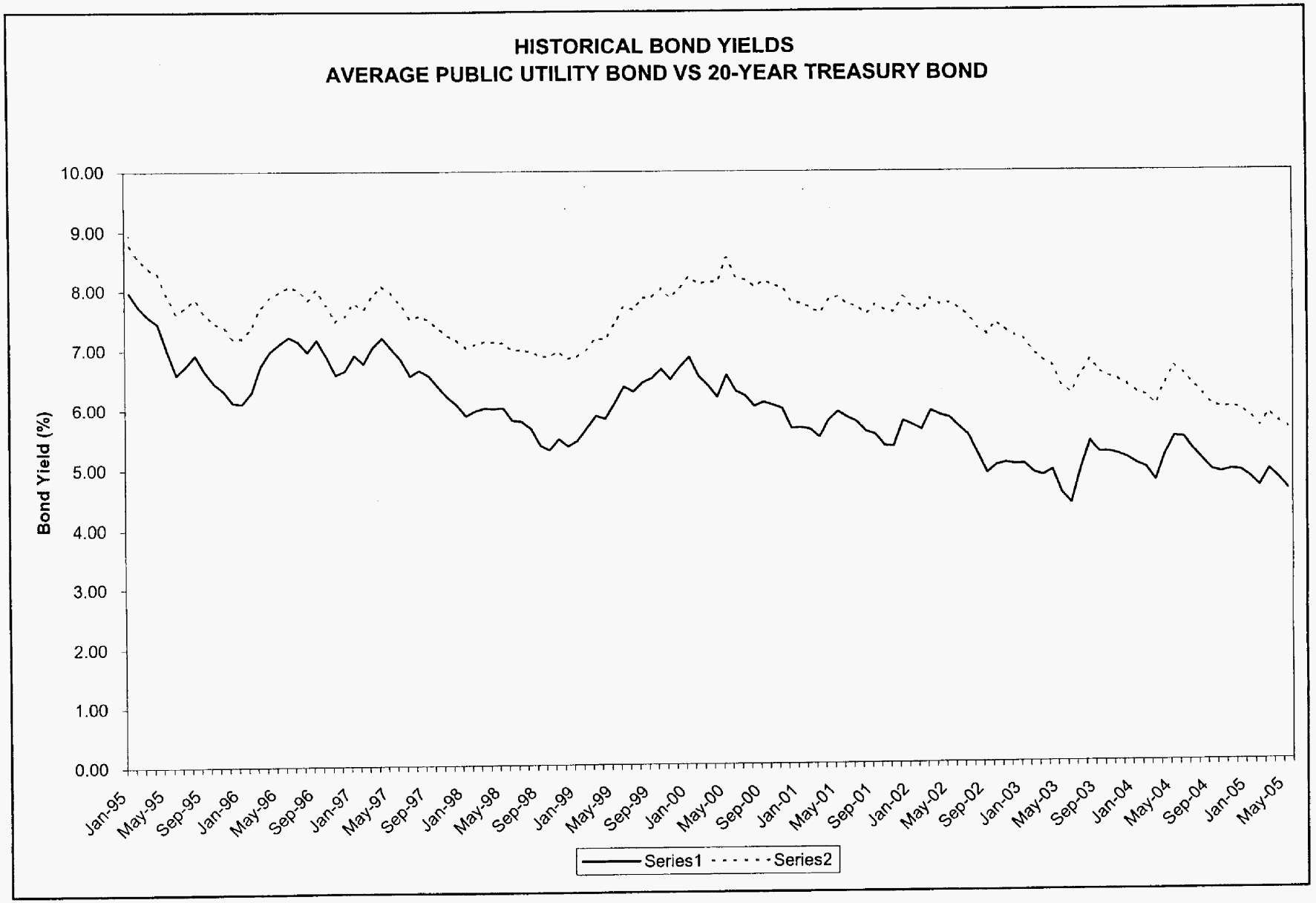
| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 7/98 | R-00984280 | PA | PG Energy, Inc. | PGE Industrial Intervenors | Cost allocation. |
| 8/98 | U-17735 | LA | Louisiana Public Service Commission | Cajun Electric Power Cooperative | Revenue requirements. |
| 10/98 | 97-596 | ME | Maine Office of the Public Advocate | Bangor Hydro-Electric Co. | Return on equity, rate of return. |
| 10/98 | U-23327 | LA | Louisiana Public Service Commission | SWEPCO, CSW and AEP | Analysis of proposed merger. |
| 12/98 | 98-577 | ME | Maine Office of the Public Advocate | Maine Public Service Co. | Return on equity, rate of return. |
| 12/98 | U-23358 | LA | Louisiana Public Service Commission | Entergy Gulf States, Inc. | Return on equity, rate of return. |
| 3/99 | 98-426 | KY | Kentucky Industrial Utility Customers, Inc. | Louisville Gas and Electric Co | Return on equity. |
| 3/99 | 99-082 | KY | Kentucky Industrial Utility Customers, Inc. | Kentucky Utilities Co. | Return on equity. |
| 4/99 | R-984554 | PA | T. W. Phillips Users Group | T. W. Phillips Gas and Oil Co. | Allocation of purchased gas costs. |
| 6/99 | R-0099462 | PA | Columbia Industrial Intervenors | Columbia Gas of Pennsylvania | Balancing charges. |
| 10/99 | U-24182 | LA | Louisiana Public Service Commission | Entergy Gulf States,Inc. | Cost of debt. |
| 10/99 | R-00994782 | PA | Peoples Industrial Intervenors | Peoples Natural Gas Co. | Restructuring issues. |
| 10/99 | R-00994781 | PA | Columbia Industrial Intervenors | Columbia Gas of Pennsylvania | Restructuring, balancing charges, rate flexing, alternate fuel. |
