

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**DOCKET NO. 080677-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: PETITION FOR RATE INCREASE BY
FLORIDA POWER & LIGHT COMPANY**

TESTIMONY & EXHIBITS OF:

WILLIAM E. AVERA

DOCUMENT NUMBER-DATE

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DIRECT TESTIMONY OF WILLIAM E. AVERA
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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF WILLIAM E. AVERA**

4 **DOCKET NO. 080677-EI**

5

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

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

8 **Q. By whom are you employed and in what capacity?**

9 A. I am a principal in Financial Concepts and Applications, Inc. (“FINCAP”), a firm
10 engaged in financial, economic, and policy consulting to business and
11 government.

12

13 **I. OVERVIEW**

14

15 **Q. What is the purpose of your testimony?**

16 A. The purpose of my testimony is to present to the Florida Public Service
17 Commission (“FPSC” or the “Commission”) my assessment of the fair rate of
18 return on common equity (“ROE”) for the jurisdictional electric utility operations
19 of Florida Power & Light Company (“FPL” or the “Company”). In addition, I
20 examine the reasonableness of FPL's capital structure.

21 **Q. Are you sponsoring any exhibits in this case?**

22 A. Yes. I am sponsoring Exhibits WEA-1 through WEA-17, which are attached to
23 my direct testimony.

- 1 • WEA-1 Qualifications of William E. Avera
- 2 • WEA-2 Yield Spreads – Corporate Bonds v. Treasuries
- 3 • WEA-3 CBOE VIX Index – One Month Moving Average
- 4 • WEA-4 Average Public Utility Bond Yield
- 5 • WEA-5 20-Year Treasury Bond Yields / Utility Bond Yield Spread
- 6 • WEA-6 Comparison of Proxy Group Risk Indicators
- 7 • WEA-7 DCF Model – Utility Proxy Group
- 8 • WEA-8 Sustainable Growth Rate – Utility Proxy Group
- 9 • WEA-9 DCF Model – Non-Utility Proxy Group
- 10 • WEA-10 Sustainable Growth Rate – Non-Utility Proxy Group
- 11 • WEA-11 Forward-looking CAPM – Utility Proxy Group
- 12 • WEA-12 Forward-looking CAPM – Non-Utility Proxy Group
- 13 • WEA-13 Expected Earnings Approach
- 14 • WEA-14 FPL Adjusted Capital Structure
- 15 • WEA-15 Capital Structure – Electric Utility Operating Cos.
- 16 • WEA-16 Capital Structure – Utility Proxy Group
- 17 • WEA-17 Endnotes to Direct Testimony of William E. Avera

18 **Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements**
19 **(“MFRs”)?**

20 A. No.

21 **Q. Please describe your educational background and professional experience.**

22 A. A description of my background and qualifications, including a resume containing
23 the details of my experience, is attached as Exhibit WEA-1.

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

3 A. I am familiar with the organization, finances, and operations of FPL from my
4 participation in prior proceedings before the FPSC. In connection with the
5 present filing, I considered and relied upon corporate disclosures, publicly
6 available financial reports and filings, and other published information relating to
7 FPL, including bond rating agency reports, financial filings, and prior regulatory
8 proceedings and orders. I also reviewed information relating generally to current
9 capital market conditions and specifically to current investor perceptions,
10 requirements, and expectations for FPL. These sources, coupled with my
11 experience in the fields of finance and utility regulation, have given me a working
12 knowledge of these issues relevant to investors' required return for FPL, and they
13 form the basis of my analyses and conclusions.

14 **Q. Please summarize your findings regarding a fair ROE for FPL.**

15 A. I determined that a fair ROE for FPL is currently in the range of 12.0 percent to
16 13.0 percent. This conclusion is based on several factors. I applied three
17 conventional methods of estimating ROE to a proxy group of nineteen other
18 utilities with comparable investment risks. Consistent with the fact that utilities
19 must compete for capital with firms outside their own industry, I also referenced a
20 proxy group of comparable risk companies in the non-utility sector of the
21 economy. In addition, my testimony explains that the fairness of an ROE within
22 the 12.0 percent to 13.0 percent range is supported by the need to maintain FPL's
23 strong financial position and provide a return on flotation costs. I also explain

1 how it is appropriate that the Commission recognize FPL's excellence in
2 management in establishing FPL's ROE within the recommended range. My
3 testimony demonstrates that FPL's capital structure is consistent with my fair
4 ROE range and necessary to meet the financial challenges FPL is now facing.

5 **Q. What are the financial challenges facing FPL?**

6 A. The nation is in the midst of a financial crisis that has made investors wary of
7 putting their money into anything other than the safest investments. FPL has
8 planned significant new capital investments to keep its system efficient and
9 reliable for the customers it serves. If FPL can raise private capital for these vital
10 infrastructure investments, both its customers and the economy of Florida will
11 benefit. In the past, FPL's financial strength, fostered by the support of this
12 Commission, has served customers well as the Company has been able to raise
13 capital on a reasonable basis to meet past challenges such as devastating storms.
14 To maintain its position of strength through the current financial crisis, FPL needs
15 the continued support of this Commission. FPL must be in a position of financial
16 strength to attract private capital on reasonable terms from investors whose first
17 instinct is to rush to the safety of U.S. Treasury securities. As illustrated on
18 Exhibit WEA-2, the spreads between the yields on U.S. Treasuries and corporate
19 bonds have recently risen to levels not seen since the Great Depression.

20 **Q. Given FPL's strong credit rating and investors' high regard for the quality of**
21 **this Commission, could FPL get by with a lower return during this period of**
22 **economic hardship?**

1 A. No. The challenging capital market environment highlights the benefits of FPL's
2 strong credit standing in attracting the capital needed to secure reliable service at
3 a lower cost for customers. Changing course from the path of financial strength
4 would be extremely short-sighted. Customers and the economy of Florida have
5 benefited from FPL's financial flexibility and ability to raise capital on reasonable
6 terms. If investors perceived that the Commission was withdrawing its support
7 for FPL's financial strength at this crucial juncture, then it would likely take a
8 long time to re-establish the well-deserved reputation that this Commission has
9 earned among investors. By helping sustain FPL's financial strength, the FPSC
10 will facilitate the flow of capital on reasonable terms that is required for the
11 Company to maintain and improve the electric infrastructure so vital to Florida's
12 economic recovery and future growth.

13 **Q. How can the FPSC be sure that an ROE in the 12.0 percent to 13.0 percent**
14 **range is necessary to maintain FPL's financial strength and ability to raise**
15 **capital in these challenging times?**

16 A. My testimony documents analyses using accepted methods that support the
17 reasonableness of a 12 percent to 13 percent ROE range for FPL. But beyond
18 these technical analyses, the Commission can confirm the reasonableness of the
19 ROE based on observable reality and common sense. Investors need to be paid to
20 put their money at risk. They always have the option of lending to the U.S.
21 government where interest and principal is assured by the power to tax and print
22 money. Investors can also buy utility bonds. Although more risky than U.S.
23 Treasury bonds, utility bonds offer investors the comfort of having interest and

1 principal payments that are specified by contract and have a senior claim on
2 earnings and assets. Common stock investors are the last in line to get paid, and
3 hence bear the greatest risk. The observable yields on utility bonds have soared
4 during the current crisis, with the average utility bond yield now over 100 basis
5 points higher since the FPSC approved the settlement in FPL's last base rate
6 proceeding. Because investors can now earn higher interest from the relative
7 safety of a utility bond, they require even higher compensation to put their money
8 at risk in a utility stock.

9 **Q. Is it possible that the current financial crisis is a temporary aberration that**
10 **will soon abate?**

11 A. No one knows the future of our complex global economy. We know that this
12 crisis has been building for a long time and few predicted that the economy would
13 fall as rapidly as it has, or that corporate bond yields would rise as rapidly as they
14 have. But it would be imprudent to gamble the interests of customers and the
15 economy of Florida in the hope that the harsh economic reality will pass quickly.
16 FPL must raise capital in the real world of financial markets. To ignore the
17 current reality would be unwise given the importance of reliable electric power
18 for customers and the economy.

1 While FPL enjoys the benefits of a strong credit rating, supportive regulation, and
2 excellent management, it also faces some unique circumstances that demand
3 financial resilience to protect its customers. For example, due to its location on
4 the Florida peninsula, FPL is exposed to fuel supply interruptions and
5 transmission disturbances that may require financial resources to seek alternative
6 sources of power and energy on a temporary or extended basis. FPL's use of
7 nuclear power, wisely supported by this Commission and state leaders, has many
8 economic and environmental benefits. But the exposure to outages due to
9 circumstances beyond the control of the company (e.g., Nuclear Regulatory
10 Commission actions) means that FPL must have the financial resilience required
11 to purchase or generate replacement power with little notice. FPL's customers are
12 predominantly home and small business owners with few alternatives when power
13 is interrupted and therefore are particularly dependent on FPL's reliability. This
14 exposure is exacerbated by the potential for tropical storms in FPL's service area,
15 which create a particular need for financial resilience by FPL. Similarly, if
16 Florida is to grow, reliable electric service is paramount.

17 **Q. In addition to considering the specific conditions and exposures that affect**
18 **FPL, what quantitative estimation methods did you use to evaluate an ROE**
19 **for FPL?**

20 A. I applied three recognized methods to estimate investors' required rate of return:
21 • *Discounted Cash Flow ("DCF") model that uses the current stock price,*
22 *dividend, and expected growth rate to estimate investors' required return;*

- 1 • *Capital Asset Pricing Model (“CAPM”) that uses the expected stock*
2 *market risk premium, the risk-free Treasury yield, and the beta to estimate*
3 *investors’ return requirements; and,*
4 • *Expected Earnings Approach, which I apply using forward-looking*
5 *information to assess what investors expect comparable companies to*
6 *actually earn.*

7 **Q. Why did you rely on more than one method to estimate the cost of equity for**
8 **FPL?**

9 A. Each method relies on different inputs and assumptions. Investors do not limit
10 themselves to any one method of evaluating stocks competing for their money. If
11 the cost of equity estimation is limited to a single approach, the resulting estimate
12 may be unreasonable and unreliable.

13 **Q. Does the fact that there are different accepted methods to estimate the cost of**
14 **equity, each based on certain assumptions, imply that determining the ROE**
15 **is subjective?**

16 A. Absolutely not. The alternative approaches that I have applied to estimate the
17 cost of equity have considerable theoretical and practical support, and the body of
18 knowledge on the topic of cost of capital attests to the significance of developing
19 cost of capital estimates that work in the real world of financial markets. For
20 example, the reality that investors require compensation for bearing the risk of
21 putting their money in common stock is a fundamental tenet of the theory and
22 practice of finance. While assumptions and judgment underlie these methods to

1 estimate the cost of equity, this does not imply that they are subjective or that the
2 cost of equity is unknowable.

3
4 Each method of estimating the cost of equity is based on empirical evidence and
5 accepted applications. While experts may disagree on particular nuances and
6 details of their application, the reliability of these methods is confirmed by their
7 use throughout the regulatory arena as well as in the worlds of investment
8 management and corporate finance.

9
10 The fact that alternative methods may give somewhat different results, or that
11 different experts may come to different estimates using these methods, does not
12 mean the methods are subjective or unreliable. It means simply that interpreting
13 the results of these methods requires care and practical judgment.

14 **Q. What is the practical test of the reasonableness of the ROE used in setting a**
15 **utility's rates?**

16 A. The ROE compensates common equity investors for the use of their capital to
17 finance the plant and equipment necessary to provide utility service. Investors
18 commit capital only if they expect to earn a return on their investment
19 commensurate with returns available from alternative investments with
20 comparable risks. To be consistent with sound regulatory economics and the
21 standards set forth by the Supreme Court in the *Bluefield*¹ and *Hope*² cases, a
22 utility's allowed ROE should be sufficient to: (1) fairly compensate investors for
23 capital invested in the utility, (2) enable the utility to offer a return adequate to

1 attract new capital on reasonable terms, and (3) maintain the utility's financial
2 integrity.

3 **Q. Should the Commission's determination of FPL's ROE be based on a review**
4 **of historical returns authorized by other regulatory commissions?**

5 A. No. Reference to historical rates of return authorized by other regulatory
6 commissions does not provide a meaningful basis to establish FPL's ROE for
7 several reasons. First, because of the inherent lag in regulatory proceedings, the
8 test periods and financial data considered in historical cases is unlikely to reflect
9 the dramatic increase in capital costs associated with the financial market turmoil
10 that began in the third quarter of 2008. As a result, recent historical authorized
11 rates of return fail to reflect the returns that investors require in today's capital
12 markets. Moreover, these historical returns are not predicated on the
13 circumstances and financial exposures facing FPL. As I have explained, the
14 Commission should evaluate FPL's cost of equity based upon the return investors
15 require for companies with comparable risk and taking into account the current
16 financial market environment. The Commission's determination should also
17 specifically account for the risks and exposures unique to FPL. I believe that it
18 would be neither good policy or consistent with the regulatory standards
19 established in *Bluefield* and *Hope* decisions for the FPSC to base its ROE for FPL
20 on conclusions reached by other regulatory commissions for non-jurisdictional
21 utilities with different risk profiles, and which are based on data that fail to
22 capture the ongoing upheaval in the economic and capital market environment.

1 **Q. Is it appropriate to recognize and encourage exemplary management in**
2 **evaluating the fair ROE for FPL from within your recommended range?**

3 A. Yes. Recognition and encouragement for exemplary performance, such as that
4 documented in the testimony of FPL's witnesses, is an appropriate consideration
5 in establishing a fair rate of return from within the 12.0 percent to 13.0 percent
6 range. Consumers in FPL's service area have benefited from efficient and cost-
7 effective operations, excellent customer service, reliable electric service, and
8 prices that have declined in real terms. Considering exemplary performance in
9 establishing a point estimate from within my ROE range offers an appropriate
10 incentive for FPL to continue to innovate and take risks in pursuit of superior
11 results.

12 **Q. What is your conclusion as to the reasonableness of FPL's recommended**
13 **capital structure for regulatory purposes?**

14 A. Based on my evaluation, I concluded that the 55.8 percent adjusted common
15 equity ratio requested by FPL and supported in the testimony of FPL witness
16 Pimentel represents a reasonable mix of capital sources from which to calculate
17 FPL's overall rate of return. This conclusion was based on the following findings:

- 18 • *While FPL's adjusted common equity ratio falls somewhat above the*
19 *average maintained by the electric utilities in the proxy group, it is well*
20 *within the range of individual results for these firms and in-line with the*
21 *lower leverage expected for the industry going forward;*
- 22 • *Absent its relatively conservative capital structure, FPL's debt rating*
23 *would undoubtedly be lower than present levels and the resulting greater*

1 *investment risk would imply an increase in investors' required rate of*
2 *return for FPL's securities; and,*
3 • *For an electric utility with an obligation to provide reliable service,*
4 *uncertainties associated with FPL's resource mix and service area*
5 *highlight the necessity of preserving financial flexibility, especially during*
6 *periods of adverse capital market conditions.*

7
8 Since the 1930s, there has not been a time when the domestic and global financial
9 markets have experienced as much turmoil and uncertainty as they are now
10 undergoing. For a utility with an obligation to provide reliable service, investors'
11 increased reticence to supply additional capital during times of crisis highlights
12 the necessity of preserving the flexibility necessary to overcome periods of
13 adverse capital market conditions. The investment risks faced by utilities and
14 their investors have only been exacerbated in this uncertain environment. In turn,
15 the need for supportive regulation and an adequate ROE may never have been
16 greater.

17
18 **II. CAPITAL MARKET CONDITIONS**

- 19
20 **Q. What is the purpose of this section?**
21 A. This section evaluates the impact of recent capital market trends on FPL's ROE
22 and discusses why it is critical to consider investors' current requirements in order
23 to support FPL's finances on an ongoing basis.

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

2 A. Recent volatility in the debt and equity markets linked to the ongoing financial
3 crisis and the economic downturn evidences investors' trepidation to commit
4 capital. Because price volatility implies greater risk for investors, it also marks a
5 significant upward revision in their required returns. The Chicago Board Options
6 Exchange ("CBOE") Volatility Index, commonly known as the "VIX", is a key
7 measure of expectations of near-term volatility and market sentiment based on
8 options prices for the S&P 500 Stock Index ("S&P 500"). The unprecedented
9 price fluctuations and uncertainty that investors have endured since the third-
10 quarter of 2008 is mirrored in the sharp and sustained increase in the VIX, which
11 is plotted on Exhibit WEA-3. Bloomberg reported in October 2008 that the VIX
12 had surged 26 percentage points, to almost triple its average during the past year.³

13
14 With respect to utilities specifically, as of year-end 2008, the Dow Jones Utility
15 Average stock index had declined over 28 percent since June 2008, while yields
16 on utility bonds have experienced significant volatility and increased
17 precipitously. Exhibit WEA-4 plots the monthly average yield on public utility
18 bonds reported by Moody's Investors Service ("Moody's") from August 2005,
19 when the settlement in FPL's last base rate proceeding was approved by the
20 FPSC, through January 2009. As shown there, in August 2005, the average yield
21 on public utility bonds was 5.5 percent. As illustrated on Exhibit WEA-4,
22 average public utility bond yields generally increased through 2007. This upward
23 trajectory increased significantly in 2008, with the average yield on public utility

1 bonds reaching a peak of 7.8 percent in November 2008 before moderating to
2 approximately 6.8 percent in January 2009. In other words, since the settlement
3 in 2005 establishing an 11.75 percent ROE “for all other regulatory purposes”
4 was approved, the average yield on public utility bonds has increased
5 approximately 130 basis points.

6 **Q. What does this evidence indicate with respect to establishing a fair ROE for**
7 **FPL?**

8 A. The sell-off in common stocks and the increase in utility bond yields are
9 indicative of higher costs for long-term capital, reflecting the fact that the ongoing
10 financial and economic crisis has spilled over into the utility industry. For
11 example, utilities have been forced to draw on short-term credit lines to meet debt
12 retirement obligations because of uncertainties regarding the availability of long-
13 term capital.⁴ As the Edison Electric Institute (“EEI”) noted in a letter to
14 congressional representatives, the financial crisis has serious implications for
15 utilities and their customers:

16 In the wake of the continuing upheaval on Wall Street, capital
17 markets are all but immobilized, and short-term borrowing costs to
18 utilities have already increased substantially. If the financial crisis
19 is not resolved quickly, financial pressures on utilities will
20 intensify sharply, resulting in higher costs to our customers and,
21 ultimately, could compromise service reliability.⁵

1 Similarly, an October 1, 2008, *Wall Street Journal* report confirmed that
2 dislocations in credit markets were also impacting the utility sector:

3 Disruptions in credit markets are jolting the capital-hungry utility
4 sector, forcing companies to delay new borrowing or come up with
5 different—often more costly—ways of raising cash.⁶

6
7 An October 2008 report on the implications of credit market upheaval for utilities
8 noted that, while high-quality companies can still issue debt, “they now have to
9 pay an unusually high risk premium over Treasuries.”⁷ Similarly, S&P recently
10 concluded:

11 Regulated electric issuers continued to access debt markets during
12 the fourth quarter of 2008 at rates in line with the 10-year average
13 of about 8% for five-year notes, not the abnormally low interest
14 rate environment of the 2000’s which is a distant memory.⁸

15
16 Meanwhile, a Managing Director with Fitch Ratings, Ltd. (“Fitch”) observed that
17 with debt costs at present levels, “significantly higher regulated returns will be
18 required to attract equity capital.”⁹ More recently, Fitch confirmed “sharp
19 repricing of and aversion to risk in the investment community,” and noted that the
20 disruptions in financial markets and the fundamental shift in investors’ risk
21 perceptions has increased the cost of capital for utilities such as FPL:

22 The broad credit markets are in shambles and access to credit is
23 restrictive, particularly at lower credit ratings. While credit is

1 available to investment-grade issuers in the utilities, power and gas
2 sectors, it is more expensive, particularly when viewed against the
3 easy money environment which prevailed for most of this
4 decade.¹⁰

5
6 Fitch concluded, “The sharp increase in the cost of equity capital is a negative
7 credit development.”¹¹ All of these statements represent information currently
8 being provided to and reviewed by investors, and constitute real evidence of the
9 investment and economic environment faced by FPL.