| 01/00 | R-00994786 | PA | UGI Industrial Intervenors | UGI Utilities, Inc. | Universal service costs, balancing, penalty charges, capacity assignment. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 01/00 | 8829 | MD | Maryland Industrial Gr. & United States | Baltimore Gas & Electric Co. | Revenue requirements, cost allocation, rate design. |
| 02/00 | R-00994788 | PA | Penn Fuel Transportation | PFG Gas, Inc., and | Tariff charges, balancing provisions. |
| 05/00 | U-17735 | LA | Louisiana Public Service Comm. | Louisiana Electric Cooperative | Rate restructuring. |
| 07/00 | 2000-080 | KY | Kentucky Industrial Utility Consumers | Louisville Gas and Electric Co. | Cost allocation. |
| 07/00 | U-21453 LA U-20925 (SC), U-22092 (SC) (Subdocket E) | | Louisiana Public Service Comm. | Southwestern Electric Power Co. | Stranded cost analysis. |
| 09/00 | R-00005654 | PA | Philadelphia Industrial And Commercial Gas Users Group. | Philadelphia Gas Works | Interim relief analysis. |
| 10/00 | U-21453 LA U-20925 (SC), U-22092 (SC) (Subdocket B) | | Louisiana Public Service Comm. | Entergy Gulf States, Inc. | Restructuring, Business Separation Plan. |
| 11/00 | R-00005277 (Rebuttal) | PA | Penn Fuel Transportation Customers | PFG Gas, Inc. and North Penn Gas Co. | Cost allocation issues. |
| 12/00 | U-24993 | LA | Louisiana Public Service Comm. | Entergy Gulf States, Inc. | Return on equity. |
| 03/01 | U-22092 | LA | Louisiana Public Service Comm. | Entergy Gulf States, Inc. | Stranded cost analysis. |
| 04/01 | U-21453 LA U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues) | | Louisiana Public Service Comm. | Entergy Gulf States, Inc. | Restructuring issues. |
| 04/01 | R-00006042 | PA | Philadelphia Industrial and Commercial Gas Users Group | Philadelphia Gas Works | Revenue requirements, cost allocation and tariff issues. |
| 11/01 | U-25687 | LA | Louisiana Public Service Comm. | Entergy Gulf States, Inc. | Return on equity. |