10 **Q. Do trends in the yields on Treasury notes and bonds accurately reflect the**
11 **expectations and requirements of FPL’s equity investors?**

12 A. No. The graph at the top of Exhibit WEA-5, plots the monthly average yields on
13 20-year Treasury bonds from August 2005 through January 2009. As shown
14 there, beginning in the third quarter of 2007, the yields on 20-year Treasury bonds
15 began a general decline. In response to accelerating concerns over economic
16 uncertainties and the Federal Reserve’s actions to increase liquidity in the face of
17 a profound crisis in credit markets, the fall in Treasury bond yields became
18 increasingly pronounced, with the yield on 20-year notes falling below 3 percent
19 in December 2008. Meanwhile, the price of 3-month Treasury bills rose high
20 enough to push yields into the negative for the first time in history.¹²

21
22 While the yields on Treasury securities have fallen significantly, the required
23 returns for common stocks and public utility bonds have moved sharply higher to

1 compensate for increased perceptions of risk. This “flight to quality” has caused
2 the spread between the observable yields on public utility bonds and 20-year
3 Treasury bonds to spike dramatically. The graph at the bottom of Exhibit
4 WEA-5, plots the monthly spread between average public utility bond yields and
5 20-year Treasury bond yields since August 2005. As illustrated there, the gap
6 between the yields on 20-year government bonds and public utility bonds
7 widened significantly, reflecting the extent of the uncertainties facing investors.
8 During 2007, this yield spread averaged 121 basis points, versus 228 basis points
9 in 2008 and 338 basis points during January 2009. As Standard & Poor’s recently
10 observed:

11 The Standard & Poor’s composite spreads widened to new five-
12 year highs yesterday, leaving the investment-grade spread at 554
13 basis points (bps) and the speculative grade spread at 1,598 bps,
14 both well more than triple their five-year moving averages. ...
15 With speculative-grade defaults on the rise, a higher
16 preponderance of credit downgrades, and a general malaise about
17 the future of the economy, we expect spreads to remain at their
18 elevated levels for some time until confidence is restored to the
19 market.¹³

20 **Q. What does this imply with respect to the ROE for a utility such as FPL?**

21 A. Because of the significant increase in the spread between utility and government
22 bond yields, trends in Treasury bond yields have virtually no relevance in
23 evaluating long-term capital costs for FPL in the current capital market climate.

1 As a result of the turmoil and uncertainty spreading through financial markets,
2 investors have sought a safe haven in government-backed securities, such as
3 Treasury bonds. While the required returns for other asset classes, such as
4 common stocks and public utility bonds, have moved higher to compensate for
5 increased perceptions of risk, the yields on Treasury securities have fallen
6 significantly. As evidenced above, the spread between the observable yields on
7 utility bonds and Treasury securities has spiked dramatically as a result.

8
9 In other words, focusing solely on the decrease in Treasury bond yields
10 experienced since 2007 might suggest that investors' required returns have fallen,
11 but the exact opposite is true. Treasury bond yields have declined because of a
12 "flight to quality" as investors' risk perceptions have mounted in the face of the
13 ongoing financial crisis. As the Wall Street Journal noted, "Real-world
14 borrowing costs are in a different universe from Treasury yields and Fed rates."¹⁴
15 The fact that prices of Treasury bonds have been driven sharply higher is the
16 mirror image of higher, not lower returns for more risky asset classes, such as the
17 common stock of utilities like FPL.

18 **Q. Would expectations of an economic recession lead to lower capital costs?**

19 A. No. Investors' required rates of return for FPL and other financial assets are a
20 function of risk, with greater exposure to uncertainty requiring higher – not lower
21 – rates of return to induce long-term investment. This has been vividly
22 demonstrated in numerous segments of the debt markets where heightened

1 uncertainties regarding risk exposure have resulted in the almost complete
2 inability of borrowers to access credit at reasonable rates.

3

4 It is important not to confuse investors' expectations for future growth and cash
5 flows, which is one consideration in estimating the cost of equity, with their
6 required rate of return. In fact, trends in growth rates say nothing at all about
7 investors' overall risk perceptions. The fact that investors' required rates of
8 return for long-term capital can rise in tandem with expectations of declining
9 growth that would accompany an economic slowdown is demonstrated in the
10 bond markets, where perceptions of greater risks have pushed yields on long-term
11 utility bonds sharply higher.

12

13 Similarly, the uncertainty over future trends in corporate earnings and stock prices
14 has led investors to sharply reevaluate what they are willing to pay for common
15 stocks. While the precipitous decline in utility stock prices may in part be
16 attributed to somewhat diminished expectations of future cash flows, there is also
17 every indication that investors' discount rate, or cost of equity, has moved
18 significantly higher to accommodate the greater risks they now associate with
19 equity investments.

20

21 The idea that the current recession would lead the rate of return demanded by
22 equity investors to decline is also contrary to economic logic. As documented
23 above, the required yield on long-term utility bonds has increased substantially in

1 response to investors' heightened risk perceptions. A drop in the cost of common
2 equity would imply that the risk premium between common stocks and bonds has
3 declined. The notion that equity risk premiums would be declining at a time of
4 unprecedented capital market turmoil runs counter to common sense. Investors
5 require a higher rate of return to assume more risk and common stocks have the
6 lowest priority claim on a company's cash flows. Given the significant increase
7 in utility bond yields documented earlier, the dramatic widening of the yield
8 spreads between risk-free Treasury bonds and corporate debt instruments, and
9 investors heightened sensitivity to risk, there is no evidence to suggest that the
10 return demanded by equity investors has declined.

11 **Q. Would it be reasonable to disregard current capital market conditions in**
12 **establishing a fair ROE for FPL?**

13 A. Absolutely not. They reflect the reality of the situation in which FPL and other
14 businesses must attract and retain capital. As noted earlier, the standards
15 underlying a fair rate of return require that FPL's authorized ROE reflect a return
16 competitive with other investments of comparable risk and preserve the
17 Company's ability to maintain access to capital on reasonable terms. This
18 standard can only be met by considering the requirements of investors in today's
19 capital markets.

20
21 While the events of the last several months undoubtedly mark a significant
22 transition in investors' expectations, there is very little indication that the dire
23 conditions confronting the economy and financial markets will be resolved

1 quickly. As Fitch recently concluded, “higher corporate interest rates are likely to
2 prevail through 2009 and into the foreseeable future.”¹⁵ Moreover, the fact that
3 market volatility may complicate the evaluation of the cost of equity provides no
4 basis to ignore the dramatic upward shift in investors’ risk perceptions and
5 required rates of return for long-term capital. Capital markets are continuously
6 responding to current information and investors are incessantly revising their
7 forward-looking expectations accordingly. It is for this very reason that it
8 becomes even more critical to focus on current expectations, rather than
9 backward-looking or “normalized” data.

10 **Q. What are the implications of disregarding actual capital market conditions in
11 setting the allowed ROE?**

12 A. If the increase in investors’ required rate of return on long-term capital is not
13 incorporated in the allowed rate of return on equity, the results will fail to meet
14 the comparable earnings standard that is fundamental in determining the cost of
15 capital. From a more practical perspective, failing to provide investors with the
16 opportunity to earn a rate of return commensurate with FPL’s risks will only serve
17 to weaken its financial integrity, while hampering the Company’s ability to attract
18 the capital needed to meet the economic and reliability needs of its service area.

1 **III. RISKS AND FINANCIAL REQUIREMENTS OF FPL**

2

3 **Q. What is the purpose of this section of your testimony?**

4 A. As a predicate to my capital market analyses, this section briefly reviews FPL's
5 operations and finances. In addition, it examines the risks that investors take into
6 account in evaluating their required rate of return for FPL and the unique financial
7 requirements that should be considered in establishing a fair ROE for FPL.

8

9

A. Operations and Finances

10

11 **Q. Please briefly describe FPL and its parent, FPL Group, Inc.**

12 A. Headquartered in Juno Beach, Florida, FPL is engaged in the generation,
13 transmission, and distribution of electric power throughout 35 counties located
14 principally along the east and lower west coasts of Florida. FPL's service territory
15 includes a population of more than 8.7 million, with service being provided to
16 approximately 4.5 million customers. FPL is the principal subsidiary of FPL
17 Group, Inc. ("FPL Group"). FPL Group is a leading energy company with
18 approximately 39,000 megawatts ("MW") of generating capacity, and more than
19 15,000 employees in 27 states and Canada. In addition to the electric utility
20 operations of FPL, FPL Group's principal subsidiaries include NextEra Energy
21 Resources, LLC, which is the largest generator in North America of renewable
22 energy from the wind and sun. At year-end 2008, FPL Group had total assets of

1 approximately \$44.8 billion, with consolidated revenues totaling approximately
2 \$16.4 billion.

3 **Q. Please describe FPL's electric utility operations.**

4 A. During 2008, approximately 51 percent of electric sales were attributable to
5 residential customers, with 43 percent from commercial and 6 percent from
6 industrial and other users. With a combined capacity of approximately 22,087
7 MW, FPL's generating facilities include four nuclear units at the St. Lucie and
8 Turkey Point generating stations, with a total capacity of 2,939 MW. In 2008,
9 nuclear generation accounted for 22 percent of the electric energy provided by
10 FPL, with natural gas at 53 percent, oil at 5 percent, and coal at 6 percent.

11
12 The remaining 14 percent of FPL's 2008 energy requirements were obtained
13 through purchased power contracts. Take-or-pay purchased power contracts with
14 the Jacksonville Electric Authority and with subsidiaries of The Southern
15 Company provide approximately 1,300 MW of power through mid-2015 and 375
16 MW thereafter through 2021. FPL also has various firm contracts to purchase
17 approximately 740 MW of capacity and energy from certain cogenerators and
18 qualifying facilities. In addition, FPL has various agreements with several other
19 electricity suppliers to purchase an aggregate of up to approximately 920 MW of
20 power with expiration dates ranging from 2009 through 2012. FPL estimates that
21 capacity and minimum payments under these agreements will average
22 approximately \$500 million annually through 2013.

1 FPL's transmission and distribution facilities consist of over 570 substations and
2 include over 48,000 miles of overhead lines and approximately 25,000 miles of
3 underground and submarine cables. At December 31, 2008, FPL's investment in
4 utility assets was approximately \$26.2 billion. FPL's retail electric operations are
5 subject to the jurisdiction of the FPSC, with the interstate jurisdiction regulated by
6 the Federal Energy Regulatory Commission ("FERC"). Additionally, FPL's
7 nuclear facilities are subject to licensing and oversight by the Nuclear Regulatory
8 Commission. FPL's latest decommissioning studies indicate that FPL's portion of
9 the cost of decommissioning its four nuclear units, including costs associated with
10 spent fuel storage, to be \$10.9 billion. At December 31, 2008, the accumulated
11 provision for nuclear decommissioning totaled approximately \$2.3 billion.

12 **Q. What credit ratings have been assigned to FPL?**

13 A. FPL has been assigned a corporate credit rating of "A" by Standard & Poor's
14 Corporation ("S&P") and an issuer rating of "A1" by Moody's Investors Service
15 ("Moody's"). Similarly, Fitch Ratings Ltd. ("Fitch") has assigned an issuer
16 default rating of "A" to FPL.

17

18 **B. Risks and Financial Requirements**

19

20 **Q. How have investors' risk perceptions for the utility industry evolved?**

21 A. Implementation of structural change and related events caused investors to rethink
22 their assessment of the relative risks associated with the utility industry. The past
23 decade witnessed steady erosion in credit quality throughout the utility industry,

1 both as a result of revised perceptions of the risks in the industry and the
2 weakened finances of the utilities themselves. Fitch recently reported that the
3 short- and long-term outlook for investor-owned electric utilities is negative.¹⁶
4 Similarly, Moody's observed, "Material negative bias appears to be developing
5 over the intermediate and longer term due to rapidly rising business and operating
6 risks."¹⁷

7 **Q. Does FPL anticipate the need to access the capital markets going forward?**

8 A. Yes. FPL will require capital investment to meet customer growth, provide for
9 necessary maintenance and replacements, and fund new investment in the
10 facilities needed to generate, transmit and distribute electricity. As discussed in
11 greater detail by FPL witness Pimentel, planned capital expenditures for the next
12 five years total approximately \$16 billion.

13
14 Continued support for FPL's financial integrity and flexibility will be
15 instrumental in attracting the long-term capital necessary to fund these projects in
16 an effective manner. In addition, FPL must meet short-term liquidity needs
17 arising from seasonal cash flows and ongoing construction programs. FPL's
18 exposure to storm restoration activities and the substantial liquidity requirements
19 necessary to support its fuel hedging program magnify the importance of
20 maintaining financial flexibility, which is essential to guarantee access to the cash
21 resources and interim financing required to cover operating cash flows and fund
22 required investments in the utility system.

1 **Q. Is the potential for energy market volatility an ongoing concern for investors**
2 **and does it affect FPL's financial requirements?**

3 A. Yes on both counts. In recent years utilities and their customers have had to
4 contend with dramatic fluctuations in gas costs due to ongoing price volatility in
5 the spot markets. S&P concluded that "natural gas prices have proven to be very
6 volatile" and warned of a "turbulent journey" due to the uncertainty associated
7 with future fluctuations in energy costs,¹⁸ with Moody's warning investors of
8 ongoing exposure to "extremely volatile" energy commodity costs, including
9 purchased power prices, which are heavily influenced by fuel costs.¹⁹ Fitch has
10 also highlighted the challenges that fluctuations in commodity prices can have for
11 utilities and recently noted that:

12 From their September 2007 low of \$5.29, spot natural gas prices as
13 reported at Henry Hub rose 150% to \$13.31 in early July 2008 and
14 declined 57% to \$5.68 per million British thermal unit (mmBtu) on
15 Dec. 10, 2008. The sharp run-up and subsequent collapse of
16 natural gas prices in 2008 is emblematic of the extreme price
17 volatility that characterizes the commodity and is likely to persist
18 in the future.²⁰

19 **Q. Are volatile natural gas prices relevant to FPL's financial requirements?**

20 A. Yes. In order to meet rising demand for electricity across its service territory, FPL
21 has sought to acquire additional power resources to ensure its ability to maintain
22 adequate reserve margins and provide reliable service. The expansion of gas-fired
23 generation has resulted in this fuel representing over 50 percent of FPL's fuel mix.

1 As a result, exposure to fluctuations in natural gas prices or supply interruption is
2 a significant concern, with S&P noting that “a large and growing reliance on
3 natural gas to fuel utility generation could over time turn from an advantage
4 (because of its environmental status) to a weakness if gas prices continue to
5 fluctuate and trend up.”²¹ FPL’s significant exposure to natural gas detracts from
6 the Company’s credit quality and should be considered in evaluating a fair ROE.
7 While FPL has stated that it continues to explore alternative fuel sources and
8 technologies, the potential for a continuation of the extreme price volatility
9 experienced in the market for natural gas means that FPL must be able to fund
10 fuel under-recoveries and have the financial strength to effectively hedge price
11 risks.

12 **Q. Don’t the Commission’s adjustment mechanisms protect FPL from exposure**
13 **to fluctuations in power supply costs?**

14 A. To a limited extent, yes. The investment community views FPL’s ability to
15 periodically adjust retail rates to accommodate fluctuations in fuel and purchased
16 power as an important source of support for FPL’s financial integrity.
17 Nevertheless, they also recognize that there can be a lag between the time FPL
18 actually incurs the expenditure and when it is recovered from ratepayers. As a
19 result, FPL is not insulated from the need to finance deferred power production
20 and supply costs and support the substantial liquidity requirements related to its
21 fuel hedging program. Indeed, despite the significant investment of resources to
22 manage fuel procurement, investors are aware that the best that FPL can do is to

1 recover its actual costs. In other words, FPL earns no return on fuel costs and is
2 exposed to disallowances for imprudence in its fuel procurement.

3 **Q. What other financial pressures impact investors' risk assessment of FPL and**
4 **its financial requirements?**

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

8 [P]ressures are building. Utilities are facing rising operating costs
9 and infrastructure investment needs that are prompting them to
10 seek more-frequent requests for rate relief. Meanwhile, as energy
11 (and other commodity) costs rise, so does the risk of a consumer
12 backlash over electric rates that could prompt legislative
13 intervention or a more contentious atmosphere between utilities
14 and their regulators.²²

15

16 Similarly, S&P noted that "heavy construction programs," along with rising
17 operating and maintenance costs and volatile fuel costs, were a significant
18 challenge to the utility industry.²³ Fitch recently echoed this assessment,
19 concluding:

20 Continued access to capital at reasonable rates in 2009 remains
21 uncertain at a time when many utility holding groups have
22 historically high capital investment programs and will require

1 ongoing access to reasonably priced capital in order to fund new
2 investment and refinance maturing debt.²⁴

3

4 As noted earlier, FPL's plans include electric utility capital expenditures of
5 approximately \$16 billion over the next five years. While providing the
6 infrastructure necessary to meet the energy needs of customers is certainly
7 desirable, it imposes additional financial responsibilities on FPL that are
8 heightened during times of capital market turmoil.

9 **Q. Are environmental considerations also affecting investors' evaluation of**
10 **electric utilities, including FPL?**

11 A. Although FPL's exposure is moderated through the environmental compliance
12 cost recovery clause established by the FPSC, utilities are confronting increased
13 environmental pressures that could impose significant uncertainties. In 2007 S&P
14 cited environmental mandates, including emissions, conservation, and renewable
15 resources as one of the top ten credit issues facing U.S. utilities.²⁵ Similarly,
16 Moody's noted that "the prospect for new environmental emission legislation, via
17 federal or state carbon emission rules, represents the single-biggest emerging
18 issue on the horizon,"²⁶ while Fitch recently observed that "the structure, timing
19 and implementation is still uncertain."²⁷

20 **Q. What exposures should be considered in evaluating FPL's financial**
21 **requirements?**

22 A. Approximately 22 percent of FPL's total energy requirements are provided by its
23 four nuclear units located at the St. Lucie and Turkey Point generating stations.

1 Moreover, in light of political opposition to the construction of new coal-fired
2 generation in Florida, expanding FPL's nuclear generating capacity will likely be
3 required in order to diversify fuel mix while meeting customer load.

4
5 As discussed in the testimony of FPL's witnesses, consumers have realized
6 considerable savings in energy costs as a result of FPL's effective management of
7 its nuclear generating facilities. While nuclear power confers advantages in terms
8 of fuel cost savings and diversity, investors also associate nuclear facilities with
9 risks that are not encountered with other sources of generation. S&P has long
10 recognized the additional risks posed by nuclear facilities, as reflected in a 1994
11 article:

12 Operating and maintaining [nuclear plants] is more complex
13 compared with fossil plants because of safety considerations and
14 the additional safety equipment and operational controls required.²⁸

15
16 More recently, Moody's confirmed that "ownership of nuclear generating
17 facilities brings a higher level of complexity associated with operating and
18 maintaining the units."²⁹

19
20 As Moody's noted, "[O]ne of the biggest risks associated with nuclear generation
21 is an unanticipated extended outage," concluding that "an extended outage can
22 significantly stress an owner's liquidity and over-all financial profile."³⁰ In
23 addition, longer-term uncertainties regarding the disposal of spent fuel and the

1 ultimate costs of decommissioning continue to accompany any investment in
2 nuclear generating facilities. In order to mitigate against these potential
3 exposures, Moody's cited the importance of a constructive regulatory relationship
4 and "a need to establish financial policies over the near-term aimed at producing
5 very strong financial credit ratios in order to maintain a given rating."³¹

6
7 Nuclear power represents a significant portion of the Company's generating
8 capability, and this concentration increases FPL's exposure to significant financial
9 threats. Considering these potential uncertainties in establishing FPL's ROE will
10 preserve the Company's financial wherewithal and ensure that consumers
11 continue to benefit from FPL's ongoing investment in nuclear facilities.

12 **Q. What other operational factors increase FPL's need for financial strength?**

13 A. Because of the geographical location of FPL's service territory, the potential
14 exposures associated with a prolonged outage at key generating facilities or
15 disruptions in fuel supply are heightened. As Fitch noted:

16 Given the location of the company's service territory at the
17 extreme southern end of the Florida peninsula, there are limits on
18 the ability to import power.³²

19
20 Apart from its relative isolation, FPL's service territory has extreme exposure to
21 the catastrophic damage of tropical storms. While the investment community
22 recognizes that the FPSC has been generally supportive in permitting recovery of
23 the costs of storm damage, FPL nonetheless must maintain the financial strength

1 and liquidity necessary to effect a rapid and far-reaching response in the likely
2 event of a future hurricane strike.

3 **Q. How does the nature of the economy in FPL's service territory impact its**
4 **relative risks and financial requirements?**

5 A. Past experience indicates that the economy in FPL's service territory can be
6 highly vulnerable, especially to conditions that cause a decline in tourism. And
7 while the Florida economy has achieved a degree of diversification that was not
8 present during the tourism-led slump of the 1970s, Floridians are aware that the
9 combined effect of a general business slowdown and a plunge in tourism can
10 result in a particularly severe economic double-whammy, which heightens the
11 risks of an economic downturn for FPL's investors and customers. More recently,
12 the economy of FPL's service territory has been the epicenter for the monumental
13 collapse in real estate values that precipitated a global financial crisis. Coupled
14 with the deepening world-wide recession, continued turmoil in the housing
15 market and the sharp decline in Florida's economic growth has implications for
16 FPL's finances, as S&P recently recognized:

17 A prolonged downturn in the Florida economy, particularly the real
18 estate market, could affect the cash flows of regulated unit Florida
19 Power & Light.³³

20
21 While the long-term outlook for Florida's economy may remain positive,
22 investors nonetheless recognize the exposure to additional volatility introduced by
23 current uncertainties.

1 **Q. What fundamental economic principle underlies the cost of equity concept?**

2 A. The fundamental economic principle underlying the cost of equity concept is the
3 notion that investors are risk averse. In capital markets where relatively risk-free
4 assets are available (*e.g.*, U.S. Treasury securities), investors can be induced to
5 hold riskier assets only if they are offered a premium, or additional return, above
6 the rate of return on a risk-free asset. Because all assets compete with each other
7 for investor funds, riskier assets must yield a higher expected rate of return than
8 safer assets to induce investors to invest and hold them.

9
10 Given this risk-return tradeoff, the required rate of return (k) from an asset (i) can
11 generally be expressed as:

$$12 \quad k_i = R_f + RP_i$$

13 where: R_f = Risk-free rate of return, and

14 RP_i = Risk premium required to hold riskier asset i .

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

18 **Q. Is there evidence that the risk-return tradeoff principle actually operates in**
19 **the capital markets?**

20 A. Yes. The risk-return tradeoff can be readily documented in segments of the
21 capital markets where required rates of return can be directly inferred from market
22 data and where generally accepted measures of risk exist. Bond yields, for
23 example, reflect investors' expected rates of return, and bond ratings measure the
24 risk of individual bond issues. The observed yields on government securities,

1 which are considered free of default risk, and bonds of various rating categories
2 demonstrate that the risk-return tradeoff does, in fact, exist in the capital markets.

3 **Q. Does the risk-return tradeoff observed with fixed income securities extend to**
4 **common stocks and other assets?**

5 A. It is generally accepted that the risk-return tradeoff evidenced with long-term debt
6 extends to all assets. Documenting the risk-return tradeoff for assets other than
7 fixed income securities, however, is complicated by two factors. First, there is no
8 standard measure of risk applicable to all assets. Second, for most assets –
9 including common stock – required rates of return cannot be directly observed.
10 Yet there is every reason to believe that investors exhibit risk aversion in deciding
11 whether or not to hold common stocks and other assets, just as when choosing
12 among fixed-income securities.

13 **Q. Is this risk-return tradeoff limited to differences between firms?**

14 A. No. The risk-return tradeoff principle applies not only to investments in different
15 firms, but also to different securities issued by the same firm. The securities
16 issued by a utility vary considerably in risk because they have different
17 characteristics and priorities. Long-term debt is senior among all capital in its
18 claim on a utility's net revenues and is, therefore, the least risky. The last
19 investors in line are common shareholders. They receive only the net revenues, if
20 any, remaining after all other claimants have been paid. As a result, the rate of
21 return that investors require from a utility's common stock, the most junior and
22 riskiest of its securities, must be considerably higher than the yield offered by the
23 utility's senior, long-term debt.

1 **Q. What does the above discussion imply with respect to estimating the cost of**
2 **equity for a utility?**

3 A. Although the cost of equity cannot be observed directly, it is a function of the
4 returns available from other investment alternatives and the risks to which the
5 equity capital is exposed. Because it is not readily observable, the cost of equity
6 for a particular utility must be estimated by analyzing information about capital
7 market conditions generally, assessing the relative risks of the company
8 specifically, and employing various quantitative methods that focus on investors'
9 required rates of return. These various quantitative methods typically attempt to
10 infer investors' required rates of return from stock prices, interest rates, or other
11 capital market data.

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

13 A. No. In my opinion, no single method or model should be relied on by itself to
14 determine a utility's cost of equity because no single approach can be regarded as
15 definitive. For example, a publication of the Society of Utility and Financial
16 Analysts (formerly the National Society of Rate of Return Analysts), concluded
17 that:

18 Each model requires the exercise of judgment as to the
19 reasonableness of the underlying assumptions of the methodology
20 and on the reasonableness of the proxies used to validate the
21 theory. Each model has its own way of examining investor
22 behavior, its own premises, and its own set of simplifications of
23 reality. Each method proceeds from different fundamental

1 premises, most of which cannot be validated empirically.
2 Investors clearly do not subscribe to any singular method, nor does
3 the stock price reflect the application of any one single method by
4 investors.³⁴

5
6 Therefore, I used both the DCF and CAPM methods to estimate the cost of equity.
7 In addition, I also evaluated a fair ROE using an earnings approach based on
8 investors' current expectations in the capital markets. In my opinion, comparing
9 estimates produced by one method with those produced by other approaches
10 ensures that the estimates of the cost of equity pass fundamental tests of
11 reasonableness and economic logic.

12

13 **B. Comparable Risk Proxy Groups**

14

15 **Q. How did you implement these quantitative methods to estimate the cost of**
16 **common equity for FPL?**

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

1 the DCF model and other quantitative methods to a proxy group of publicly
2 traded companies that investors regard as risk comparable.

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

4 A. In order to reflect the risks and prospects associated with FPL's jurisdictional
5 utility operations, my DCF analyses focused on a reference group of other utilities
6 composed of those companies classified by The Value Line Investment Survey
7 ("Value Line") as electric utilities with: (1) a minimum S&P corporate credit
8 rating of "BBB+" [as discussed subsequently, the average bond rating for the
9 Utility Proxy Group is single-A], (2) a Value Line Safety Rank of "1" or "2", (3) a
10 Value Line Financial Strength Rating of "B++" or better, and (4) at least two
11 published earnings per share ("EPS") growth projections from Value Line,
12 Thomson I/B/E/S ("IBES"), First Call Corporation ("First Call"), and Zacks
13 Investment Research ("Zacks").³⁵ These criteria resulted in a proxy group
14 composed of nineteen companies. I refer to this group as the "Utility Proxy
15 Group."

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

17 A. Under the regulatory standards established by *Hope* and *Bluefield*, the salient
18 criteria in establishing a meaningful benchmark to evaluate a fair rate of return is
19 relative risk, not the particular business activity or degree of regulation. As noted
20 in *Regulatory Finance: Utilities' Cost of Capital*, "It should be emphasized that
21 the definition of a comparable risk class of companies does not entail similarity of
22 operation, product lines, or environmental conditions, but rather similarity of
23 experienced business risk and financial risk."³⁶ Utilities must compete for capital,

1 not just against firms in their own industry, but with other investment
2 opportunities of comparable risk. With regulation taking the place of competitive
3 market forces, required returns for utilities should be in line with those of non-
4 utility firms of comparable risk operating under the constraints of free
5 competition. Consistent with this accepted regulatory standard, I also applied the
6 DCF model to a reference group of comparable risk companies in the non-utility
7 sectors of the economy. I refer to this group as the “Non-Utility Proxy Group”.

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

9 A. My comparable risk proxy group was composed of those U.S. companies
10 followed by Value Line that: 1) pay common dividends; 2) have a Safety Rank of
11 “1”; 3) have a Financial Strength Rating of “A” or above, and 4) have investment
12 grade credit ratings from S&P. In addition, consistent with the criteria used to
13 develop the Utility Proxy Group discussed earlier, I also included only those firms
14 with at least two published growth estimates from Value Line, IBES, First Call, or
15 Zacks.

16 **Q. Do these criteria provide objective evidence to evaluate investors’ risk
17 perceptions?**

18 A. Yes. Credit ratings are assigned by independent rating agencies for the purpose of
19 providing investors with a broad assessment of the creditworthiness of a firm.
20 Ratings generally extend from triple-A (the highest) to D (in default). Other
21 symbols (*e.g.*, “A+”) are used to show relative standing within a category.
22 Because the rating agencies’ evaluation includes virtually all of the factors
23 normally considered important in assessing a firm’s relative credit standing,

1 corporate credit ratings provide a broad, objective measure of overall investment
2 risk that is readily available to investors. Widely cited in the investment
3 community and referenced by investors, credit ratings are also frequently used as
4 a primary risk indicator in establishing proxy groups to estimate the cost of equity.

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

13
14 The Financial Strength Rating is designed as a guide to overall financial strength
15 and creditworthiness, with the key inputs including financial leverage, business
16 volatility measures, and company size. Value Line's Financial Strength Ratings
17 range from "A++" (strongest) down to "C" (weakest) in nine steps. Given that
18 Value Line is perhaps the most widely available source of investment advisory
19 information, its Safety Rank and Financial Strength Rating provide useful
20 guidance regarding the risk perceptions of investors. These objective, published
21 indicators incorporate consideration of a broad spectrum of risks, including
22 financial and business position, relative size, and exposure to company-specific
23 factors.

1 **Q. How do the overall risks of your proxy groups compare with FPL?**

2 A. Exhibit WEA-6 compares the Non-Utility Proxy Group with the Utility Proxy
3 Group and FPL across four key indicators of investment risk. Because FPL has no
4 publicly traded common stock, the Value Line risk measures shown reflect those
5 published for its parent, FPL Group.

6 **Q. Does this comparison indicate that investors would view the firms in your
7 proxy groups as risk-comparable to FPL?**

8 A. Yes. As shown on Exhibit WEA-6, the average corporate credit rating for the
9 Utility Proxy Group is “A-”, with ratings for the individual firms ranging from
10 “BBB+” to “A+”, while the Non-Utility Proxy Group’s average credit rating is
11 slightly higher at “A+”. Considering that the “+” and “-” designations tend to
12 reflect very modest gradations in risk, these average single-A ratings for the
13 Utility and Non-Utility Proxy Groups are essentially identical to FPL’s corporate
14 credit rating.

15
16 Meanwhile, the average Value Line Safety Rank and Financial Strength Rating
17 for the Utility Proxy Group is one notch lower than for FPL, while the average
18 beta value of 0.73 indicates less risk than for FPL. With respect to the Non-
19 Utility Proxy Group, its average Safety Rank and Financial Strength Rating is
20 identical to FPL, with its 0.84 average beta suggesting somewhat greater risk.
21 Considered together, a comparison of these objective measures, which consider of
22 a broad spectrum of risks, including financial and business position, relative size,
23 and exposure to company specific factors, indicates that investors would likely

1 conclude that the overall investment risks for FPL are comparable to those of the
2 firms in the Utility and Non-Utility Proxy Groups.

3 4 **C. Discounted Cash Flow Analyses**

5 6 **Q. How is the DCF model used to estimate the cost of equity?**

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

$$P_0 = \frac{D_1}{(1+k_e)^1} + \frac{D_2}{(1+k_e)^2} + \dots + \frac{D_t}{(1+k_e)^t} + \frac{P_t}{(1+k_e)^t}$$

where: P_0 = Current price per share;

P_t = Expected future price per share in period t;

D_t = Expected dividend per share in period t;

k_e = Cost of equity.

That is, the cost of equity is the discount rate that will equate the current price of a share of stock with the present value of all expected cash flows from the stock.

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

A. Rather than developing annual estimates of cash flows into perpetuity, the DCF model can be simplified to a “constant growth” form:³⁷

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

where: g = Investors’ long-term growth expectations.

The cost of equity (k_e) can be isolated by rearranging terms within the equation:

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

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: 1) dividend yield (D_1/P_0); and 2) growth (g).

In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation.

1 **Q. What form of the DCF model did you use?**

2 A. I applied the constant growth DCF model to estimate the cost of equity for FPL,
3 which is the form of the model most commonly relied on to establish the cost of
4 equity for traditional regulated utilities and the method most often referenced by
5 regulators.

6 **Q. How is the constant growth form of the DCF model typically used to estimate
7 the cost of equity?**

8 A. The first step in implementing the constant growth DCF model is to determine the
9 expected dividend yield (D_1/P_0) for the firm in question. This is usually
10 calculated based on an estimate of dividends to be paid in the coming year divided
11 by the current price of the stock. The second, and more controversial, step is to
12 estimate investors' long-term growth expectations (g) for the firm. The final step
13 is to sum the firm's dividend yield and estimated growth rate to arrive at an
14 estimate of its cost of equity.

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

16 A. Estimates of dividends to be paid by each of these utilities over the next twelve
17 months, obtained from Value Line, served as D_1 . This annual dividend was then
18 divided by the corresponding stock price for each utility to arrive at the expected
19 dividend yield. The expected dividends, stock prices, and resulting dividend
20 yields for the firms in the utility proxy group are presented on Exhibit WEA-7.
21 As shown there, dividend yields for the firms in the Utility Proxy Group ranged
22 from 2.8 percent to 6.4 percent.

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

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

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

12 A. No. If past trends in earnings, dividends, and book value are to be representative
13 of investors’ expectations for the future, then the historical conditions giving rise
14 to these growth rates should be expected to continue. That is clearly not the case
15 for utilities, where structural and industry changes have led to declining
16 dividends, earnings pressure, and, in many cases, significant write-offs. While
17 these conditions serve to depress historical growth measures, they are not
18 representative of long-term expectations for the utility industry.

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

21 A. While the DCF model is technically concerned with growth in dividend cash
22 flows, implementation of this DCF model is solely concerned with replicating the
23 forward-looking evaluation of real-world investors. In the case of utilities,

1 dividend growth rates are not likely to provide a meaningful guide to investors’
2 current growth expectations. This is because utilities have significantly altered
3 their dividend policies in response to more accentuated business risks in the
4 industry, with the payout ratio for electric utilities falling from approximately 80
5 percent historically to on the order of 60 percent.³⁸ As a result of this trend
6 towards a more conservative payout ratio, dividend growth in the utility industry
7 has remained largely stagnant as utilities conserve financial resources to provide a
8 hedge against heightened uncertainties.

9
10 As payout ratios for firms in the utility industry trended downward, investors’
11 focus has increasingly shifted from dividends to earnings as a measure of long-
12 term growth. Future trends in earnings, which provide the source for future
13 dividends and ultimately support share prices, play a pivotal role in determining
14 investors’ long-term growth expectations. The importance of earnings in
15 evaluating investors’ expectations and requirements is well accepted in the
16 investment community. As noted in *Finding Reality in Reported Earnings*
17 published by the Association for Investment Management and Research:

18 [E]arnings, presumably, are the basis for the investment benefits that
19 we all seek. “Healthy earnings equal healthy investment benefits”
20 seems a logical equation, but earnings are also a scorecard by which
21 we compare companies, a filter through which we assess
22 management, and a crystal ball in which we try to foretell future
23 performance.³⁹

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

4 The future earnings rank accounts for 65% in the determination of
5 relative price change in the future; the other two variables (current
6 earnings rank and current price rank) explain 35%.⁴⁰

7
8 The fact that investment advisory services focus primarily on growth in earnings
9 indicates that the investment community regards this as a superior indicator of
10 future long-term growth. Indeed, "A Study of Financial Analysts: Practice and
11 Theory," published in the *Financial Analysts Journal*, reported the results of a
12 survey conducted to determine what analytical techniques investment analysts
13 actually use.⁴¹ Respondents were asked to rank the relative importance of
14 earnings, dividends, cash flow, and book value in analyzing securities. Of the 297
15 analysts that responded, only 3 ranked dividends first while 276 ranked it last.
16 The article concluded:

17 Earnings and cash flow are considered far more important than book
18 value and dividends.⁴²

19
20 More recently, the *Financial Analysts Journal* reported the results of a study of
21 the relationship between valuations based on alternative multiples and actual
22 market prices, which concluded, "In all cases studied, earnings dominated
23 operating cash flows and dividends."⁴³

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

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

7 **Q. What are security analysts currently projecting in the way of growth for the**
8 **firms in the utility proxy group?**

9 A. The earnings growth projections for each of the firms in the Utility Proxy Group
10 reported by Value Line, IBES, First Call, and Zacks are displayed on Exhibit
11 WEA-7.

12 **Q. Some argue that analysts' assessments of growth rates are biased. Is there**
13 **any reason to believe these projections are inappropriate for estimating**
14 **investors' required return using the DCF model?**

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

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

10
11 The continued success of investment services such as Thompson Reuters and
12 Value Line, and the fact that projected growth rates from such sources are widely
13 referenced, provides strong evidence that investors give considerable weight to
14 analysts' earnings projections in forming their expectations for future growth.
15 While the projections of securities analysts may be proven optimistic or
16 pessimistic in hindsight, this is irrelevant in assessing the expected growth that
17 investors have incorporated into current stock prices, and any bias in analysts'
18 forecasts – whether pessimistic or optimistic – is irrelevant if investors share
19 analysts' views. Earnings growth projections of security analysts provide the
20 most frequently referenced guide to investors' views and are widely accepted in
21 applying the DCF model. As explained in *Regulatory Finance: Utilities' Cost of*
22 *Capital:*

1 Because of the dominance of institutional investors and their
2 influence on individual investors, analysts' forecasts of long-run
3 growth rates provide a sound basis for estimating required returns.
4 Financial analysts also exert a strong influence on the expectations
5 of many investors who do not possess the resources to make their
6 own forecasts, that is, they are a cause of g [growth]. ...
7 Published studies in the academic literature demonstrate that
8 growth forecasts made by securities analysts represent an
9 appropriate source of DCF growth rates, are reasonable indicators
10 of investor expectations and are more accurate than forecasts based
11 on historical growth. ... Cragg and Malkiel (1982) presented
12 detailed empirical evidence that the average analyst's expectation
13 is more similar to expectations being reflected in the marketplace
14 than are historical growth rates, and that they represent the best
15 possible source of DCF growth rates.⁴⁴

16 **Q. How else are investors' expectations of future long-term growth prospects**
17 **often estimated when applying the constant growth DCF model?**

18 A. In constant growth theory, growth in book equity will be equal to the product of
19 the earnings retention ratio (one minus the dividend payout ratio) and the earned
20 rate of return on book equity. Furthermore, if the earned rate of return and the
21 payout ratio are constant over time, growth in earnings and dividends will be
22 equal to growth in book value. Despite the fact that these conditions are seldom,
23 if ever, met in practice, this "sustainable growth" approach may provide a rough

1 guide for evaluating a firm's growth prospects and is frequently proposed in
2 regulatory proceedings.

3
4 Accordingly, while I believe that analysts' forecasts provide a superior and more
5 direct guide to investors' growth expectations, I have included the "sustainable
6 growth" approach for completeness. The sustainable growth rate is calculated by
7 the formula, $g = br + sv$, where "b" is the expected retention ratio, "r" is the
8 expected earned return on equity, "s" is the percent of common equity expected to
9 be issued annually as new common stock, and "v" is the equity accretion rate.

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

11 A. Under DCF theory, the "sv" factor is a component of the growth rate designed to
12 capture the impact of issuing new common stock at a price above, or below, book
13 value. When a company's stock price is greater than its book value per share, the
14 per-share contribution in excess of book value associated with new stock issues
15 will accrue to the current shareholders. This increase to the book value of existing
16 shareholders leads to higher expected earnings and dividends, with the "sv" factor
17 incorporating this additional growth component.

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

20 A. The sustainable, "br+sv" growth rates for each firm in the Utility Proxy Group are
21 summarized on Exhibit WEA-7, with the underlying details being presented on
22 Exhibit WEA-8. For each firm, the expected retention ratio (b) was calculated
23 based on Value Line's projected dividends and earnings per share. Likewise, each

1 firm's expected earned rate of return (r) was computed by dividing projected
2 earnings per share by projected net book value. Because Value Line reports end-
3 of-year book values, an adjustment was incorporated to compute an average rate
4 of return over the year, consistent with the theory underlying this approach to
5 estimating investors' growth expectations. Meanwhile, the percent of common
6 equity expected to be issued annually as new common stock (s) was equal to the
7 product of the projected market-to-book ratio and growth in common shares
8 outstanding, while the equity accretion rate (v) was computed as 1 minus the
9 inverse of the projected market-to-book ratio.

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

12 A. After combining the dividend yields and respective growth projections for each
13 utility, the resulting cost of equity estimates are shown on Exhibit WEA-7.

14 **Q. In evaluating the results of the constant growth DCF model, is it appropriate**
15 **to eliminate cost of equity estimates that are implausibly low?**

16 A. Yes. It is a basic economic principle that investors can be induced to hold more
17 risky assets only if they expect to earn a return to compensate them for their risk
18 bearing. As a result, the rate of return that investors require from a utility's
19 common stock, the most junior and riskiest of its securities, must be considerably
20 higher than the yield offered by senior, long-term debt. Consistent with this
21 principle, the DCF results for the Utility Proxy Group must be adjusted to
22 eliminate cost of equity estimates that are determined to be extreme outliers.

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

2 A. Yes. FERC has noted that adjustments are justified where applications of the
3 DCF approach produce illogical results. FERC evaluates DCF results against
4 observable yields on long-term public utility debt and has recognized that it is
5 appropriate to eliminate cost of equity estimates that do not sufficiently exceed
6 this threshold. In a 2002 opinion establishing its current precedent for
7 determining ROEs for electric utilities, for example, FERC concluded:

8 An adjustment to this data is appropriate in the case of PG&E's low-
9 end return of 8.42 percent, which is comparable to the average
10 Moody's "A" grade public utility bond yield of 8.06 percent, for
11 October 1999. Because investors cannot be expected to purchase
12 stock if debt, which has less risk than stock, yields essentially the
13 same return, this low-end return cannot be considered reliable in this
14 case.⁴⁵

15

16 More recently, in its October 2006 decision in *Kern River Gas Transmission*
17 *Company*, FERC noted that:

18 [T]he 7.31 and 7.32 percent costs of equity for El Paso and Williams
19 found by the ALJ are only 110 and 122 basis points above that
20 average yield for public utility debt.⁴⁶

1 FERC upheld the opinion of Staff and the Administrative Law Judge that cost of
2 equity estimates for these two proxy group companies “were too low to be
3 credible.”⁴⁷

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

6 A. The average corporate credit rating associated with the firms in the Utility Proxy
7 Group is “A-”. Companies rated “A-”, “A”, and “A+” are all considered part of
8 the single-A rating category, with Moody’s monthly yields on single-A bonds
9 averaging approximately 6.4 percent in January 2009.⁴⁸ As highlighted on
10 Exhibit WEA-7, one of the individual equity estimates for the firms in the Utility
11 Proxy Group exceeded this threshold by 50 basis points, with another falling
12 below the yield available on single-A utility bonds.⁴⁹ In light of the risk-return
13 tradeoff principle and the test applied in *Kern River Gas Transmission Company*,
14 it is inconceivable that investors are not requiring a substantially higher rate of
15 return for holding common stock, which is the riskiest of a utility’s securities. As
16 a result, consistent with the test of economic logic applied by FERC, these values
17 provide little guidance as to the returns investors require from utility common
18 stocks and should be excluded.