**Expert Testimony Appearances**
**of**
**Richard A. Baudino**
**As of April 2004**

| Date | Case | Jurisdict. | Party | Utility | Subject |
|---|---|---|---|---|---|
| 03/02 | 14311-U | GA | Georgia Public Service Commission | Atlanta Gas Light | Capital structure. |
| 08/02 | 2002-00145 | KY | Kentucky Industrial Utility Customers | Columbia Gas of Kentucky | Revenue requirements. |
| 09/02 | M-00021612 | PA | Philadelphia Industrial And Commercial Gas Users Group | Philadelphia Gas Works | Transportation rates, terms, and conditions. |
| 01/03 | 2002-00169 | KY | Kentucky Industrial Utility Customers | Kentucky Power | Return on equity. |
| 02/03 | 02S-594E | CO | Cripple Creek & Victor Gold Mining Company | Aquila Networks – WPC | Return on equity. |
| 04/03 | U-26527 | LA | Louisiana Public Service Commission | Entergy Gulf States, Inc. | Return on equity. |
| 10/03 | CV020495AB | GA | The Landings Assn., Inc. | Utilities Inc. of GA | Revenue requirement & overcharge refund |
| 03/04 | 2003-00433 | KY | Kentucky Industrial Utility Customers | Louisville Gas & Electric | Return on equity, Cost allocation & rate design |
| 03/04 | 2003-00434 | KY | Kentucky Industrial Utility Customers | Kentucky Utilities | Return on equity |
| 4/04 | ER03-583-000, et. al. | FERC | Louisiana Public Service Commission | Entergy Corp. | Return on Equity |
| 4/04 | 04S-035E | CO | Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co. | Aquila Networks – WPC | Return on equity |
| 9/04 | U-23327, Subdocket B | LA | Louisiana Public Service Commission | Southwestern Electric Power Company | Fuel cost review |
| 10/04 | U-23327 Subdocket A | LA | Louisiana Public Service Commission | Southwestern Electric Power Company | Return on Equity |
| 03/05 | 2004-00426/ 2004-00421 | KY | Kentucky Industrial Utility Customers, Inc. | Louisville Gas & Electric/ Kentucky Utilities | Return on Equity |


HISTORICAL BOND YIELDS
AVERAGE PUBLIC UTILITY BOND VS 20-YEAR TREASURY BOND
Bond Yield (%)
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Jan-95
May-95
Sep-95
Jan-96
May-96
Sep-96
Jan-97
May-97
Sep-97
Jan-98
May-98
Sep-98
Jan-99
May-99
Sep-99
Jan-00
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Sep-00
Jan-01
May-01
Sep-01
Jan-02
May-02
Sep-02
Jan-03
May-03
Sep-03
Jan-04
May-04
Sep-04
Jan-05
May-05
Series1
Series2

**ELECTRIC COMPANY**
**COMPARISON GROUP**

| | S&P Rating | Moody's Rating |
|---|---|---|
| Alliant Energy Corp. | A- | A2 |
| Ameren Corp. | A- | A2 |
| Consolidation Edison | A | A1 |
| Energy East | BBB+ | A3 |
| FPL Group, Inc. | A | Aa3 |
| Northeast Utilities | BBB+ | A3 |
| NSTAR | A | A1 |
| Pepco Holdings, Inc. | A- | A3 |
| Southern Company | A+ | A1 |
| Wisconsin Energy | A1 | A1 |

Source: AUS Utility Reports, June 2005

## ELECTRIC UTILITY
## COMPARISON GROUP
## AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

| | | Dec '04 | Jan '05 | Feb '05 | March '05 | April '05 | May '05 |
|---|---|---|---|---|---|---|---|
| **Alliant Energy Corp.** | High Price ($) | 28.800 | 28.590 | 27.860 | 27.750 | 27.510 | 27.750 |
| | Low Price ($) | 26.380 | 27.120 | 26.060 | 25.800 | 25.560 | 25.900 |
| | Avg. Price ($) | 27.590 | 27.855 | 26.960 | 26.775 | 26.535 | 26.825 |
| | Dividend ($) | 0.263 | 0.263 | 0.263 | 0.263 | 0.263 | 0.263 |
| | Mo. Avg. Div. | 3.81% | 3.78% | 3.90% | 3.93% | 3.96% | 3.92% |
| | 6 mos. Avg. | 3.88% | | | | | |
| **Ameren Corp.** | High Price ($) | 50.360 | 50.260 | 51.960 | 52.000 | 51.700 | 54.970 |
| | Low Price ($) | 47.830 | 48.170 | 49.800 | 47.510 | 48.700 | 51.660 |
| | Avg. Price ($) | 49.095 | 49.215 | 50.880 | 49.755 | 50.200 | 53.315 |
| | Dividend ($) | 0.635 | 0.635 | 0.635 | 0.635 | 0.635 | 0.635 |
| | Mo. Avg. Div. | 5.17% | 5.16% | 4.99% | 5.11% | 5.06% | 4.76% |
| | 6 mos. Avg. | 5.04% | | | | | |
| **Consolidated Edison** | High Price ($) | 44.750 | 44.140 | 44.710 | 43.210 | 43.650 | 46.100 |
| | Low Price ($) | 43.130 | 42.540 | 42.320 | 41.100 | 41.500 | 43.380 |
| | Avg. Price ($) | 43.940 | 43.340 | 43.515 | 42.155 | 42.575 | 44.740 |
| | Dividend ($) | 0.565 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 |
| | Mo. Avg. Div. | 5.14% | 5.26% | 5.24% | 5.41% | 5.36% | 5.10% |
| | 6 mos. Avg. | 5.25% | | | | | |
| **Energy East Corp.** | High Price ($) | 27.080 | 26.850 | 26.950 | 26.300 | 26.600 | 28.650 |
| | Low Price ($) | 24.810 | 25.690 | 25.350 | 24.980 | 25.090 | 25.870 |
| | Avg. Price ($) | 25.945 | 26.270 | 26.150 | 25.640 | 25.845 | 27.260 |
| | Dividend ($) | 0.275 | 0.275 | 0.275 | 0.275 | 0.275 | 0.275 |
| | Mo. Avg. Div. | 4.24% | 4.19% | 4.21% | 4.29% | 4.26% | 4.04% |
| | 6 mos. Avg. | 4.20% | | | | | |
| **FPL Group, Inc.** | High Price ($) | 76.100 | 76.850 | 80.190 | 41.375 | 41.970 | 41.300 |
| | Low Price ($) | 69.400 | 71.800 | 76.300 | 38.700 | 39.760 | 39.250 |
| | Avg. Price ($) | 72.750 | 74.325 | 78.245 | 40.038 | 40.865 | 40.275 |
| | Dividend ($) | 0.680 | 0.680 | 0.680 | 0.355 | 0.355 | 0.355 |
| | Mo. Avg. Div. | 3.74% | 3.66% | 3.48% | 3.55% | 3.47% | 3.53% |
| | 6 mos. Avg. | 3.57% | | | | | |
| **Northeast Utilities** | High Price ($) | 18.860 | 18.820 | 19.490 | 19.500 | 19.480 | 19.910 |
| | Low Price ($) | 17.580 | 17.750 | 18.500 | 18.390 | 18.020 | 18.500 |
| | Avg. Price ($) | 18.220 | 18.285 | 18.995 | 18.945 | 18.750 | 19.205 |
| | Dividend ($) | 0.163 | 0.163 | 0.163 | 0.163 | 0.163 | 0.163 |
| | Mo. Avg. Div. | 3.58% | 3.57% | 3.43% | 3.44% | 3.48% | 3.39% |
| | 6 mos. Avg. | 3.48% | | | | | |

## ELECTRIC UTILITY
## COMPARISON GROUP
## AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

| | | Dec '04 | Jan '05 | Feb '05 | March '05 | April '05 | May '05 |
|---|---|---|---|---|---|---|---|
| **NSTAR** | High Price ($) | 54.450 | 56.640 | 59.350 | 56.930 | 55.630 | 58.950 |
| | Low Price ($) | 49.600 | 52.650 | 54.950 | 53.350 | 53.600 | 53.960 |
| | Avg. Price ($) | 52.025 | 54.645 | 57.150 | 55.140 | 54.615 | 56.455 |
| | Dividend ($) | 0.555 | 0.580 | 0.580 | 0.580 | 0.580 | 0.580 |
| | Mo. Avg. Div. | 4.27% | 4.25% | 4.06% | 4.21% | 4.25% | 4.11% |
| | 6 mos. Avg. | 4.19% | | | | | |
| **Pepco Holdings, Inc.** | High Price ($) | 21.680 | 21.850 | 22.920 | 23.250 | 21.810 | 22.750 |
| | Low Price ($) | 20.400 | 20.490 | 21.790 | 20.260 | 20.500 | 21.360 |
| | Avg. Price ($) | 21.040 | 21.170 | 22.355 | 21.755 | 21.155 | 22.055 |
| | Dividend ($) | 0.250 | 0.250 | 0.250 | 0.250 | 0.250 | 0.250 |
| | Mo. Avg. Div. | 4.75% | 4.72% | 4.47% | 4.60% | 4.73% | 4.53% |
| | 6 mos. Avg. | 4.63% | | | | | |
| **Southern Company** | High Price ($) | 33.960 | 33.800 | 34.340 | 32.830 | 33.380 | 34.700 |
| | Low Price ($) | 32.220 | 32.490 | 31.590 | 31.140 | 31.600 | 32.700 |
| | Avg. Price ($) | 33.090 | 33.145 | 32.965 | 31.985 | 32.490 | 33.700 |
| | Dividend ($) | 0.358 | 0.358 | 0.358 | 0.358 | 0.373 | 0.373 |
| | Mo. Avg. Div. | 4.33% | 4.32% | 4.34% | 4.48% | 4.59% | 4.43% |
| | 6 mos. Avg. | 4.41% | | | | | |
| **Wisconsin Energy** | High Price ($) | 34.600 | 34.500 | 36.120 | 35.800 | 35.930 | 36.420 |
| | Low Price ($) | 32.940 | 33.350 | 34.190 | 34.010 | 34.660 | 34.200 |
| | Avg. Price ($) | 33.770 | 33.925 | 35.155 | 34.905 | 35.295 | 35.310 |
| | Dividend ($) | 0.210 | 0.210 | 0.220 | 0.220 | 0.220 | 0.220 |
| | Mo. Avg. Div. | 2.49% | 2.48% | 2.50% | 2.52% | 2.49% | 2.49% |
| | 6 mos. Avg. | 2.50% | | | | | |
| **Average Dividend Yield** | | 4.12% | | | | | |