19 **Q. Do you also recommend excluding cost of equity estimates at the high end of**
20 **the range of DCF results?**

21 A. Yes. The upper end of the cost of equity range produced by the DCF analysis
22 presented on Exhibit WEA-7 was set by cost of equity estimates of 17.5 percent
23 for Integrys Energy Group, with one other DCF estimate at 17.0 percent.

1 Compared with the balance of the remaining estimates, these results are extreme
2 outliers and should also be excluded in evaluating the results of the DCF model
3 for the Utility Proxy Group. This is also consistent with the threshold adopted by
4 FERC, which established that a 17.7 percent DCF estimate was “an extreme
5 outlier” and should be disregarded.⁵⁰

6 **Q. What cost of equity estimates are implied by your DCF results for the Utility
7 Proxy Group?**

8 A. As shown on Exhibit WEA-7, after eliminating illogical low- and high-end
9 values, application of the constant growth DCF model resulted in cost of equity
10 estimates generally exceeding 11 percent [DCF estimates for FPL Group ranged
11 between 12.1 percent and 13.9 percent].

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

14 A. I applied the DCF model to the Non-Utility Proxy Group in exactly the same
15 manner described earlier for the Utility Proxy Group. As shown on Exhibit
16 WEA-9, after eliminating illogical low- and high-end values, application of the
17 constant growth DCF model resulted in cost of equity estimates generally
18 exceeding 13 percent. As discussed earlier, reference to the Non-Utility Proxy
19 Group is consistent with established regulatory principles and required returns for
20 utilities should be in line with those of non-utility firms of comparable risk
21 operating under the constraints of free competition.

D. Capital Asset Pricing Model

1
2
3 **Q. Please describe the CAPM.**

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

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

9
10 where: R_j = required rate of return for stock j ;

11 R_f = risk-free rate;

12 R_m = expected return on the market portfolio; and,

13 β_j = beta, or systematic risk, for stock j .

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

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

20 A. Application of the CAPM to the Utility Proxy Group based on a forward-looking
21 estimate for investors' required rate of return from common stocks is presented on
22 Exhibit WEA-11. In order to capture the expectations of today's investors in

1 current capital markets, the expected market rate of return was estimated by
2 conducting a DCF analysis on the dividend paying firms in the S&P 500.

3
4 The dividend yield for each firm was obtained from Value Line, with the growth
5 rate being equal to the average of the earnings growth projections for each firm
6 published by Value Line, IBES, First Call, and Zacks, with each firm's dividend
7 yield and growth rate being weighted by its proportionate share of total market
8 value. Based on the weighted average of the projections for the 346 individual
9 firms, current estimates imply an average growth rate over the next five years of
10 9.6 percent. Combining this average growth rate with a dividend yield of 3.6
11 percent results in a current cost of equity estimate for the market as a whole of
12 approximately 13.2 percent. Subtracting a 3.2 percent risk-free rate based on the
13 average yield on 20-year Treasury bonds for December 2008 produced a market
14 equity risk premium of 10.0 percent.

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

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

19 Value Line betas are computed on a theoretically sound basis using
20 a broadly-based market index, and they are adjusted for the
21 regression tendency of betas to converge to 1.00. . . . Value Line is
22 the largest and most widely circulated independent investment
23 advisory service, and exerts influence on a large number of

1 institutional and individual investors and on the expectations of
2 these investors.⁵¹

3

4 As shown on Exhibit WEA-11, multiplying the 10.0 percent market risk premium
5 by the respective Value Line betas for the firms in the Utility Proxy Group, and
6 then adding the resulting risk premiums to the average long-term Treasury bond
7 yield, results in an average indicated cost of equity of 10.5 percent, with the
8 implied ROE for FPL Group being 11.2 percent.

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

11 A. As shown on Exhibit WEA-12, applying the forward-looking CAPM approach to
12 the firms in the Non-Utility Proxy Group results in an average implied cost of
13 equity of 11.5 percent.

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

15 A. Yes. Applying the CAPM is complicated by the impact of the unprecedented
16 financial crisis on investors' risk perceptions and required returns. The CAPM
17 cost of equity estimate is calibrated from investors' required risk premium
18 between Treasury bonds and common stocks. As discussed earlier, investors have
19 sought a safe haven in Treasury bonds and this "flight to safety" has caused the
20 yield spreads for corporate debt to spike to levels not seen since the Great
21 Depression. Economic logic would suggest that investors' required risk premium
22 for common stocks over Treasury bonds has also increased dramatically. Thus,
23 the recent financial turmoil may cause CAPM cost of equity estimates to

1 understate investors' required returns for common stocks, particularly when
2 historical data are used to calculate the market risk premium. While my
3 application of the CAPM makes every effort to incorporate investors' forward-
4 looking expectations, the full effect of the "flight to safety" may not be captured
5 in my market risk premium estimate. One other obvious limitation of CAPM cost
6 of equity estimates is that beta values are customarily calculated based solely on
7 historical data and may not accurately reflect investor's forward-looking rate of
8 return requirements, particularly during periods of financial turmoil.

9 **Q. Did your CAPM analysis rely on geometric or arithmetic means in arriving**
10 **at an equity risk premium?**

11 A. No. Reference to arithmetic or geometric mean risk premiums is associated with
12 applications of the CAPM that depend on historical data. In order to derive an
13 estimate of the market equity risk premium under this approach, historical average
14 returns on Treasury bonds are typically subtracted from those for common stocks.
15 These average rates of return based on backward-looking data for historical time
16 periods can be derived using both arithmetic and geometric means.

17
18 As discussed above, however, my application of the CAPM was a purely forward-
19 looking approach, which is consistent with the underlying assumptions of this
20 method and the standards underlying a determination of a fair rate of return.
21 Because I looked directly at investors' current expectations in the capital markets
22 – and not at historical rates of return – my CAPM analysis did not need to
23 reference either the arithmetic or geometric mean of historical rates of return.⁵²

1 **Q. Are there selected academic studies or other sources that might measure an**
2 **equity risk premium that is less than what is indicated based on investors’**
3 **current expectations for the stocks in the S&P 500?**

4 A. There are a plethora of studies that examine what investors have actually realized
5 in terms of equity returns versus stocks. Similarly, there are articles suggesting
6 what investors should expect based on “building blocks” or other techniques.
7 Further, there are surveys of corporate executives and others about what they
8 expect the return differential to be over various horizons. Finally, there are
9 projections that the managers of utility pensions funds use for actuarial purposes.

10

11 None of these values are comparable to the risk premium as I have applied it in
12 my forward-looking CAPM analyses, which is based not on some generic notion
13 of the equity risk premium but is derived from contemporaneous projections for
14 individual stocks in the S&P 500. Average realized risk premiums computed over
15 some selected time period may be an accurate representation of what was actually
16 earned in the past, but they don’t answer the question as to what risk premium
17 investors were actually expecting to earn on a forward-looking basis during these
18 same time periods. Similarly, calculations of the equity risk premium developed
19 at a point in history – whether based on actual returns in prior periods or
20 contemporaneous projections – are not the same as the forward-looking
21 expectations of today’s investors, which are premised on an entirely different set
22 of capital market and economic expectations.

1 The purpose of my analysis was to determine an allowed return that would meet
2 the regulatory requirement of allowing FPL to attract capital and maintain its
3 financial integrity. The most appropriate benchmark for a meaningful forward-
4 looking estimate of the return investors require from FPL, is what investors are
5 currently requiring for other investments with which FPL must compete for
6 capital. The risk premium used in my CAPM is derived from current market data
7 and is forward-looking in the sense of using the projected earnings estimates used
8 by investors. It does not depend on analysis of past historical data on risk
9 premiums nor does it purport to identify what investors will actually realize in the
10 future, or what they should reasonably expect over the long-term. Rather it is an
11 estimate of what investors currently require when they allocate their capital to
12 competing investments. These current forward-looking required returns are the
13 touchstone of whether an authorized ROE can meet the FPSC's standard of
14 capital attraction and maintaining financial integrity.

15 16 **E. Expected Earnings Approach**

17
18 **Q. What other analyses did you conduct to estimate the cost of equity?**

19 A. As I noted earlier, I also evaluated the cost of equity using the expected earnings
20 method. Reference to rates of return available from alternative investments of
21 comparable risk can provide an important benchmark in assessing the return
22 necessary to assure confidence in the financial integrity of a firm and its ability to
23 attract capital. This expected earnings approach is consistent with the economic

1 underpinnings for a fair rate of return established by the U.S. Supreme Court.
2 Moreover, it avoids the complexities and limitations of capital market methods
3 and instead focuses on the returns earned on book equity, which are readily
4 available to investors.

5 **Q. What rates of return on equity are indicated for utilities based on the**
6 **expected earnings approach?**

7 A. Value Line reports that its analysts anticipate an average rate of return on common
8 equity for the electric utility industry of 11.5 percent in 2009 and over its 2011-
9 2013 forecast horizon.⁵³ Meanwhile, Value Line expects that natural gas
10 distribution utilities will earn an average rate of return on common equity of 11.5
11 percent in 2009 and 12.0 percent over its three-to-five year forecast horizon.⁵⁴

12

13 For the firms in the Utility Proxy Group specifically, the returns on common
14 equity projected by Value Line over its three-to-five year forecast horizon are
15 shown on Exhibit WEA-13. Consistent with the rationale underlying the
16 development of the br+sv growth rates, these year-end values were converted to
17 average returns using the same adjustment factor discussed earlier. As shown on
18 Exhibit WEA-13, Value Line's projections for the Utility Proxy Group suggested
19 an average ROE of 11.7 percent. As shown on Exhibit WEA-13, the expected
20 earnings approach implied an ROE for FPL Group of 14.0 percent.

F. Flotation Costs

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

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

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

A. No. While debt flotation costs are recorded on the books of the utility, amortized over the life of the issue, and thus increase the effective cost of debt capital, there is no similar accounting treatment to ensure that equity flotation costs are recorded and ultimately recognized. Alternatively, no rate of return is authorized on flotation costs necessarily incurred to obtain a portion of the equity capital used to finance plant. In other words, equity flotation costs are not included in a utility’s rate base because neither that portion of the gross proceeds from the sale of common stock used to pay flotation costs is available to invest in plant and

1 equipment, nor are flotation costs capitalized as an intangible asset. Unless some
2 provision is made to recognize these issuance costs, a utility's revenue requirements
3 will not fully reflect all of the costs incurred for the use of investors' funds.
4 Because there is no accounting convention to accumulate the flotation costs .
5 associated with equity issues, they must be accounted for indirectly, with an
6 upward adjustment to the cost of equity being the most logical mechanism.

7 **Q. What is the magnitude of the adjustment to the “bare bones” cost of equity to**
8 **account for issuance costs?**

9 A. While there are a number of ways in which a flotation cost adjustment can be
10 calculated, one of the most common methods used to account for flotation costs in
11 regulatory proceedings is to apply an average flotation-cost percentage to a
12 utility's dividend yield. Based on a review of the finance literature, *Regulatory*
13 *Finance: Utilities' Cost of Capital* concluded:

14 The flotation cost allowance requires an estimated adjustment to the
15 return on equity of approximately 5% to 10%, depending on the size
16 and risk of the issue.⁵⁵

17
18 Alternatively, a study of data from Morgan Stanley regarding issuance costs
19 associated with utility common stock issuances suggests an average flotation cost
20 percentage of 3.6%.⁵⁶

21
22 Applying these expense percentages to a representative dividend yield for a utility
23 of 4.9 percent implies a flotation cost adjustment on the order of 18 to 49 basis

1 points. Issuance costs are a legitimate consideration in setting the return on equity
2 for a utility, and I recommend incorporating a 25 basis-point adjustment in
3 determining a reasonable ROE range for FPL.⁵⁷
4

5 V. RETURN ON EQUITY RANGE FOR FPL 6

7 Q. What is the purpose of this section?

8 A. This section addresses the economic requirements for FPL's rate of return on
9 equity. It discusses the regulatory policy reasons for avoiding a return on equity
10 that is not sufficient to maintain FPL's financial integrity and ability to attract
11 capital, and examines other factors properly considered in determining a fair rate
12 of return, including specific exposures faced by FPL. Finally, this section
13 presents my conclusions regarding a fair ROE range and discusses the merits of
14 an ROE reward to recognize FPL's exemplary results.
15

16 A. Implications for Financial Integrity 17

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

19 A. Given the importance of the utility industry to the economy and society, it is
20 essential to maintain reliable and economical service to all consumers. While
21 FPL remains committed to provide reliable electric service, a utility's ability to
22 fulfill its mandate can be compromised if it lacks the necessary financial
23 wherewithal or is unable to earn a return sufficient to attract capital. Coupled

1 with the ongoing potential for energy market volatility, FPL's plans for significant
2 infrastructure investment and its exposure to other potential challenges might
3 require the relatively swift commitment of significant capital resources in order to
4 maintain the high level of service that customers have come to expect.

5 As documented earlier, the major rating agencies have warned of exposure to
6 uncertainties associated with political and regulatory developments, especially in
7 view of the pressures associated with large capital expenditure programs and the
8 potential for high and volatile commodity costs in wholesale energy markets.

9 Investors understand just how swiftly unforeseen circumstances can lead to
10 deterioration in a utility's financial condition, and stakeholders have discovered
11 first hand how difficult and complex it can be to remedy the situation after the
12 fact. While providing the infrastructure necessary to enhance the power system
13 and meet the energy needs of customers is certainly desirable, it imposes
14 additional financial responsibilities on FPL. For a utility with an obligation to
15 provide reliable service, investors' increased reticence to supply additional capital
16 during times of crisis highlights the necessity of preserving the flexibility
17 necessary to overcome periods of adverse capital market conditions. These
18 considerations heighten the importance of allowing FPL an adequate ROE.

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

21 A. Considering investors' heightened awareness of the risks associated with the
22 utility industry and the damage that results when a utility's financial flexibility is
23 compromised, the continuation of supportive regulation remains crucial to FPL's

1 access to capital. Investors recognize that regulation has its own risks, and that
2 constructive regulation is a key ingredient in supporting utility credit ratings and
3 financial integrity, particularly during times of adverse conditions. Fitch noted
4 that:

5 Regulatory risk remains a recurring theme for this year's outlook,
6 as the pressure of a weak economic backdrop could result in
7 political push-back to rate increase requests.⁵⁸

8
9 The report went on to conclude, "Fitch is concerned that the recent rapid
10 escalation in the cost of capital will not be reflected on a timely basis in utility
11 rates."⁵⁹ Similarly, with respect to FPL specifically, Fitch concluded:

12 Maintaining a supportive political and regulatory environment in
13 Florida that permits full and timely recovery of utility capital
14 investments, commodity costs and storm recovery is important to
15 the maintenance of the current ratings.⁶⁰

16
17 Moody's has also emphasized the need for regulatory support "in an era of
18 broadly rising costs," noting that as cost pressures have escalated for electric
19 utilities, so too has the importance of timely recovery through the regulatory
20 process and the risks associated with regulatory lag.⁶¹ S&P concluded "the
21 quality of regulation is at the forefront of our analysis of utility
22 creditworthiness."⁶²

1 **Q. Does the fact that FPL operates under various cost adjustment mechanisms**
2 **warrant any adjustment in your evaluation of a fair ROE?**

3 A. No. Investors recognize that FPL is exposed to significant risks associated with
4 energy price volatility and rising costs and concerns over these risks have become
5 increasingly pronounced in the industry. The FPSC's cost adjustment
6 mechanisms are a valuable means of mitigating those risks, but they do not
7 eliminate them. As noted above, of particular concern to investors is the impact
8 of regulatory lag and cost-recovery on the utility's ability to earn its authorized
9 return. While the adjustment mechanisms approved for FPL partially attenuate
10 exposure to attrition in an era of rising costs, this leveling of the playing field only
11 serves to preserve FPL's opportunity to earn its authorized return, as required by
12 established regulatory standards.

13
14 Moreover, adjustment mechanisms and contractual arrangements that enable
15 utilities to implement rate changes to pass-through fluctuations in fuel costs have
16 been widely prevalent in the industry and utilities increasingly benefit from a
17 wide variety of mechanisms designed to mitigate against the risks associated with
18 fluctuations in costs and regulatory lag. While not always directly analogous to
19 the specific mechanisms in effect for FPL, the objective is similar; namely, to
20 allow the utility an opportunity to earn a fair rate of return and partially attenuate
21 exposure to attrition in an era of rising costs. Reflective of this industry trend, the
22 companies in the Utility Proxy Group operate under a variety of cost adjustment
23 mechanisms, which range from riders to recover bad debt expense and post-

1 retirement employee benefit costs to adjustment clauses designed to address the
2 rising costs of environmental compliance measures.

3
4 For example, Pacific Gas and Electric Company benefits from a number of
5 balancing account mechanisms that cover a significant portion of its revenue
6 requirements. Similarly, Xcel Energy, Inc. also benefits from a transmission cost
7 recovery adjustment that allows the utility to recover incremental transmission
8 investments between rate cases, as well as an adjustment clause to account for the
9 impact of demand side management programs. Moreover, in response to the
10 heightened risk associated with utilities' exposure to substantial costs for
11 environmental remediation, adjustment mechanisms designed to allow for
12 recovery of these costs outside a general rate case have become increasingly
13 prevalent. As a result, the mitigation in risks associated with utilities' ability to
14 attenuate the impact of fluctuations in costs is already reflected in the cost of
15 equity estimates developed earlier. Similarly, the firms in the Non-Utility Proxy
16 Group also have the ability to alter prices in response to rising production costs,
17 with the added flexibility to withdraw from the market altogether.

18 **Q. Do the exposures peculiar to FPL highlight the need for ongoing support of**
19 **the company's financial strength and ability to attract capital?**

20 A. Most definitely. As discussed earlier, FPL faces a number of potential challenges
21 that might require the relatively swift commitment of considerable capital
22 resources in order to maintain the high level of service to which its customers
23 have become accustomed. For example, mandated shutdowns in response to

1 security threats or a catastrophic event elsewhere in the U.S. would impose
2 significant reliance on wholesale power markets to meet energy shortfalls. FPL's
3 reliance on purchased power for a significant portion of its power requirements
4 also imposes increased vulnerability to supply disruptions, especially in light of
5 its relative geographic isolation on the Florida peninsula. Similarly, any
6 interruption of gas supplies due to deliverability constraints imposed on FPL's
7 suppliers could also result in the need for a considerable financial commitment for
8 an alternative fuel source or replacement power. Given the potential for
9 significant volatility in wholesale energy markets and FPL's lack of control over
10 the timing of such events, FPL must have the wherewithal to meet these
11 challenges even when capital and energy market conditions are unfavorable. In
12 addition, it is crucial that FPL maintain its ability to meet the significant liquidity
13 requirements necessary for storm restoration and its fuel hedging program.

14
15 Apart from this exposure to the vagaries of capital and energy market conditions,
16 FPL must simultaneously meet the long-term energy needs of its service area. To
17 continue to meet these challenges successfully and economically, it is crucial that
18 FPL receive adequate support for its credit standing. While providing an ROE
19 that is sufficient to maintain FPL's ability to attract capital, even under duress, is
20 consistent with the economic requirements embodied in the Supreme Court's
21 *Hope* and *Bluefield* decisions, it is also in customers' best interests. Ultimately, it
22 is customers and the service area economy that enjoy the benefits that come from
23 ensuring that the utility has the financial wherewithal to invest in infrastructure

1 and take whatever actions are required to ensure a reliable energy supply. By the
2 same token, customers and the service area economy also bear a significant
3 burden when the ability of the utility to attract necessary capital is impaired and
4 service quality is compromised.

5 **Q. What evidence illustrates the benefits of maintaining FPL's ability to attract**
6 **capital?**

7 A. FPL's consistent ability to keep pace with the growing needs of its customers
8 demonstrates the advantage that accrues to all stakeholders when the utility is able
9 to maintain a strong financial position. In recent years, FPL has spent billions of
10 dollars to add the new generation and transmission capacity dictated by the
11 demands of a vibrant service area and repair the devastation wrought by tropical
12 storms, while simultaneously increasing efficiency and lowering emissions.
13 Despite the associated complexities, including volatile conditions in energy and
14 capital markets, FPL has effectively and economically responded to these
15 challenges, in part due to its strong financial position.

16
17 As discussed in the testimony of FPL's witnesses, FPL has done an outstanding
18 job of meeting customers' power requirements reliably, efficiently, and at rates
19 that compare favorably with other utilities. While FPL's conservative posture has
20 benefited customers and provided a strong platform for continued success, actions
21 that serve to erode financial strength or impair financial flexibility could have
22 swift and damaging consequences. The cost of providing FPL an adequate return

1 is small relative to the potential benefits that a strong utility can have in providing
2 reliable service and fostering growth.

3
4 **B. Return on Equity Recommendation**

5
6 **Q. What then is your conclusion as to a fair ROE range for FPL applicable to**
7 **the 2010 test year?**

8 A. Taken together, and considering their relative strengths and weaknesses, the
9 results of my alternative analyses generally indicate a cost of equity in the 11.0
10 percent to 13.0 percent range. Apart from the results of these quantitative
11 methods, it is crucial to recognize the importance of maintaining a strong
12 financial position so that FPL remains prepared to respond to unforeseen events
13 that may materialize in the future. While this imperative is reinforced by current
14 capital market conditions, it extends well beyond the financial markets and
15 includes the Company's ability to absorb potential shocks associated with
16 devastating hurricanes, volatile fuel pricing, and disruptions in energy supply.