**Source: Yahoo! Finance**

**ELECTRIC UTILITY**
**COMPARISON GROUP**
**DCF Growth Rate Analysis**

| Company | (1) Value Line DPS | (2) Value Line EPS | (3) Zacks | (4) First Call/ Thomson | (5) Value Line B x R |
|---|---|---|---|---|---|
| Alliant Energy Corp. | 5.29% | 5.38% | 4.00% | 3.25% | 2.97% |
| Ameren Corp. | 0.00% | 1.50% | 5.00% | 2.92% | 1.74% |
| Consolidation Edison | 0.87% | 1.40% | 3.00% | 3.40% | 1.92% |
| Energy East | 6.47% | 4.72% | 5.00% | 3.75% | 2.61% |
| FPL Group, Inc. | 6.96% | 4.19% | 5.00% | 4.76% | 4.41% |
| Northeast Utilities | 9.01% | 10.87% | 5.00% | 4.50% | 5.15% |
| NSTAR | 3.62% | 2.45% | 5.00% | 4.33% | 4.06% |
| Pepco Holdings, Inc. | 3.01% | 7.22% | 5.00% | 4.17% | 5.68% |
| Southern Company | 3.79% | 4.14% | 5.00% | 4.60% | 4.27% |
| Wisconsin Energy | 4.61% | 4.24% | 6.00% | 6.20% | 5.91% |
| Average | 4.36% | 4.61% | 4.80% | 4.19% | 3.87% |

**Sources:** **Zacks Detailed Analysts' Estimates, May 2005**
**First Call Earnings Estimates, May 2005**
**Value Line Investment Survey, March 4, April 1, and June 3, 2005**

**Value Line Projected Dividend Per Share Growth**

| Company | 2004 DPS | Projected DPS | Compound Growth Rate |
|---|---|---|---|
| Alliant Energy Corp. | $ 1.02 | $ 1.32 | 5.29% |
| Ameren Corp. | $ 2.54 | $ 2.54 | 0.00% |
| Consolidation Edison | $ 2.26 | $ 2.36 | 0.87% |
| Energy East | $ 1.06 | $ 1.45 | 6.47% |
| FPL Group, Inc. | $ 1.30 | $ 1.82 | 6.96% |
| Northeast Utilities | $ 0.63 | $ 0.97 | 9.01% |
| NSTAR | $ 1.13 | $ 1.35 | 3.62% |
| Pepco Holdings, Inc. | $ 1.00 | $ 1.16 | 3.01% |
| Southern Company | $ 1.42 | $ 1.71 | 3.79% |
| Wisconsin Energy | $ 0.83 | $ 1.04 | 4.61% |
| Average | | | 4.36% |