17
18 The challenging capital market environment highlights the benefits of FPL's
19 strong credit rating in attracting the capital needed to secure reliable service at a
20 lower cost for customers. Changing course from the path of financial strength
21 would be extremely short-sighted, especially considering that a combination of
22 events could adversely impact FPL's ability to serve customers if its current
23 financial strength were not maintained. After considering the potential exposures

1 faced by FPL and the economic requirements necessary to maintain access to
2 capital even under adverse circumstances, it is my opinion that a reasonable ROE
3 for FPL is in the range of 12.0 percent to 13.0 percent. This conclusion is
4 supported by the implications of ongoing turmoil in the capital markets and my
5 recommended 25 basis point adjustment for flotation costs. By helping sustain
6 FPL's financial strength, the FPSC will facilitate the flow of capital on reasonable
7 terms that is required for the Company to maintain and improve the electric
8 infrastructure so vital to Florida's economic recovery and future growth.

9 **Q. In evaluating the fair ROE for FPL from within this range, is it appropriate**
10 **to recognize and encourage exemplary management?**

11 A. Yes. As discussed in the testimony of FPL's witnesses, FPL has distinguished
12 itself in numerous measures of operating efficiency and effectiveness while
13 maintaining moderate electric rates. As a result, consumers and the service area
14 economy have benefited from FPL's efficient and cost-effective operations,
15 excellent customer service, improved reliability, and prices that have declined in
16 real terms. To date, the FPSC has helped to foster an environment in which
17 customers are assured reliable service at reasonable rates, stockholders are fairly
18 treated, and stakeholders are not forced to commit significant resources and bear
19 the concomitant costs of multiple or annual rate cases. FPL's superior
20 management continues to be instrumental in achieving these results, and
21 considering exemplary performance when establishing a fair ROE from within my
22 recommended range is entirely consistent with regulatory economics and past
23 incentive mechanisms approved by the FPSC.

VI. CAPITAL STRUCTURE

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

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

Q. Do the capital structure ratios reflected in FPL's MFRs provide a representative basis on which to evaluate FPL's capital structure?

A. No. Depending on their specific attributes, contractual agreements or other obligations that require the utility to make specified payments may be treated as debt in evaluating FPL's financial risk. PPAs and leases typically obligate the utility to make specified minimum contractual payments akin to those associated with traditional debt financing and investors consider a portion of these commitments as debt in evaluating total financial risks. Because investors consider the debt impact of such fixed obligations in assessing a utility's financial position, they imply greater risk and reduced financial flexibility. In order to offset the debt equivalent associated with off-balance sheet obligations, the utility

1 must rebalance its capital structure by increasing its common equity in order to
2 restore its effective capitalization ratios to previous levels.

3
4 Reflecting the longstanding perception of investors that the fixed obligations
5 associated with PPAs, leases, and other off-balance sheet obligations diminish a
6 utility's creditworthiness and financial flexibility, the implications of these
7 commitments have been repeatedly cited by major bond rating agencies in
8 connection with assessments of utility financial risks. For example, in explaining
9 its evaluation of the credit implications of PPAs, S&P affirmed its position that
10 such agreements give rise to "debt equivalents" and that the increased financial
11 risk must be considered in evaluating a utility's credit risks.⁶³ As the rating
12 agency explained:

13 For many years, Standard & Poor's Ratings Services has viewed
14 power supply agreements (PPA) in the U.S. utility sector as
15 creating fixed, debt-like, financial obligations that represent
16 substitutes for debt-financed capital investments in generation
17 capacity. In a sense, a utility that has entered into a PPA has
18 contracted with a supplier to make the financial investment on its
19 behalf. Consequently, PPA fixed obligations, in the form of
20 capacity payments, merit inclusion in a utility's financial metrics
21 as though they are part of a utility's permanent capital structure
22 and are incorporated in our assessment of a utility's
23 creditworthiness.⁶⁴

1 Apart from reaffirming the importance of imputed debt in its analysis of credit
2 standing, S&P also noted that it has refined its methodology to include imputed
3 debt associated with shorter-term PPAs.⁶⁵ Similarly, S&P affirmed its policy of
4 modifying a utility's balance sheet to include the debt equivalents associated with
5 operating leases.⁶⁶

6
7 As discussed earlier, a significant portion of FPL's power requirements are
8 currently obtained through purchased power contracts. These contractual
9 payment obligations are fixed commitments with debt-like characteristics and are
10 properly considered when evaluating the financial risks implied by FPL's capital
11 structure. S&P reported that it adjusts FPL's current capitalization to include
12 approximately \$1.2 billion in imputed debt from off-balance sheet obligations.⁶⁷
13 Unless the Company takes action to offset this additional financial risk by
14 maintaining a higher equity ratio, the resulting leverage will weaken FPL's
15 creditworthiness, implying a higher required rate of return to compensate
16 investors for the greater risks.⁶⁸

17 **Q. What capital structure is implied for FPL's 2010 test year once the off-**
18 **balance sheet obligations associated with purchased power contracts are**
19 **incorporated?**

20 A. Based on S&P's quantification, an upward adjustment to long-term debt of \$950
21 million was incorporated for 2010 to account for the debt equivalent attributed to
22 FPL's off-balance sheet obligations. This results in the adjusted capital structure

1 ratios shown on Exhibit WEA-14 of 1.1 percent short-term debt, 43.1 percent
2 long-term debt, and 55.8 percent common equity.

3
4 These calculations not only reflect the investment community's evaluation of
5 FPL's financial risks, they are also consistent with methodology used to derive the
6 55.8 percent adjusted equity ratio that forms the surveillance cap specified under
7 the terms of the Stipulation and Settlement approved in Docket No. 050045-EI.⁶⁹
8 Moreover, past decisions of the FPSC have acknowledged that an adjustment is
9 appropriate to address the capital structure impact associated with purchased
10 power.

11 **Q. How can FPL's requested capital structure be evaluated?**

12 A. It is generally accepted that the norms established by comparable firms provide
13 one valid benchmark against which to evaluate the reasonableness of a utility's
14 capital structure. The capital structure maintained by other electric utilities should
15 reflect their collective efforts to finance themselves so as to minimize capital costs
16 while preserving their financial integrity and ability to attract capital. Moreover,
17 these industry capital structures should also incorporate the requirements of
18 investors (both debt and equity), as well as the influence of regulators.

19 **Q. What capitalization ratios are maintained by other electric utility operating
20 companies?**

21 A. Exhibit WEA-15 displays capital structure data at year-end 2007 for the group of
22 electric utility operating companies owned by the firms in the Utility Proxy Group
23 (excluding FPL) used to estimate the cost of equity. As shown there, common

1 equity ratios for these electric utilities ranged from 42.5 percent to 77.1 percent
2 and averaged 54.2 percent. Incorporating the same short-term debt ratio reflected
3 in FPL's adjusted 2010 capitalization of approximately 1.1 percent results in an
4 average common equity ratio for this group of other utilities of 53.6 percent.

5 **Q. What was the average capitalization maintained by the Utility Proxy Group?**

6 A. As shown on Exhibit WEA-16, for the nineteen firms in the Utility Proxy Group,
7 common equity ratios at December 31, 2007 ranged between 38.7 percent and
8 66.0 percent and averaged 51.1 percent. Adjusting the average capitalization to
9 include short-term debt in the same proportion as FPL would result in an adjusted
10 equity ratio of 50.6 percent.

11 **Q. What capitalization is representative for the Utility Proxy Group going**
12 **forward?**

13 A. As shown on Exhibit WEA-16, Value Line expects an average common equity
14 ratio for the Utility Proxy Group of 52.2 percent for its three-to-five year forecast
15 horizon, with the individual common equity ratios ranging from 45.0 percent to
16 69.5 percent. Adjusting the average capitalization to include short-term debt in
17 the same proportion as FPL would result in an adjusted equity ratio of 51.6
18 percent.

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

21 A. As discussed earlier, utilities are facing energy market volatility, rising cost
22 structures, the need to finance significant capital investment plans, uncertainties
23 over accommodating future environmental mandates, and ongoing regulatory

1 risks. Coupled with the ongoing turmoil in capital markets, these considerations
2 warrant a stronger balance sheet to deal with an increasingly uncertain
3 environment. A more conservative financial profile, in the form of a higher
4 common equity ratio, is consistent with increasing uncertainties and the need to
5 maintain the continuous access to capital that is required to fund operations and
6 necessary system investment, even during times of adverse capital market
7 conditions.

8
9 Moody's has warned investors of the risks associated with debt leverage and fixed
10 obligations and advised utilities not to squander the opportunity to strengthen the
11 balance sheet as a buffer against future uncertainties.⁷⁰ Moody's noted that,
12 "maintaining unfettered access to capital markets will be crucial," and cited the
13 importance of forestalling future downgrades by bolstering utility balance
14 sheets.⁷¹ As Moody's concluded:

15 Our concerns are clearly growing, but we believe utilities have
16 adequate time to adjust and revise their corporate finance policies
17 and strengthen balance sheets, thereby improving their ability to
18 manage volatility and address uncertainty.⁷²

19
20 Moody's affirmed that, because of its significant investment plans, the utility
21 industry "will need to attract a significant amount of new equity capital in order to
22 maintain existing ratings."⁷³ This is especially the case for FPL, which faces the
23 prospect of financing significant capital expansion plans in a turbulent market

1 while at the same time maintaining its ability to respond to other significant
2 challenges.

3 **Q. What did you conclude regarding the reasonableness of FPL's requested**
4 **capital structure?**

5 A. Based on my evaluation, I concluded that the 55.8 percent common equity ratio
6 requested by FPL represents a reasonable mix of capital sources from which to
7 calculate FPL's overall rate of return. Although this adjusted common equity ratio
8 is somewhat higher than the average currently maintained by the group of electric
9 utility operating companies, it is well within the range of individual results for this
10 reference group and the Utility Proxy Group and consistent with the trend towards
11 lower financial leverage expected for the industry. As discussed earlier, it is also
12 consistent with the relatively greater financial strength required to counterbalance
13 the various exposures faced by FPL.

14
15 While industry averages provide one benchmark for comparison, each firm must
16 select its capitalization based on the risks and prospects it faces, as well as its
17 specific needs to access the capital markets. A public utility with an obligation to
18 serve must maintain ready access to capital under reasonable terms so that it can
19 meet the service requirements of its customers. The need for access becomes
20 even more important when the company has capital requirements over a period of
21 years, and financing must be continuously available, even during unfavorable
22 capital market conditions.

1 Financial flexibility plays a crucial role in ensuring the wherewithal to meet the
2 needs of customers, and utilities with higher leverage may be foreclosed from
3 additional borrowing, especially during times of stress. FPL's capital structure
4 reflects the Company's ongoing efforts to maintain its credit standing and support
5 access to capital on reasonable terms. The reasonableness of FPL's capital
6 structure is reinforced by the ongoing uncertainties associated with the electric
7 power industry, the need to accommodate the specific exposures faced by FPL,
8 and the importance of supporting continued system investment, even during times
9 of adverse industry or market conditions.

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

11 A. Yes.

1 utility-related matters on behalf of utilities, industrial customers, municipalities, and
2 regulatory commissions. I have previously testified before the Federal Energy
3 Regulatory Commission ("FERC"), as well as the Federal Communications
4 Commission ("FCC"), the Surface Transportation Board (and its predecessor, the
5 Interstate Commerce Commission), the Canadian Radio-Television and
6 Telecommunications Commission, and regulatory agencies, courts, and legislative
7 committees in 39 states.

8
9 In 1995, I was appointed by the PUCT to the Synchronous Interconnection
10 Committee to advise the Texas legislature on the costs and benefits of connecting
11 Texas to the national electric transmission grid. In addition, I served as an outside
12 director of Georgia System Operations Corporation, the system operator for electric
13 cooperatives in Georgia.

14
15 I have served as Lecturer in the Finance Department at the University of Texas at
16 Austin and taught in the evening graduate program at St. Edward's University for
17 twenty years. In addition, I have lectured on economic and regulatory topics in
18 programs sponsored by universities and industry groups. I have taught in hundreds of
19 educational programs for financial analysts in programs sponsored by the Association
20 for Investment Management and Research, the Financial Analysts Review, and local
21 financial analysts societies. These programs have been presented in Asia, Europe,
22 and North America, including the Financial Analysts Seminar at Northwestern

1 University. I hold the Chartered Financial Analyst (CFA[®]) designation and have
2 served as Vice President for Membership of the Financial Management Association. I
3 have also served on the Board of Directors of the North Carolina Society of Financial
4 Analysts. I was elected Vice Chairman of the National Association of Regulatory
5 Commissioners ("NARUC") Subcommittee on Economics and appointed to
6 NARUC's Technical Subcommittee on the National Energy Act. I have also served
7 as an officer of various other professional organizations and societies. A resume
8 containing the details of my experience and qualifications is attached.

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Summary of Qualifications

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

Employment

Principal,
FINCAP, Inc.
(Sep. 1979 to present)

Financial, economic and policy consulting to business and government. Perform business and public policy research, cost/benefit analyses and financial modeling, valuation of businesses (over 150 entities valued), estimation of damages, statistical and industry studies. Provide strategy advice and educational services in public and private sectors, and serve as expert witness before regulatory agencies, legislative committees, arbitration panels, and courts.

*Director, Economic Research
Division,*
Public Utility Commission of Texas
(Dec. 1977 to Aug. 1979)

Responsible for research and testimony preparation on rate of return, rate structure, and econometric analysis dealing with energy, telecommunications, water and sewer utilities. Testified in major rate cases and appeared before legislative committees and served as Chief Economist for agency. Administered state and federal grant funds. Communicated frequently with political leaders and representatives from consumer groups, media, and investment community.

Manager, Financial Education,
International Paper Company
New York City
(Feb. 1977 to Nov. 1977)

Directed corporate education programs in accounting, finance, and economics. Developed course materials, recruited and trained instructors, liaison within the company and with academic institutions. Prepared operating budget and designed financial controls for corporate professional development program.

Lecturer in Finance,

The University of Texas at Austin
(Sep. 1979 to May 1981)
Assistant Professor of Finance,
(Sep. 1975 to May 1977)

Taught graduate and undergraduate courses in financial management and investment theory. Conducted research in business and public policy. Named Outstanding Graduate Business Professor and received various administrative appointments.

Assistant Professor of Business,
University of North Carolina at
Chapel Hill
(Sep. 1972 to Jul. 1975)

Taught in BBA, MBA, and Ph.D. programs. Created project course in finance, Financial Management for Women, and participated in developing Small Business Management sequence. Organized the North Carolina Institute for Investment Research, a group of financial institutions that supported academic research. Faculty advisor to the Media Board, which funds student publications and broadcast stations.

Education

Ph.D., Economics and Finance,
University of North Carolina at
Chapel Hill
(Jan. 1969 to Aug. 1972)

Elective courses included financial management, public finance, monetary theory, and econometrics. Awarded the Stonier Fellowship by the American Bankers' Association and University Teaching Fellowship. Taught statistics, macroeconomics, and microeconomics.

Dissertation: *The Geometric Mean Strategy as a Theory of Multiperiod Portfolio Choice*

B.A., Economics,
Emory University, Atlanta, Georgia
(Sep. 1961 to Jun. 1965)

Active in extracurricular activities, President of the Barkley Forum (debate team), Emory Religious Association, and Delta Tau Delta chapter. Individual awards and team championships at national collegiate debate tournaments.

Professional Associations

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

Teaching in Executive Education Programs

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

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

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

Expert Witness Testimony

Testified in over 250 cases before regulatory agencies addressing cost of capital, regulatory policy, rate design, and other economic and financial issues.

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

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

Testified in 41 cases before federal and state courts, arbitration panels, and alternative dispute tribunals (86 depositions given) regarding damages, valuation, antitrust liability, fiduciary duties, and other economic and financial issues.

Board Positions and Other Professional Activities

Audit Committee and Outside Director, Georgia System Operations Corporation (electric system operator for member-owned electric cooperatives in Georgia); Chairman, Board of Print Depot, Inc. and FINCAP, Inc.; Co-chair, Synchronous Interconnection Committee, appointed by Public Utility Commission of Texas and approved by governor; Appointed by Hays County Commission to Citizens Advisory Committee of Habitat Conservation Plan, Operator of AAA Ranch, a certified organic producer of agricultural products; Appointed to Organic Livestock Advisory Committee by Texas Agricultural Commissioner Susan Combs; Appointed by Texas Railroad Commissioners to study group for *The UP/SP Merger: An Assessment of the Impacts on the State of Texas*; Appointed by Hawaii Public Utilities Commission to team reviewing affiliate relationships of Hawaiian Electric Industries; Chairman, Energy Task Force, Greater Austin-San Antonio Corridor Council; Consultant to Public Utility Commission of Texas on cogeneration policy and other matters; Consultant to Public Service Commission of New Mexico on cogeneration policy; Evaluator of Energy Research Grant Proposals for Texas Higher Education Coordinating Board.

Community Activities

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

Military

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

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- "Portfolio Performance Evaluation and Long-run Capital Growth," with Henry A. Latané in *Proceedings of the Eastern Finance Association* (1973)
- Book reviews in *Journal of Finance* and *Financial Review*. Abstracts for *CFA Digest*. Articles in *Carolina Financial Times*.

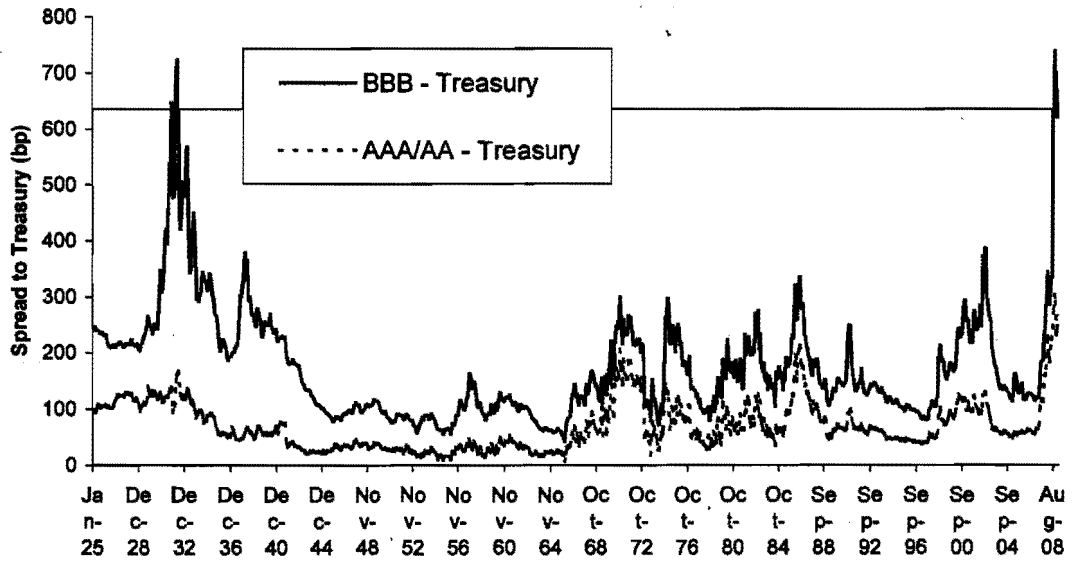
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- "The Who, What, When, How, and Why of Ethics", San Antonio Financial Analysts Society (Jan. 16, 2002). Similar presentation given to the Austin Society of Financial Analysts (Jan. 17, 2002)
- "Ethics for Financial Analysts," Sponsored by Canadian Council of Financial Analysts: delivered in Calgary, Edmonton, Regina, and Winnipeg, June 1997. Similar presentations given to Austin Society of Financial Analysts (Mar. 1994), San Antonio Society of Financial Analysts (Nov. 1985), and St. Louis Society of Financial Analysts (Feb. 1986)
- "Cost of Capital for Multi-Divisional Corporations," Financial Management Association, New Orleans, Louisiana (Oct. 1996)
- "Ethics and the Treasury Function," Government Treasurers Organization of Texas, Corpus Christi, Texas (Jun. 1996)
- "A Cooperative Future," Iowa Association of Electric Cooperatives, Des Moines (December 1995). Similar presentations given to National G & T Conference, Irving, Texas (June 1995), Kentucky Association of Electric Cooperatives Annual Meeting, Louisville (Nov. 1994), Virginia, Maryland, and Delaware Association of Electric Cooperatives Annual Meeting, Richmond (July 1994), and Carolina Electric Cooperatives Annual Meeting, Raleigh (Mar. 1994)
- "Information Superhighway Warnings: Speed Bumps on Wall Street and Detours from the Economy," Texas Society of Certified Public Accountants Natural Gas, Telecommunications and Electric Industries Conference, Austin (Apr. 1995)
- "Economic/Wall Street Outlook," Carolinas Council of the Institute of Management Accountants, Myrtle Beach, South Carolina (May 1994). Similar presentation given to Bell Operating Company Accounting Witness Conference, Santa Fe, New Mexico (Apr. 1993)
- "Regulatory Developments in Telecommunications," Regional Holding Company Financial and Accounting Conference, San Antonio (Sep. 1993)
- "Estimating the Cost of Capital During the 1990s: Issues and Directions," The National Society of Rate of Return Analysts, Washington, D.C. (May 1992)
- "Making Utility Regulation Work at the Public Utility Commission of Texas," Center for Legal and Regulatory Studies, University of Texas, Austin (June 1991)
- "Can Regulation Compete for the Hearts and Minds of Industrial Customers," Emerging Issues of Competition in the Electric Utility Industry Conference, Austin (May 1988)
- "The Role of Utilities in Fostering New Energy Technologies," Emerging Energy Technologies in Texas Conference, Austin (Mar. 1988)
- "The Regulators' Perspective," Bellcore Economic Analysis Conference, San Antonio (Nov. 1987)

- "Public Utility Commissions and the Nuclear Plant Contractor," Construction Litigation Superconference, Laguna Beach, California (Dec. 1986)
- "Development of Cogeneration Policies in Texas," University of Georgia Fifth Annual Public Utilities Conference, Atlanta (Sep. 1985)
- "Wheeling for Power Sales," Energy Bureau Cogeneration Conference, Houston (Nov. 1985).
- "Asymmetric Discounting of Information and Relative Liquidity: Some Empirical Evidence for Common Stocks" (with John Groth and Kerry Cooper), Southern Finance Association, New Orleans (Nov. 1982)
- "Used and Useful Planning Models," Planning Executive Institute, 27th Corporate Planning Conference, Los Angeles (Nov. 1979)
- "Staff Input to Commission Rate of Return Decisions," The National Society of Rate of Return Analysts, New York (Oct. 1979)
- "Electric Rate Design in Texas," Southwestern Economics Association, Fort Worth (Mar. 1979)
- "Discounted Cash Life: A New Measure of the Time Dimension in Capital Budgeting," with David Cordell, Southern Finance Association, New Orleans (Nov. 1978)
- "The Relative Value of Statistics of Ex Post Common Stock Distributions to Explain Variance," with Charles G. Martin, Southern Finance Association, Atlanta (Nov. 1977)
- "An ANOVA Representation of Common Stock Returns as a Framework for the Allocation of Portfolio Management Effort," with Charles G. Martin, Financial Management Association, Montreal (Oct. 1976)
- "A Growth-Optimal Portfolio Selection Model with Finite Horizon," with Henry A. Latané, American Finance Association, San Francisco (Dec. 1974)
- "An Optimal Approach to the Finance Decision," with Henry A. Latané, Southern Finance Association, Atlanta (Nov. 1974)
- "A Pragmatic Approach to the Capital Structure Decision Based on Long-Run Growth," with Henry A. Latané, Financial Management Association, San Diego (Oct. 1974)
- "Multi-period Wealth Distributions and Portfolio Theory," Southern Finance Association, Houston (Nov. 1973)
- "Growth Rates, Expected Returns, and Variance in Portfolio Selection and Performance Evaluation," with Henry A. Latané, Econometric Society, Oslo, Norway (Aug. 1973)

EXHIBIT WEA-2

YIELD SPREADS – CORPORATE BONDS V. TREASURIES

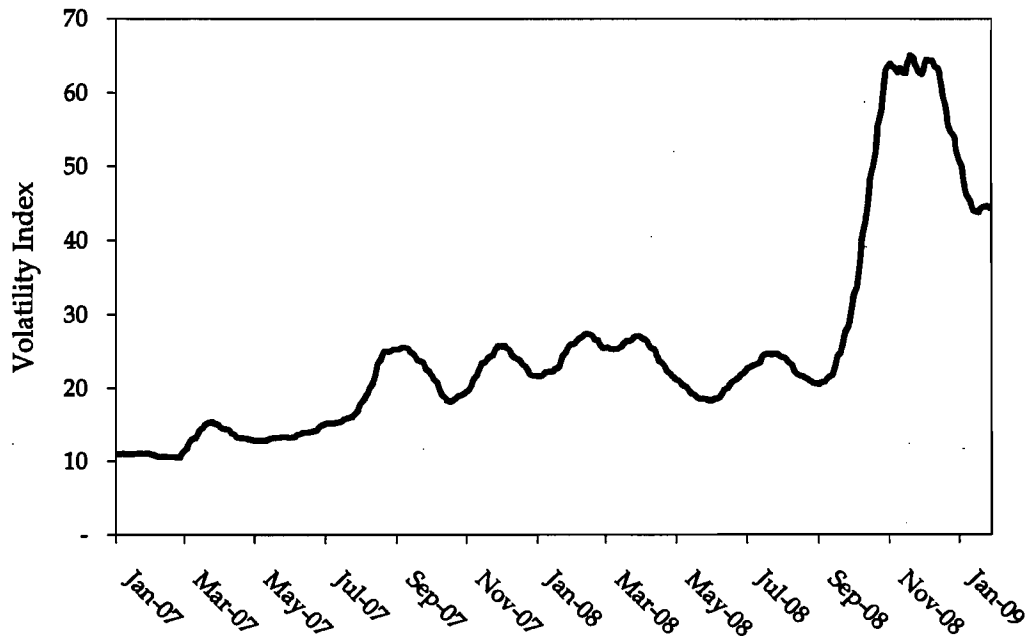


Source: Morgan Stanley Research, Moody's Investors Service.

EXHIBIT WEA-3

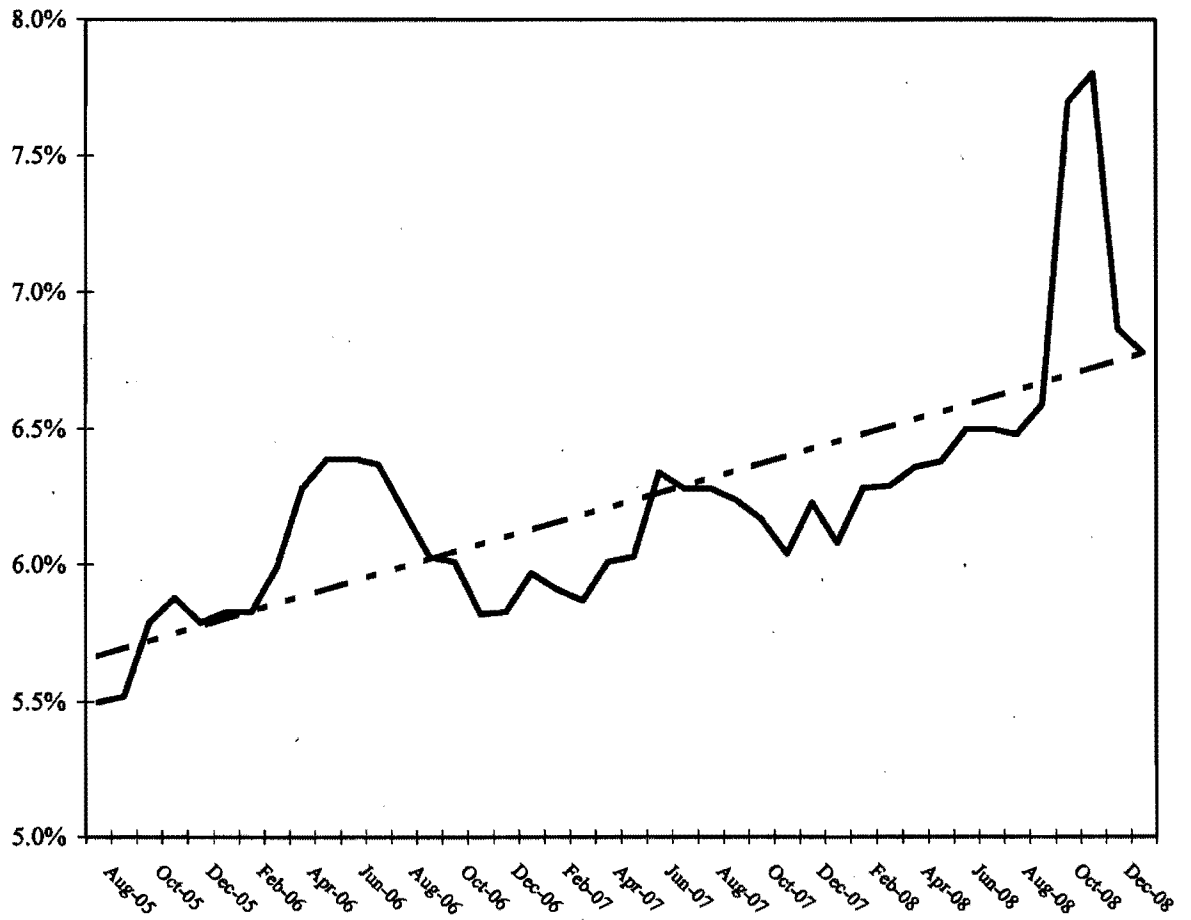
CBOE VIX INDEX – ONE MONTH MOVING AVERAGE

(January 2005 –January 2009)



Source: <http://www.cboe.com/micro/vix/historical.aspx>.

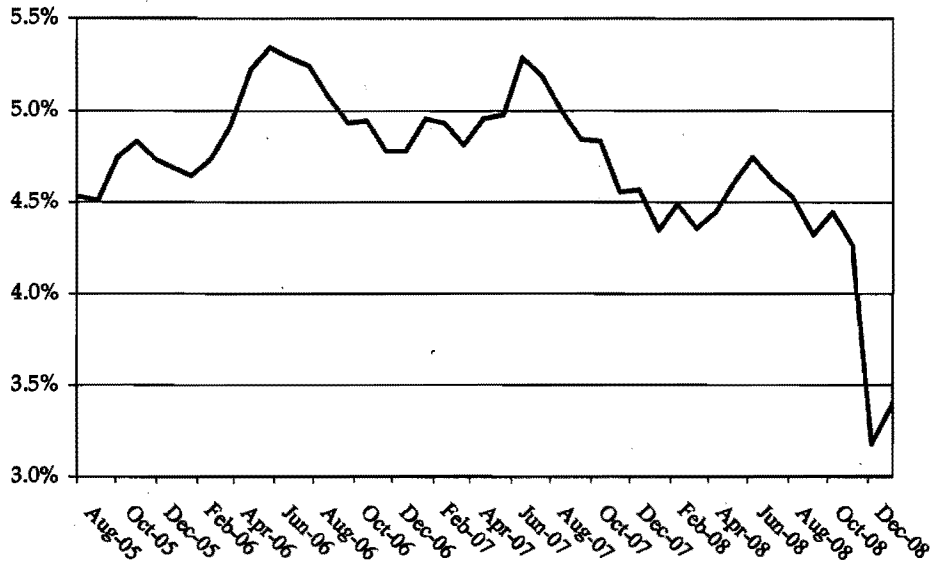
EXHIBIT WEA-4
AVERAGE PUBLIC UTILITY BOND YIELD
(August 2005 – January 2009)



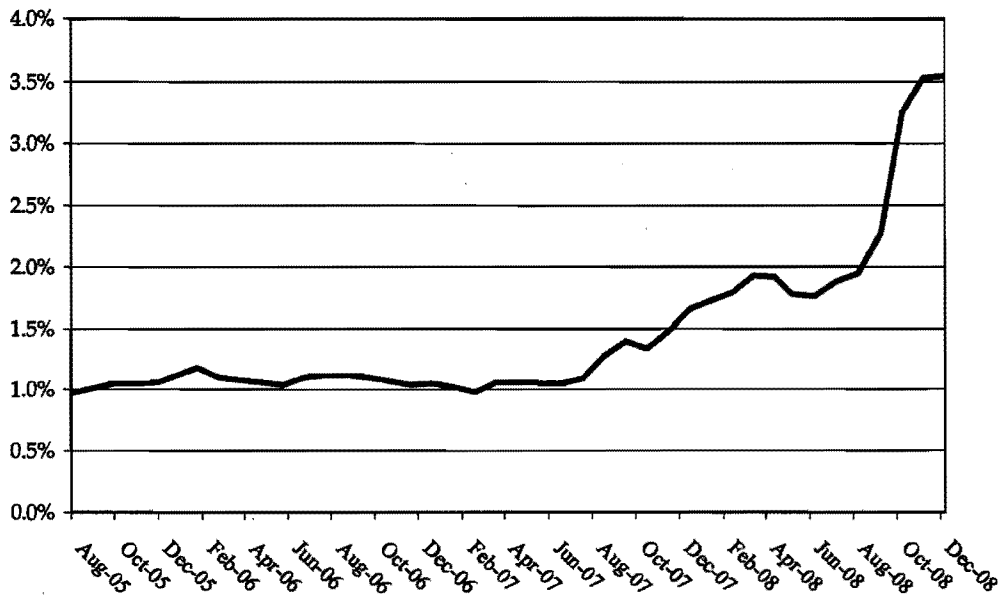
Source: Moody's Investors Service.

EXHIBIT WEA-5

20-YEAR TREASURY BOND YIELD



YIELD SPREAD - UTILITY BONDS V. 20-YEAR TREASURIES



Source: Federal Reserve, Moody's Investors Service.

EXHIBIT WEA-6

COMPARISON OF PROXY GROUP RISK INDICATORS

<u>Proxy Group</u>	<u>S&P Credit Rating</u>	<u>Value Line</u>		
		<u>Safety Rank</u>	<u>Financial Strength</u>	<u>Beta</u>
Utility	A-	2	A	0.73
Non-Utility	A+	1	A+	0.84
FPL	A	1	A+	0.80

Source: Standard & Poor's Corporation, The Value Line Investment Survey.

DCF MODEL

UTILITY PROXY GROUP

Company	(a) Dividend Yield			(b) Growth Rates					(g) Cost of Equity Estimates				
	Price	Dividends	Yield	V Line	IBES	First Call	Zacks	br+sv	V Line	IBES	First Call	Zacks	br+sv
1 ALLETE	\$ 31.04	\$ 1.76	5.7%	0.0%	6.5%	6.5%	5.0%	5.6%	12.2%	12.2%	12.2%	10.7%	11.3%
2 Alliant Energy	\$ 30.64	\$ 1.50	4.9%	6.0%	6.1%	6.1%	5.0%	4.8%	10.9%	11.0%	11.0%	9.9%	9.7%
3 Consolidated Edison	\$ 39.35	\$ 2.34	5.9%	1.0%	2.1%	2.0%	3.3%	2.5%	6.9%	8.0%	7.9%	9.2%	8.5%
4 Dominion Resources	\$ 34.66	\$ 1.75	5.0%	12.0%	8.2%	7.0%	7.2%	8.9%	17.0%	13.2%	12.0%	12.2%	14.0%
5 Duke Energy	\$ 14.94	\$ 0.94	6.3%	4.0%	4.5%	4.9%	5.0%	2.2%	10.3%	10.8%	11.2%	11.3%	8.5%
6 FPL Group, Inc.	\$ 47.99	\$ 1.88	3.9%	9.5%	9.7%	10.0%	9.3%	8.2%	13.4%	13.6%	13.9%	13.2%	12.1%
7 Integrys Energy Group	\$ 42.56	\$ 2.72	6.4%	6.0%	11.1%	11.1%	9.0%	4.1%	12.4%	13.4%	13.5%	15.4%	10.5%
8 MDU Resources Group	\$ 22.31	\$ 0.62	2.8%	7.0%	11.7%	9.0%	9.1%	9.2%	9.8%	14.4%	11.8%	11.9%	11.9%
9 NSTAR	\$ 36.33	\$ 1.50	4.1%	7.5%	6.7%	6.0%	6.8%	5.6%	11.6%	10.8%	10.1%	10.9%	9.8%
10 OGE Energy Corp.	\$ 26.10	\$ 1.43	5.5%	4.5%	6.0%	6.0%	NA	6.8%	10.0%	11.5%	11.5%	NA	12.3%
11 PG&E Corp.	\$ 38.51	\$ 1.62	4.2%	5.0%	7.0%	7.2%	7.5%	5.4%	9.2%	11.2%	11.4%	11.7%	9.6%
12 Portland General Elec.	\$ 18.40	\$ 1.00	5.4%	7.0%	5.9%	5.3%	6.5%	4.8%	12.4%	11.4%	10.7%	11.9%	10.3%
13 Progress Energy	\$ 40.34	\$ 2.48	6.1%	5.0%	6.0%	5.0%	5.0%	2.7%	11.1%	12.1%	11.1%	11.1%	8.8%
14 SCANA Corp.	\$ 34.81	\$ 1.92	5.5%	4.5%	5.0%	5.0%	5.0%	5.8%	10.0%	10.5%	10.5%	10.5%	11.3%
15 Sempra Energy	\$ 41.85	\$ 1.55	3.7%	7.0%	7.0%	6.7%	7.0%	7.4%	10.7%	10.7%	10.4%	10.7%	11.1%
16 Southern Company	\$ 37.20	\$ 1.73	4.7%	5.5%	5.6%	5.8%	5.2%	6.0%	10.2%	10.2%	10.5%	9.9%	10.6%
17 Vectren Corp.	\$ 26.19	\$ 1.34	5.1%	5.0%	5.7%	6.0%	6.4%	5.2%	10.1%	10.8%	11.1%	11.5%	10.3%
18 Wisconsin Energy	\$ 42.96	\$ 1.35	3.1%	8.0%	9.4%	9.9%	9.0%	6.7%	11.1%	12.5%	13.0%	12.1%	9.9%
19 Xcel Energy, Inc.	\$ 18.54	\$ 0.97	5.2%	7.5%	6.9%	7.0%	6.5%	5.7%	12.7%	12.1%	12.2%	11.7%	10.9%
Average (h)									11.0%	11.5%	11.3%	11.4%	10.6%

- (a) Recent price and estimated dividend for next 12 mos. from *The Value Line Investment Survey, Summary and Index* (Dec. 26, 2008)
- (b) *The Value Line Investment Survey* (Nov. 7, Nov. 28, & Dec. 26, 2008)
- (c) Thomson Reuters, *Company in Context Report* (Jan. 7, 2009).
- (d) *First Call Earnings Valuation Report* (Jan. 5, 2009)
- (e) www.zacks.com (retrieved Jan. 5, 2009).
- (f) See Exhibit WEA-8.
- (g) Sum of dividend yield and respective growth rate.
- (h) Excludes highlighted figures.

SUSTAINABLE GROWTH RATE

Docket No. 080677-EI

Sustainable Growth Rate – Utility Proxy Group

UTILITY PROXY GROUP

Exhibit WEA-8, Page 1 of 3

	(a)	(a)	(b)	(a)	(a)	(a)	(c)	(d)
	2011-13 Market Price			2011-13 Projections				
<u>Company</u>	<u>High</u>	<u>Low</u>	<u>Avg.</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>b</u>	<u>r</u>
1 ALLETE	50.00	35.00	\$42.50	\$2.75	\$1.90	\$28.50	30.9%	9.6%
2 Alliant Energy	50.00	35.00	\$42.50	\$3.30	\$1.92	\$31.50	41.8%	10.5%
3 Consolidated Edison	50.00	40.00	\$45.00	\$3.30	\$2.42	\$37.70	26.7%	8.8%
4 Dominion Resources	60.00	45.00	\$52.50	\$4.00	\$2.15	\$26.75	46.3%	15.0%
5 Duke Energy	25.00	19.00	\$22.00	\$1.45	\$1.06	\$18.50	26.9%	7.8%
6 FPL Group, Inc.	80.00	65.00	\$72.50	\$5.00	\$2.20	\$37.50	56.0%	13.3%
7 Integrys Energy Group	65.00	50.00	\$57.50	\$4.75	\$2.84	\$49.00	40.2%	9.7%
8 MDU Resources Group	35.00	30.00	\$32.50	\$2.50	\$0.76	\$21.25	69.6%	11.8%
9 NSTAR	45.00	40.00	\$42.50	\$3.00	\$1.85	\$21.00	38.3%	14.3%
10 OGE Energy Corp.	45.00	30.00	\$37.50	\$3.00	\$1.60	\$25.50	46.7%	11.8%
11 PG&E Corp.	45.00	35.00	\$40.00	\$3.50	\$2.04	\$29.95	41.7%	11.7%
12 Portland General Elec.	30.00	25.00	\$27.50	\$2.25	\$1.20	\$25.00	46.7%	9.0%
13 Progress Energy	50.00	35.00	\$42.50	\$3.40	\$2.54	\$36.45	25.3%	9.3%
14 SCANA Corp.	55.00	40.00	\$47.50	\$3.50	\$2.10	\$32.75	40.0%	10.7%
15 Sempra Energy	90.00	70.00	\$80.00	\$6.00	\$2.00	\$45.75	66.7%	13.1%
16 Southern Company	45.00	35.00	\$40.00	\$3.00	\$2.00	\$21.50	33.3%	14.0%
17 Vectren Corp.	40.00	30.00	\$35.00	\$2.25	\$1.47	\$19.55	34.7%	11.5%
18 Wisconsin Energy	65.00	50.00	\$57.50	\$4.25	\$1.95	\$35.25	54.1%	12.1%
19 Xcel Energy, Inc.	25.00	19.00	\$22.00	\$2.00	\$1.06	\$18.00	47.0%	11.1%

SUSTAINABLE GROWTH RATE

UTILITY PROXY GROUP

Docket No. 080677-EI
 Sustainable Growth Rate – Utility Proxy Group
 Exhibit WEA-8, Page 2 of 3