**ELECTRIC UTILITY**
**COMPARISON GROUP**
**DCF Growth Rate Analysis**

**Value Line Projected Earnings Per Share Growth**

| Company | 2002 - 2004 Avg. EPS | Projected EPS | Compound Growth Rate |
|---|---|---|---|
| Alliant Energy Corp. | $ 1.53 | $ 2.10 | 5.38% |
| Ameren Corp. | $ 2.88 | $ 3.15 | 1.50% |
| Consolidation Edison | $ 2.76 | $ 3.00 | 1.40% |
| Energy East | $ 1.52 | $ 2.00 | 4.72% |
| FPL Group, Inc. | $ 2.31 | $ 2.95 | 4.19% |
| Northeast Utilities | $ 1.08 | $ 2.00 | 10.87% |
| NSTAR | $ 1.73 | $ 2.00 | 2.45% |
| Pepco Holdings, Inc. | $ 1.58 | $ 2.40 | 7.22% |
| Southern Company | $ 1.96 | $ 2.50 | 4.14% |
| Wisconsin Energy | $ 2.14 | $ 2.75 | 4.24% |
| Average | | | 4.61% |

**Sustainable Growth Calculation**

| Company | Forecasted Payout Ratio | Forecasted Retention Ratio | Expected Return | Growth Rate |
|---|---|---|---|---|
| Alliant Energy Corp. | 62.86% | 37.14% | 8.00% | 2.97% |
| Ameren Corp. | 80.63% | 19.37% | 9.00% | 1.74% |
| Consolidation Edison | 78.67% | 21.33% | 9.00% | 1.92% |
| Energy East | 72.50% | 27.50% | 9.50% | 2.61% |
| FPL Group, Inc. | 61.69% | 38.31% | 11.50% | 4.41% |
| Northeast Utilities | 48.50% | 51.50% | 10.00% | 5.15% |
| NSTAR | 67.50% | 32.50% | 12.50% | 4.06% |
| Pepco Holdings, Inc. | 48.33% | 51.67% | 11.00% | 5.68% |
| Southern Company | 68.40% | 31.60% | 13.50% | 4.27% |
| Wisconsin Energy | 37.82% | 62.18% | 9.50% | 5.91% |
| Average | 65.45% | 34.55% | 10.44% | 3.87% |

**ELECTRIC UTILITY**
**COMPARISON GROUP**
**DCF Growth Rate Analysis**

**RETURN ON EQUITY CALCULATION**
**COMPARISON GROUP**

| | (1) Value Line Dividend Gr. | (2) Value Line Earnings Gr. | (3) Zack's Earning Gr. | (4) First Call Earning Gr. | (5) Average of All Gr. Rates |
|---|---|---|---|---|---|
| Dividend Yield | 4.12% | 4.12% | 4.12% | 4.12% | 4.12% |
| Growth Rate | 4.36% | 4.61% | 4.80% | 4.19% | 4.49% |
| Expected Div. Yield | 4.21% | 4.21% | 4.22% | 4.20% | 4.21% |
| DCF Return on Equity | 8.57% | 8.82% | 9.02% | 8.39% | 8.70% |

## CAPITAL ASSET PRICING MODEL ANALYSIS
## Electric Utility
## Comparison Group

### 20-Year Treasury Bond

| Line No. | | Value Line |
|---|---|---|
| 1 | Market Required Return Estimate | |
| 2 | Expected Dividend Yield | 1.18% |
| 3 | Expected Growth | 12.70% |
| 4 | Required Return | 13.88% |
| 5 | Risk-free Rate of Return, 20-Year Treasury Bond | |
| 6 | Average of Last Six Months | 4.74% |
| 8 | Risk Premium | |
| 9 | @ 6 Month Average RFR (Line 4 minus Line 6) | 9.14% |
| 10 | Comparison Group Beta | 0.75 |
| 11 | Comparison Group Beta * Risk Premium | |
| 12 | @ 6 Month Average RFR (Line 10 * Line 9) | 6.81% |
| 13 | CAPM Return on Equity | |
| 14 | @ 6 Month Average RFR (Line 12 plus Line 6) | 11.55% |

### 5-Year Treasury Bond

| | | |
|---|---|---|
| 1 | Market Required Return Estimate | |
| 2 | Expected Dividend Yield | 1.18% |
| 3 | Expected Growth | 12.70% |
| 4 | Required Return | 13.88% |
| 5 | Risk-free Rate of Return, 5-Year Treasury Bond | |
| 6 | Average of Last Six Months | 3.85% |
| 8 | Risk Premium | |
| 9 | @ 6 Month Average RFR (Line 4 minus Line 6) | 10.03% |
| 10 | Comparison Group Beta | 0.75 |
| 11 | Comparison Group Beta * Risk Premium | |
| 12 | @ 6 Month Average RFR (Line 9 * Line 10) | 7.47% |
| 13 | CAPM Return on Equity | |
| 14 | @ 6 Month Average RFR (Line 12 plus Line 6) | 11.32% |