	(a)	(a)	(c)	(a)	(a)	(c)	(f)	(g)	(h)
		2007		2011-13			Adjusted "r"		
<u>Company</u>	<u>BVPS</u>	<u>No. Shares</u>	<u>Common Equity</u>	<u>BVPS</u>	<u>No. Shares</u>	<u>Common Equity</u>	<u>Chg in Equity</u>	<u>Adj. Factor</u>	<u>Adj. r</u>
1 ALLETE	\$24.11	30.80	\$743	\$28.50	39.50	\$1,126	8.7%	1.0416	10.1%
2 Alliant Energy	\$24.30	110.36	\$2,682	\$31.50	115.00	\$3,623	6.2%	1.0301	10.8%
3 Consolidated Edison	\$32.58	272.02	\$8,862	\$37.70	284.00	\$10,707	3.9%	1.0189	8.9%
4 Dominion Resources	\$16.30	577.00	\$9,405	\$26.75	627.00	\$16,772	12.3%	1.0578	15.8%
5 Duke Energy	\$16.80	1,262.00	\$21,202	\$18.50	1,300.00	\$24,050	2.6%	1.0126	7.9%
6 FPL Group, Inc.	\$26.35	407.35	\$10,734	\$37.50	418.00	\$15,675	7.9%	1.0379	13.8%
7 Integrys Energy Group	\$42.58	75.99	\$3,236	\$49.00	78.50	\$3,847	3.5%	1.0173	9.9%
8 MDU Resources Group	\$13.75	182.95	\$2,516	\$21.25	193.00	\$4,101	10.3%	1.0488	12.3%
9 NSTAR	\$15.95	106.81	\$1,704	\$21.00	106.81	\$2,243	5.7%	1.0275	14.7%
10 OGE Energy Corp.	\$18.31	91.80	\$1,681	\$25.50	103.00	\$2,627	9.3%	1.0446	12.3%
11 PG&E Corp.	\$22.60	378.39	\$8,552	\$29.95	398.00	\$11,920	6.9%	1.0332	12.1%
12 Portland General Elec.	\$21.05	62.53	\$1,316	\$25.00	79.00	\$1,975	8.5%	1.0406	9.4%
13 Progress Energy	\$32.38	260.10	\$8,422	\$36.45	280.00	\$10,206	3.9%	1.0192	9.5%
14 SCANA Corp.	\$25.30	117.00	\$2,960	\$32.75	135.00	\$4,421	8.4%	1.0401	11.1%
15 Sempra Energy	\$31.87	261.21	\$8,325	\$45.75	235.00	\$10,751	5.2%	1.0256	13.5%
16 Southern Company	\$16.23	763.10	\$12,385	\$21.50	815.00	\$17,523	7.2%	1.0347	14.4%
17 Vectren Corp.	\$16.16	76.36	\$1,234	\$19.55	81.80	\$1,599	5.3%	1.0259	11.8%
18 Wisconsin Energy	\$26.50	116.94	\$3,099	\$35.25	117.00	\$4,124	5.9%	1.0286	12.4%
19 Xcel Energy, Inc.	\$14.70	428.78	\$6,303	\$18.00	458.00	\$8,244	5.5%	1.0268	11.4%

SUSTAINABLE GROWTH RATE

Docket No. 080677-EI

Sustainable Growth Rate – Utility Proxy Group

UTILITY PROXY GROUP

Exhibit WEA-8, Page 3 of 3

	Company	(a)	(a)	(f)	(i)	(j)	(k)	(l)	(m)
		Common Shares			M/B	"sv" Factor			br + sv
		Outstanding				Ratio	s	y	
		2007	2011-13	Change					
1	ALLETE	30.8	39.5	5.10%	1.49	0.0761	0.3294	2.51%	5.6%
2	Alliant Energy	110.4	115.0	0.83%	1.35	0.0112	0.2588	0.29%	4.8%
3	Consolidated Edison	272.0	284.0	0.87%	1.19	0.0103	0.1622	0.17%	2.5%
4	Dominion Resources	577.0	627.0	1.68%	1.96	0.0329	0.4905	1.61%	8.9%
5	Duke Energy	1,262.0	1,300.0	0.60%	1.19	0.0071	0.1591	0.11%	2.2%
6	FPL Group, Inc.	407.4	418.0	0.52%	1.93	0.0100	0.4828	0.48%	8.2%
7	Integrus Energy Group	76.0	78.5	0.65%	1.17	0.0077	0.1478	0.11%	4.1%
8	MDU Resources Group	183.0	193.0	1.08%	1.53	0.0164	0.3462	0.57%	9.2%
9	NSTAR	106.8	106.8	0.00%	2.02	-	0.5059	0.00%	5.6%
10	OGE Energy Corp.	91.8	103.0	2.33%	1.47	0.0343	0.3200	1.10%	6.8%
11	PG&E Corp.	378.4	398.0	1.02%	1.34	0.0136	0.2513	0.34%	5.4%
12	Portland General Elec.	62.5	79.0	4.79%	1.10	0.0527	0.0909	0.48%	4.8%
13	Progress Energy	260.1	280.0	1.49%	1.17	0.0173	0.1424	0.25%	2.7%
14	SCANA Corp.	117.0	135.0	2.90%	1.45	0.0421	0.3105	1.31%	5.8%
15	Sempra Energy	261.2	235.0	-2.09%	1.75	(0.0366)	0.4281	-1.57%	7.4%
16	Southern Company	763.1	815.0	1.32%	1.86	0.0246	0.4625	1.14%	6.0%
17	Vectren Corp.	76.4	81.8	1.39%	1.79	0.0248	0.4414	1.10%	5.2%
18	Wisconsin Energy	116.9	117.0	0.01%	1.63	0.0002	0.3870	0.01%	6.7%
19	Xcel Energy, Inc.	428.8	458.0	1.33%	1.22	0.0162	0.1818	0.29%	5.7%

- (a) The Value Line Investment Survey (Nov. 7, Nov. 28, & Dec. 26, 2008).
- (b) Average of High and Low expected market prices.
- (c) Computed at (EPS - DPS) / EPS.
- (d) Computed as EPS / BVPS.
- (e) Product of BVPS and No. Shares Outstanding.
- (f) Five-year rate of change.
- (g) Computed using the formula $2 * (1 + 5\text{-Yr. Change in Equity}) / (2 + 5 \text{ Yr. Change in Equity})$.
- (h) Product of year-end "r" for 2011-13 and Adjustment Factor.
- (i) Average of High and Low expected market prices divided by 2011-13 BVPS.
- (j) Product of change in common shares outstanding and M/B Ratio.
- (k) Computed as $1 - B/M$ Ratio.
- (l) Product of "s" and "v".
- (m) Product of average "b" and adjusted "r", plus "sv".

COMPANY	(a) Dividend Yield	(b) Growth Rates					(c) Cost of Equity Estimates				
		(a) Y-Line	(b) IBES	(c) First Call	(d) Zacks	(e) brtv	(f) Y-Line	(f) IBES	(f) First Call	(f) Zacks	(f) brtv
1 3M Company	3.38%	4.0%	11.3%	11.0%	10.3%	16.0%	14.3%	14.7%	14.4%	13.7%	19.4%
2 Abbott Labs.	2.77%	11.5%	11.9%	13.0%	11.8%	13.3%	14.3%	14.7%	15.8%	14.6%	16.1%
3 Aflac Inc.	2.30%	14.5%	15.0%	15.0%	15.2%	10.7%	16.8%	17.3%	17.3%	17.5%	13.0%
4 Allergan, Inc.	0.55%	15.5%	14.4%	15.0%	14.9%	15.4%	16.1%	15.0%	15.6%	15.5%	15.9%
5 Allstate Corp.	6.80%	7.5%	7.0%	8.0%	8.6%	10.0%	14.3%	13.8%	14.8%	15.4%	16.8%
6 AT&T Inc.	5.68%	12.0%	6.5%	6.5%	17.9%	4.1%	12.7%	12.2%	12.2%	28.6%	9.8%
7 Bard (C.R.)	0.78%	13.5%	14.3%	14.0%	14.0%	13.1%	14.3%	15.0%	14.8%	14.8%	13.9%
8 Baxter Int'l Inc.	1.67%	16.5%	12.4%	12.5%	13.6%	14.1%	18.2%	14.1%	14.6%	15.3%	15.7%
9 Becton, Dickinson	1.82%	11.5%	12.5%	12.0%	12.3%	14.0%	13.3%	14.3%	13.8%	14.1%	15.8%
10 Bemis Co.	3.49%	5.0%	9.3%	9.0%	10.5%	6.0%	8.5%	12.8%	12.5%	14.0%	9.4%
11 Boeing	4.08%	15.5%	11.4%	10.0%	9.4%	16.6%	19.6%	15.5%	14.1%	13.5%	20.7%
12 Brown-Forman 'B'	2.48%	7.5%	8.4%	7.3%	10.5%	11.9%	10.0%	10.9%	9.8%	13.0%	14.4%
13 Chevron Corp.	3.62%	8.5%	3.0%	7.3%	10.3%	13.2%	12.1%	5.7%	10.9%	13.9%	16.8%
14 Chubb Corp.	2.76%	2.0%	10.0%	10.0%	9.3%	5.8%	4.8%	12.8%	12.8%	12.1%	8.5%
15 Coca-Cola	3.40%	8.5%	8.6%	8.5%	8.7%	11.0%	11.9%	12.0%	11.9%	12.1%	14.4%
16 Colgate-Palmolive	2.59%	12.0%	10.4%	11.0%	10.0%	18.9%	14.6%	13.0%	13.6%	12.6%	21.9%
17 Commerce Bancshares	2.51%	4.5%	6.2%	5.7%	6.5%	8.7%	10.0%	8.7%	8.2%	9.0%	11.2%
18 ConocoPhillips	4.06%	6.5%	-0.6%	5.7%	9.2%	15.8%	10.6%	4.5%	9.8%	13.3%	19.9%
19 Du Pont	6.92%	6.5%	3.1%	5.3%	9.5%	9.3%	13.4%	10.1%	12.2%	16.4%	16.3%
20 Eaton Corp.	4.81%	11.5%	9.4%	11.0%	11.5%	15.8%	16.3%	14.2%	15.8%	16.3%	20.6%
21 Ecobac Inc.	1.47%	13.0%	12.8%	13.0%	13.5%	15.4%	14.5%	14.3%	14.5%	15.0%	16.9%
22 Emerson Electric	4.18%	11.0%	12.3%	12.0%	11.8%	7.2%	15.2%	16.5%	16.2%	16.0%	11.4%
23 Everet Re Group Ltd.	2.59%	14.5%	10.0%	10.0%	15.0%	10.6%	17.1%	12.6%	12.6%	17.6%	13.2%
24 Exxon Mobil Corp.	2.10%	8.5%	2.3%	6.6%	8.6%	12.9%	10.6%	4.4%	8.7%	10.7%	15.0%
25 Fortune Brands	4.67%	5.5%	10.0%	10.0%	9.4%	8.6%	10.2%	14.7%	14.7%	14.1%	13.2%
26 Gallagher (Arthur J.)	5.35%	5.5%	6.0%	6.0%	9.5%	9.3%	10.9%	11.4%	11.4%	14.9%	14.6%
27 Gen'l Dynamics	2.80%	12.0%	9.0%	10.0%	9.1%	10.7%	14.8%	11.8%	12.8%	11.9%	13.5%
28 Gen'l Mills	2.79%	10.0%	10.0%	10.0%	9.0%	8.4%	12.8%	12.8%	12.8%	11.8%	11.2%
29 Genuine Parts	4.22%	9.0%	8.3%	8.0%	9.0%	6.5%	13.2%	12.5%	12.2%	13.2%	10.7%
30 Grainger (W.W.)	2.38%	12.5%	11.7%	12.0%	11.3%	8.7%	14.9%	14.1%	14.4%	13.7%	11.0%
31 Heinz (H.J.)	4.52%	10.0%	7.0%	7.0%	NA	13.6%	14.5%	11.5%	11.5%	NA	18.2%
32 Hewlett-Packard	0.96%	17.5%	12.7%	12.0%	12.5%	10.3%	19.5%	13.6%	13.0%	13.5%	11.3%
33 Home Depot	3.88%	-0.5%	9.8%	11.0%	9.3%	8.2%	14.4%	13.6%	14.9%	13.2%	12.1%
34 Honeywell Int'l	4.32%	13.0%	10.0%	11.0%	11.8%	14.0%	17.3%	14.3%	15.3%	16.1%	18.4%
35 Hormel Foods	2.81%	11.0%	8.8%	8.5%	8.4%	11.3%	13.8%	11.6%	11.3%	11.2%	14.1%
36 Illinois Tool Works	3.90%	10.5%	10.1%	10.0%	9.4%	10.8%	14.4%	14.0%	13.9%	13.3%	14.7%
37 Ingersoll-Rand	4.93%	18.5%	12.0%	12.0%	12.3%	18.0%	23.4%	16.9%	16.9%	17.2%	22.9%
38 Int'l Business Mach.	2.58%	14.5%	11.0%	10.0%	10.5%	7.4%	17.1%	13.6%	12.6%	13.1%	10.0%
39 ITT Corp.	1.71%	14.0%	13.0%	13.0%	12.1%	13.1%	15.7%	14.7%	14.7%	13.8%	14.8%
40 Johnson & Johnson	3.28%	8.0%	7.8%	7.5%	7.8%	10.1%	11.3%	11.1%	10.8%	11.1%	13.4%
41 Kimberly-Clark	4.24%	7.0%	7.7%	7.0%	7.3%	12.9%	11.2%	11.9%	11.2%	11.5%	17.1%
42 Kraft Foods	4.44%	6.5%	9.3%	7.3%	8.0%	4.8%	10.9%	13.8%	11.7%	12.4%	9.2%
43 Lilly (Eli)	5.55%	4.5%	5.9%	5.0%	6.4%	8.6%	10.1%	11.5%	10.6%	12.0%	14.2%
44 Lincoln Nat'l Corp.	13.60%	9.5%	10.5%	11.2%	11.0%	8.4%	23.1%	24.1%	24.8%	24.6%	22.0%
45 Lockheed Martin	2.96%	15.5%	11.5%	10.0%	8.6%	13.2%	18.5%	14.5%	13.0%	11.6%	16.2%
46 Manulife Fin'l	6.78%	10.5%	12.8%	13.7%	11.0%	11.0%	17.3%	19.6%	20.5%	17.8%	17.8%
47 McDonald's Corp.	3.29%	12.0%	10.5%	9.0%	12.0%	2.3%	15.3%	13.8%	12.3%	15.3%	14.9%
48 Medtronic, Inc.	2.46%	11.0%	12.2%	12.0%	13.4%	9.2%	13.5%	14.7%	14.5%	15.9%	11.7%
49 Microsoft Corp.	2.72%	15.5%	10.9%	11.0%	11.0%	-1.2%	18.2%	13.6%	13.7%	13.7%	17.3%
50 NIKE, Inc. 'B'	1.77%	11.5%	13.0%	14.0%	12.3%	9.5%	13.3%	14.8%	15.8%	14.1%	11.3%
51 Northrop Grumman	4.08%	11.5%	12.8%	10.0%	9.6%	8.2%	15.6%	16.9%	14.1%	13.7%	12.2%
52 PepsiCo, Inc.	3.25%	11.0%	9.4%	9.8%	10.3%	10.3%	14.3%	12.7%	13.1%	13.6%	13.5%
53 Pfizer, Inc.	7.87%	0.5%	1.0%	3.0%	3.9%	6.9%	8.4%	8.9%	10.9%	11.8%	14.7%
54 Procter & Gamble	2.61%	9.0%	10.0%	10.0%	10.2%	6.5%	11.6%	12.6%	12.6%	12.8%	9.1%
55 Raytheon Co.	2.32%	14.0%	12.4%	10.0%	10.6%	8.6%	16.3%	14.7%	12.3%	12.9%	10.9%
56 Reinsurance Group	1.00%	11.5%	10.1%	10.5%	11.5%	11.3%	12.5%	11.1%	11.5%	12.5%	12.3%
57 Sigma-Aldrich	1.39%	9.5%	9.0%	9.1%	9.0%	13.4%	10.9%	10.4%	10.5%	10.4%	14.8%
58 Sysco Corp.	4.00%	12.0%	12.0%	12.0%	12.5%	8.8%	16.0%	16.0%	16.0%	16.5%	12.8%
59 Torchmark Corp.	1.62%	8.0%	8.3%	8.0%	NA	10.6%	9.6%	9.9%	9.6%	NA	12.2%
60 United Parcel Serv.	3.17%	7.0%	11.7%	11.5%	11.8%	14.0%	10.2%	14.8%	14.7%	15.0%	17.2%
61 United Technologies	3.27%	12.5%	10.0%	10.0%	9.6%	11.8%	15.8%	13.3%	13.3%	12.9%	15.0%
62 Verizon Communic.	5.72%	6.0%	6.6%	7.0%	7.4%	8.6%	11.7%	12.3%	12.7%	13.1%	14.3%
63 Wal-Mart Stores	1.72%	9.5%	11.5%	11.0%	10.2%	10.0%	11.2%	13.2%	12.7%	11.9%	11.7%
64 Walgreen Co.	1.84%	11.0%	12.6%	14.0%	13.6%	11.8%	12.8%	14.4%	15.8%	15.4%	13.6%
65 Wells Fargo	4.94%	5.5%	8.5%	8.5%	8.2%	11.7%	10.4%	13.4%	13.4%	13.1%	16.6%
66 Wyeth	3.57%	6.0%	2.1%	2.0%	4.7%	14.2%	9.6%	4.7%	5.8%	8.3%	17.8%
Average (g)							12.9%	13.3%	13.0%	13.4%	13.3%

(a) www.valueline.com (retrieved Dec. 11, 2008).
 (b) www.finance.yahoo.com (retrieved Dec. 16, 2008).
 (c) First Call Earnings Valuation Report (retrieved Dec. 17, 2008).
 (d) www.zacks.com (retrieved Dec. 16, 2008).
 (e) See Exhibit WEA-10.
 (f) Sum of dividend yield and respective growth rate.
 (g) Excludes highlighted figures.