# CAPITAL ASSET PRICING MODEL ANALYSIS
## Electric Utility
## Comparison Group

## Supporting Data for CAPM Analyses

20 Year Treasury Bond Data

| | Avg. Yield |
|---|---|
| December-04 | 4.88% |
| January-05 | 4.77% |
| February-05 | 4.61% |
| March-05 | 4.89% |
| April-05 | 4.75% |
| May-05 | 4.56% |
| 6 month average | 4.74% |

5 Year Treasury Bond Data

| | Avg. Yield |
|---|---|
| December-04 | 3.60% |
| January-05 | 3.71% |
| February-05 | 3.77% |
| March-05 | 4.17% |
| April-05 | 4.00% |
| May-05 | 3.85% |
| 6 month average | 3.85% |

Value Screen III Growth Rate Data:

| | |
|---|---|
| Forecasted Data: | |
| Earnings | 16.10% |
| Book Value | 10.62% |
| Dividends | 11.38% |
| Average | 12.70% |

Source: Value Line Investment Survey for Windows, May 2005

Value Line Betas
Comparison Group:

| | |
|---|---|
| Alliant Energy Corp. | 0.80 |
| Ameren Corp. | 0.75 |
| Consolidation Edison | 0.60 |
| Energy East | 0.85 |
| FPL Group, Inc. | 0.75 |
| Northeast Utilities | 0.80 |
| NSTAR | 0.70 |
| Pepco Holdings, Inc. | 0.85 |
| Southern Company | 0.65 |
| Wisconsin Energy | 0.70 |
| Average | 0.75 |

Source: Value Line Investment Reports, March 4, April 1 and June 3, 2005

## CAPITAL ASSET PRICING MODEL ANALYSIS

### Historic Market Premium

| | Geometric Mean | Arithmetic Mean |
|---|---|---|
| Long-Term Annual Return on Stocks | 10.40% | 12.40% |
| Long-Term Annual Income Return on Long-Term Government Bonds | 5.20% | 5.20% |
| Historical Market Risk Premium | 5.20% | 7.20% |
| Comparison Group Beta | 0.75 | 0.75 |
| Beta * Market Premium | 3.87% | 5.36% |
| Current 20-Year Tresury Bond Yield | 4.74% | 4.74% |
| CAPM Cost of Equity | 8.62% | 10.11% |

Source: *Stocks, Bonds, Bills, and Inflation 2005 Yearbook,* Ibbotson Associates

## CORRECTED AVERA DCF ANALYSIS

| | Implied Dividend Yield | Dividend Growth | Projected Earnings Growth IBES | Value Line | First Call | Zack's | Retention Growth |
|---|---|---|---|---|---|---|---|
| Alliant Energy Corp. | 4.00% | NMF | 4.00% | 3.00% | 5.80% | 4.70% | 3.30% |
| Ameren Corp. | 5.10% | 0.00% | 4.00% | NMF | 3.00% | 3.30% | 3.90% |
| Consolidation Edison | 5.40% | 1.00% | 3.00% | NMF | 3.00% | 2.90% | 2.40% |
| Energy East | 4.50% | 6.00% | 5.00% | 3.00% | 4.00% | 4.60% | 2.90% |
| FPL Group, Inc. | 3.80% | 7.50% | 5.00% | 4.00% | 5.00% | 5.10% | 4.90% |
| Northeast Utilities | 3.60% | 9.50% | 4.00% | 7.00% | 4.00% | 4.40% | 4.70% |
| NSTAR | 4.20% | 3.50% | 4.00% | 3.50% | 5.00% | 4.70% | 4.80% |
| Pepco Holdings, Inc. | 4.60% | 13.50% | 4.00% | 4.50% | 4.00% | 3.80% | 6.30% |
| Southern Company | 4.60% | 3.00% | 5.00% | 4.50% | 5.00% | 4.40% | 5.30% |
| Wisconsin Energy | 2.50% | 4.00% | 7.00% | 4.50% | 5.00% | 6.40% | 7.10% |
| Average | 4.23% | 5.33% | 4.50% | 4.25% | 4.38% | 4.43% | 4.56% |
| Proxy Group Cost of Equity | | 9.56% | 8.73% | 8.48% | 8.61% | 8.66% | 8.79% |
| Average of ROEs | 8.81% | | | | | | |