Company	2011-13 Market Price			2011-13 Projections			h	r
	(a)	(a)	(b)	(a)	(a)	(a)		
	High	Low	Avg.	EPS	DPS	BVPS		
1 3M Company	\$110.00	\$90.00	\$100.00	\$6.25	\$2.20	\$21.85	64.8%	28.6%
2 Abbott Labs.	\$100.00	\$80.00	\$90.00	\$5.05	\$2.10	\$21.45	58.4%	23.5%
3 Aflac Inc.	\$115.00	\$95.00	\$105.00	\$6.45	\$1.88	\$30.70	70.9%	21.0%
4 Allergan, Inc.	\$115.00	\$95.00	\$105.00	\$4.05	\$0.30	\$29.50	92.6%	13.7%
5 Allstate Corp.	\$90.00	\$75.00	\$82.50	\$8.35	\$2.25	\$59.45	73.1%	14.0%
6 AT&T Inc.	\$80.00	\$65.00	\$72.50	\$4.50	\$2.60	\$25.80	42.2%	17.4%
7 Bard (C.R.)	\$155.00	\$130.00	\$142.50	\$7.15	\$0.90	\$31.78	87.4%	22.5%
8 Baxter Int'l Inc.	\$105.00	\$85.00	\$95.00	\$5.40	\$1.55	\$23.85	71.3%	22.6%
9 Becton, Dickinson	\$115.00	\$90.00	\$102.50	\$6.40	\$1.75	\$34.25	72.7%	18.7%
10 Bemis Co.	\$45.00	\$35.00	\$40.00	\$2.30	\$1.04	\$21.50	54.8%	10.7%
11 Boeing	\$150.00	\$120.00	\$135.00	\$9.00	\$2.50	\$37.35	72.2%	24.1%
12 Brown-Forman 'B'	\$75.00	\$60.00	\$67.50	\$4.00	\$1.32	\$20.70	67.0%	19.3%
13 Chevron Corp.	\$140.00	\$110.00	\$125.00	\$12.50	\$3.20	\$57.55	74.4%	21.7%
14 Clubb Corp.	\$85.00	\$70.00	\$77.50	\$6.30	\$2.80	\$56.25	55.6%	11.2%
15 Coca-Cola	\$90.00	\$75.00	\$82.50	\$3.85	\$1.88	\$17.30	51.2%	22.3%
16 Colgate-Palmolive	\$140.00	\$115.00	\$127.50	\$5.80	\$2.30	\$13.55	60.3%	42.8%
17 Commerce Bancabs.	\$55.00	\$45.00	\$50.00	\$3.70	\$1.20	\$33.35	67.6%	11.1%
18 ConocoPhillips	\$145.00	\$120.00	\$132.50	\$14.00	\$2.00	\$72.40	85.7%	19.3%
19 Du Pont	\$80.00	\$65.00	\$72.50	\$4.10	\$1.92	\$19.20	53.2%	21.4%
20 Eaton Corp.	\$210.00	\$170.00	\$190.00	\$11.90	\$3.10	\$55.90	73.9%	21.3%
21 Ecolab Inc.	\$65.00	\$55.00	\$60.00	\$3.00	\$0.75	\$15.10	75.0%	19.9%
22 Emerson Electric	\$90.00	\$75.00	\$82.50	\$4.15	\$1.80	\$15.80	56.6%	26.3%
23 Everest Re Group Ltd.	\$165.00	\$135.00	\$150.00	\$15.00	\$2.35	\$116.65	84.3%	12.9%
24 Exxon Mobil Corp.	\$140.00	\$115.00	\$127.50	\$10.50	\$1.90	\$38.55	81.9%	27.2%
25 Fortune Brands	\$115.00	\$95.00	\$105.00	\$7.00	\$1.86	\$55.15	73.4%	12.7%
26 Gallagher (Arthur J.)	\$40.00	\$35.00	\$37.50	\$2.20	\$1.44	\$10.35	34.5%	21.3%
27 Gen'l Dynamics	\$140.00	\$115.00	\$127.50	\$8.40	\$2.25	\$51.70	73.2%	16.2%
28 Gen'l Mills	\$95.00	\$80.00	\$87.50	\$5.10	\$2.25	\$23.50	55.9%	21.7%
29 Genuine Parts	\$80.00	\$65.00	\$72.50	\$4.65	\$2.16	\$24.65	53.5%	18.9%
30 Granger (W.W.)	\$160.00	\$130.00	\$145.00	\$8.65	\$2.35	\$48.20	72.8%	17.9%
31 Heinz (H.J.)	\$80.00	\$65.00	\$72.50	\$4.30	\$2.08	\$12.25	51.6%	35.1%
32 Hewlett-Packard	\$95.00	\$80.00	\$87.50	\$5.50	\$0.60	\$23.75	89.1%	23.2%
33 Home Depot	\$50.00	\$40.00	\$45.00	\$2.50	\$1.10	\$17.25	56.0%	14.5%
34 Honeywell Int'l	\$85.00	\$70.00	\$77.50	\$5.35	\$1.60	\$25.95	70.1%	20.6%
35 Hormel Foods	\$75.00	\$60.00	\$67.50	\$3.75	\$1.20	\$23.35	68.0%	16.1%
36 Illinois Tool Works	\$100.00	\$80.00	\$90.00	\$5.50	\$1.40	\$24.30	74.5%	22.6%
37 Ingersoll-Rand	\$70.00	\$55.00	\$62.50	\$8.25	\$1.00	\$46.15	87.9%	17.9%
38 Int'l Business Mach.	\$245.00	\$200.00	\$222.50	\$14.00	\$3.25	\$27.35	76.8%	51.2%
39 ITT Corp.	\$115.00	\$95.00	\$105.00	\$6.60	\$1.06	\$42.50	83.9%	15.5%
40 Johnson & Johnson	\$120.00	\$95.00	\$107.50	\$6.00	\$2.40	\$26.25	60.0%	22.9%
41 Kimberly-Clark	\$100.00	\$80.00	\$90.00	\$6.00	\$2.95	\$19.00	50.8%	31.6%
42 Kraft Foods	\$65.00	\$50.00	\$57.50	\$2.75	\$1.40	\$26.20	49.1%	10.5%
43 Lilly (Eli)	\$70.00	\$55.00	\$62.50	\$4.15	\$2.16	\$21.45	48.0%	19.3%
44 Lincoln Nat'l Corp.	\$120.00	\$100.00	\$110.00	\$8.50	\$1.98	\$60.45	76.7%	14.1%
45 Lockheed Martin	\$210.00	\$170.00	\$190.00	\$12.70	\$2.65	\$46.75	79.1%	27.2%
46 Mamilife Financial	\$60.00	\$50.00	\$55.00	\$4.00	\$1.20	\$23.15	70.0%	17.3%
47 McDonald's Corp.	\$90.00	\$70.00	\$80.00	\$4.70	\$2.80	\$16.50	40.4%	28.5%
48 Medtronic, Inc.	\$95.00	\$80.00	\$87.50	\$4.55	\$1.08	\$19.55	76.3%	23.3%
49 Microsoft Corp.	\$60.00	\$50.00	\$55.00	\$3.10	\$0.80	\$9.50	74.2%	32.6%
50 NIKE, Inc. 'B'	\$110.00	\$90.00	\$100.00	\$5.15	\$1.50	\$23.85	70.9%	21.6%
51 Northrop Grumman	\$140.00	\$115.00	\$127.50	\$8.35	\$2.10	\$71.00	74.9%	11.8%
52 PepsiCo, Inc.	\$125.00	\$100.00	\$112.50	\$5.60	\$2.12	\$15.95	62.1%	35.1%
53 Pfizer, Inc.	\$25.00	\$20.00	\$22.50	\$2.15	\$1.40	\$10.10	34.9%	21.3%
54 Procter & Gamble	\$110.00	\$90.00	\$100.00	\$4.75	\$1.95	\$32.30	58.9%	14.7%
55 Raytheon Co.	\$95.00	\$80.00	\$87.50	\$5.75	\$1.75	\$40.75	69.6%	14.1%
56 Reinsurance Group	\$70.00	\$55.00	\$62.50	\$8.85	\$0.50	\$75.35	94.4%	11.7%
57 Sigma-Aldrich	\$70.00	\$60.00	\$65.00	\$3.60	\$0.70	\$18.45	80.6%	19.5%
58 Sysco Corp.	\$65.00	\$55.00	\$60.00	\$2.80	\$1.25	\$7.70	55.4%	36.4%
59 Torchmark Corp.	\$100.00	\$85.00	\$92.50	\$8.00	\$0.75	\$56.00	90.6%	14.3%
60 United Parcel Serv.	\$135.00	\$110.00	\$122.50	\$5.65	\$2.25	\$16.90	60.2%	33.4%
61 United Technologies	\$130.00	\$105.00	\$117.50	\$7.40	\$1.85	\$42.50	75.0%	17.4%
62 Verizon Communic.	\$65.00	\$55.00	\$60.00	\$3.50	\$1.84	\$18.75	47.4%	18.7%
63 Wal-Mart Stores	\$90.00	\$75.00	\$82.50	\$5.05	\$1.25	\$24.55	75.2%	20.6%
64 Walgreen Co.	\$75.00	\$65.00	\$70.00	\$3.25	\$0.70	\$21.65	78.5%	15.0%
65 Wells Fargo	\$50.00	\$40.00	\$45.00	\$3.25	\$1.60	\$19.20	50.8%	16.9%
66 Wyeth	\$75.00	\$60.00	\$67.50	\$4.60	\$1.35	\$24.25	70.7%	19.0%

NON-UTILITY PROXY GROUP

Company	(a)			(a)			(f)	(g)		(h)
	2007			2011-13				Adjusted "r"		
	BVPS	No. Shares	Common Equity	BVPS	No. Shares	Common Equity	Chg in Equity	Adj. Factor	Adj. r	
1 3M Company	\$16.56	709.16	\$11,744	\$21.85	680.00	\$14,858	4.8%	1.0235	29.3%	
2 Abbott Labs.	\$11.47	1549.90	\$17,777	\$21.45	1520.00	\$32,604	12.9%	1.0606	25.0%	
3 Alfac Inc.	\$18.08	486.53	\$8,796	\$30.70	440.00	\$13,508	9.0%	1.0429	21.5%	
4 Allergan, Inc.	\$12.22	305.91	\$3,738	\$29.50	315.00	\$9,293	20.0%	1.0908	15.0%	
5 Allstate Corp.	\$38.81	563.00	\$21,850	\$59.45	520.00	\$30,914	7.2%	1.0347	14.5%	
6 AT&T Inc.	\$19.09	6043.50	\$115,370	\$25.80	5500.00	\$141,900	4.2%	1.0207	17.8%	
7 Bard (C.R.)	\$18.44	100.19	\$1,848	\$31.78	90.00	\$2,860	9.1%	1.0437	23.5%	
8 Baxter Int'l Inc.	\$10.91	633.64	\$6,913	\$23.85	600.00	\$14,310	15.7%	1.0726	24.3%	
9 Beeton, Dickinson	\$17.89	243.84	\$4,362	\$34.25	241.00	\$8,254	13.6%	1.0637	19.5%	
10 Bemis Co.	\$15.54	100.52	\$1,562	\$21.50	100.00	\$2,150	6.6%	1.0319	11.0%	
11 Boeing	\$12.22	736.68	\$9,002	\$37.35	700.00	\$26,145	23.8%	1.1062	26.7%	
12 Boeing	\$11.44	150.74	\$1,724	\$20.70	145.00	\$3,002	11.7%	1.0554	20.4%	
13 Chevron Corp.	\$36.88	2090.40	\$77,094	\$57.55	1800.00	\$103,590	6.1%	1.0295	22.4%	
14 Chubb Corp.	\$38.56	374.65	\$14,447	\$56.25	345.00	\$19,406	6.1%	1.0295	11.5%	
15 Coca-Cola	\$9.38	2318.00	\$21,743	\$17.30	2285.00	\$39,531	12.7%	1.0597	23.6%	
16 Colgate-Palmolive	\$4.10	509.03	\$2,087	\$13.55	480.00	\$6,504	25.5%	1.1132	47.6%	
17 Commerce Bancaba.	\$21.25	71.89	\$1,528	\$33.35	78.00	\$2,601	11.2%	1.0532	1.0532	
18 Du Pont	\$56.63	1571.40	\$88,988	\$72.40	1475.00	\$106,790	3.7%	1.0182	19.7%	
19 Du Pont	\$12.38	899.30	\$11,133	\$19.20	860.00	\$16,512	8.2%	1.0394	22.2%	
20 Eaton Corp.	\$35.42	146.00	\$5,171	\$55.90	144.00	\$8,050	9.3%	1.0442	22.2%	
21 Beolab Inc.	\$7.84	246.80	\$1,935	\$15.10	245.00	\$3,700	13.8%	1.0647	21.2%	
22 Emerson Electric	\$11.14	787.23	\$8,770	\$15.80	715.00	\$11,297	5.2%	1.0253	26.9%	
23 Everest Re Group Ltd.	\$86.92	65.40	\$5,685	\$116.65	60.00	\$6,999	4.2%	1.0208	13.1%	
24 Exxon Mobil Corp.	\$22.62	5382.00	\$121,741	\$38.55	4300.00	\$165,765	6.4%	1.0309	28.1%	
25 Fortune Brands	\$36.94	153.91	\$5,685	\$55.15	145.00	\$7,997	7.1%	1.0341	13.1%	
26 Gallagher (Arthur J.)	\$7.78	92.00	\$716	\$10.35	95.00	\$983	6.6%	1.0317	21.9%	
27 Gen'l Dynamics	\$29.13	403.98	\$11,768	\$51.70	380.00	\$19,646	10.8%	1.0512	17.1%	
28 Gen'l Mills	\$15.64	340.00	\$5,318	\$23.50	315.00	\$7,403	6.8%	1.0331	22.4%	
29 Genuine Parts	\$16.36	166.07	\$2,717	\$24.65	150.00	\$3,698	6.4%	1.0308	19.4%	
30 Grainger (W.W.)	\$26.40	79.46	\$2,098	\$48.20	70.00	\$3,374	10.0%	1.0475	18.8%	
31 Heinz (H.I.)	\$6.04	312.56	\$1,888	\$12.25	295.00	\$3,614	13.9%	1.0648	37.4%	
32 Hewlett-Packard	\$14.93	2580.00	\$38,519	\$23.75	2100.00	\$49,875	5.3%	1.0258	23.8%	
33 Home Depot	\$10.48	1690.00	\$17,711	\$17.25	1675.00	\$28,894	10.3%	1.0489	15.2%	
34 Honeywell Int'l	\$12.35	746.55	\$9,220	\$25.95	720.00	\$18,684	15.2%	1.0705	22.1%	
35 Hormel Foods	\$13.89	135.68	\$1,885	\$23.35	135.00	\$3,152	10.8%	1.0514	16.9%	
36 Illinois Tool Works	\$17.64	530.10	\$9,351	\$24.30	470.00	\$11,421	4.1%	1.0200	23.1%	
37 Ingersoll-Rand	\$29.01	272.61	\$7,908	\$46.15	325.00	\$14,999	13.7%	1.0639	19.0%	
38 Int'l Business Mach.	\$20.55	1385.20	\$28,466	\$27.35	1100.00	\$30,085	1.1%	1.0055	51.5%	
39 IIT Corp.	\$21.73	181.57	\$3,946	\$42.50	177.00	\$7,523	13.8%	1.0644	16.5%	
40 Johnson & Johnson	\$15.25	2840.20	\$43,313	\$26.25	2650.00	\$69,563	9.9%	1.0473	23.9%	
41 Kimberly-Clark	\$12.41	420.90	\$5,223	\$19.00	400.00	\$7,600	7.8%	1.0375	32.8%	
42 Kraft Foods	\$17.80	1533.80	\$27,302	\$26.20	1500.00	\$39,300	7.6%	1.0364	10.9%	
43 Lilly (Eli)	\$12.05	1134.30	\$13,668	\$21.45	1100.00	\$23,595	11.5%	1.0545	20.4%	
44 Lincoln Nat'l Corp.	\$44.35	264.23	\$11,719	\$60.45	225.00	\$13,601	3.0%	1.0149	14.3%	
45 Lockheed Martin	\$23.97	409.00	\$9,804	\$46.75	350.00	\$16,363	10.8%	1.0512	28.6%	
46 M&T Bank Corp.	\$16.37	1501.00	\$24,571	\$23.15	1425.00	\$32,989	6.1%	1.0294	17.8%	
47 McDonald's Corp.	\$13.11	1165.30	\$15,277	\$16.50	1030.00	\$16,995	2.2%	1.0107	28.8%	
48 Medtronic, Inc.	\$10.25	1124.90	\$11,530	\$19.55	980.00	\$19,159	10.7%	1.0507	24.5%	
49 Microsoft Corp.	\$3.32	9380.00	\$31,142	\$9.50	7000.00	\$66,500	16.4%	1.0757	35.1%	
50 NIKE, Inc. 'B'	\$13.94	503.80	\$7,023	\$23.85	455.00	\$10,852	9.1%	1.0435	22.5%	
51 Northrop Grumman	\$52.35	337.83	\$17,685	\$71.00	320.00	\$22,720	5.1%	1.0250	12.1%	
52 PepsiCo, Inc.	\$10.71	1605.00	\$17,190	\$15.95	1450.00	\$23,128	6.1%	1.0297	36.2%	
53 Pfizer, Inc.	\$9.60	6761.00	\$64,906	\$10.10	6600.00	\$66,660	0.5%	1.0027	21.3%	
54 Procter & Gamble	\$20.87	3131.90	\$65,363	\$32.30	2950.00	\$95,285	7.8%	1.0377	15.3%	
55 Raytheon Co.	\$29.43	426.20	\$12,543	\$40.75	400.00	\$16,300	5.4%	1.0262	14.5%	
56 Raytheon Co.	\$51.42	62.03	\$3,190	\$75.35	67.00	\$5,048	9.6%	1.0459	12.3%	
57 Sigma-Aldrich	\$12.21	132.41	\$1,617	\$18.45	125.00	\$2,306	7.4%	1.0355	20.2%	
58 Sysco Corp.	\$5.36	611.84	\$3,279	\$7.70	560.00	\$4,312	5.6%	1.0274	37.4%	
59 Sysco Corp.	\$36.07	92.18	\$3,325	\$56.00	75.00	\$4,200	4.8%	1.0234	14.6%	
60 United Parcel Serv.	\$11.78	1034.40	\$12,185	\$16.90	980.00	\$16,562	6.3%	1.0307	34.5%	
61 United Technologies	\$21.76	981.52	\$21,358	\$42.50	925.00	\$39,313	13.0%	1.0609	18.5%	
62 Verizon Communic.	\$17.62	2871.00	\$50,587	\$18.75	2850.00	\$53,438	1.1%	1.0055	18.8%	
63 Wal-Mart Stores	\$16.26	3973.00	\$64,601	\$24.55	3500.00	\$85,925	5.9%	1.0285	21.2%	
64 Walgreen Co.	\$11.20	991.14	\$11,101	\$21.65	975.00	\$21,109	13.7%	1.0642	16.0%	
65 Wells Fargo	\$14.31	3297.10	\$47,182	\$19.20	3650.00	\$70,080	8.2%	1.0395	17.6%	
66 Wyeth	\$13.61	1337.80	\$18,207	\$24.25	1340.00	\$32,495	12.3%	1.0579	20.1%	

Company	(a) Common Shares Outstanding			(i) M/B Ratio	(j) "sv" Factor			(m) br + sv
	(a) 2007	(b) 2011-13	(c) Change		(k) s	(l) v	(l) sv	
	(a) 2007	(b) 2011-13	(c) Change					
1 3M Company	709.16	680.00	-0.84%	4.58	(0.0383)	0.7815	-2.99%	16.0%
2 Abbott Labs.	1549.90	1520.00	-0.39%	4.20	(0.0163)	0.7617	-1.24%	13.3%
3 Allac Inc.	486.53	440.00	-1.99%	3.42	(0.0681)	0.7076	-4.82%	10.7%
4 Allergan, Inc.	305.91	315.00	0.59%	3.56	0.0209	0.7190	1.50%	15.4%
5 Allstate Corp.	563.00	520.00	-1.58%	1.39	(0.0219)	0.2794	-0.61%	10.0%
6 AT&T Inc.	6043.50	5500.00	-1.87%	2.81	(0.0525)	0.6441	-3.38%	4.1%
7 Bard (C.R.)	100.19	90.00	-2.12%	4.48	(0.0952)	0.7770	-7.39%	13.1%
8 Baxter Int'l Inc.	633.64	600.00	-1.09%	3.98	(0.0432)	0.7489	-3.24%	14.1%
9 Becton, Dickinson	243.84	241.00	-0.23%	2.99	(0.0070)	0.6659	-0.47%	14.0%
10 Bemis Co.	100.52	100.00	-0.10%	1.86	(0.0019)	0.4625	-0.09%	6.0%
11 Boeing	736.68	700.00	-1.02%	3.61	(0.0367)	0.7233	-2.66%	16.6%
12 Boeing	150.74	145.00	-0.77%	3.26	(0.0252)	0.6933	-1.75%	11.9%
13 Chevron Corp.	2090.40	1800.00	-2.95%	2.17	(0.0640)	0.5396	-3.45%	13.2%
14 Chubb Corp.	374.65	345.00	-1.64%	1.38	(0.0225)	0.2742	-0.62%	5.8%
15 Coca-Cola	2318.00	2285.00	-0.29%	4.77	(0.0137)	0.7903	-1.08%	11.0%
16 Colgate-Palmolive	509.03	480.00	-1.17%	9.41	(0.1099)	0.8937	-9.82%	18.9%
17 Commerce Bancabs.	71.89	78.00	1.64%	1.50	0.0247	0.3330	0.82%	8.7%
18 Du Pont	1571.40	1475.00	-1.26%	1.83	(0.0230)	0.4536	-1.04%	15.8%
19 Du Pont	899.30	860.00	-0.89%	3.78	(0.0336)	0.7352	-2.47%	9.3%
20 Eaton Corp.	146.00	144.00	-0.28%	3.40	(0.0094)	0.7058	-0.66%	15.8%
21 Ecolab Inc.	246.80	245.00	-0.15%	3.97	(0.0058)	0.7483	-0.44%	15.4%
22 Emerson Electric	787.23	715.00	-1.91%	5.22	(0.0995)	0.8085	-8.05%	7.2%
23 Everest Re Group Ltd.	65.40	60.00	-1.71%	1.29	(0.0220)	0.2223	-0.49%	10.6%
24 Exelon Mobil Corp.	5382.00	4300.00	-4.39%	3.31	(0.1452)	0.6976	-10.13%	12.9%
25 Fortune Brands	153.91	145.00	-1.19%	1.90	(0.0226)	0.4748	-1.07%	8.6%
26 Gallagher (Arthur J.)	92.00	95.00	0.64%	3.62	0.0233	0.7240	1.69%	9.3%
27 Gen'l Dynamics	403.98	380.00	-1.22%	2.47	(0.0300)	0.5945	-1.78%	10.7%
28 Gen'l Mills	340.00	315.00	-1.52%	3.72	(0.0564)	0.7314	-4.13%	8.4%
29 Genuine Parts	166.07	150.00	-2.01%	2.94	(0.0593)	0.6600	-3.91%	6.5%
30 Grainger (W.W.)	79.46	70.00	-2.50%	3.01	(0.0753)	0.6676	-5.03%	8.7%
31 Heinz (H.J.)	312.56	295.00	-1.15%	5.92	(0.0680)	0.8310	-5.65%	13.6%
32 Hewlett-Packard	2580.00	2100.00	-4.03%	3.68	(0.1486)	0.7286	-10.83%	10.3%
33 Home Depot	1690.00	1675.00	-0.18%	2.61	(0.0046)	0.6167	-0.29%	8.2%
34 Honeywell Intl	746.55	720.00	-0.72%	2.99	(0.0216)	0.6652	-1.43%	14.0%
35 Hormel Foods	135.68	135.00	-0.10%	2.89	(0.0029)	0.6541	-0.19%	11.3%
36 Illinois Tool Works	530.10	470.00	-2.38%	3.70	(0.0881)	0.7300	-6.43%	10.8%
37 Ingersoll-Rand	272.61	325.00	3.58%	1.35	0.0485	0.2616	1.27%	18.0%
38 Intl Business Mach.	1385.20	1100.00	-4.51%	8.14	(0.3666)	0.8771	-32.15%	7.4%
39 IIT Corp.	181.57	177.00	-0.51%	2.47	(0.0126)	0.5952	-0.75%	13.1%
40 Johnson & Johnson	2840.20	2650.00	-1.38%	4.10	(0.0564)	0.7558	-4.26%	10.1%
41 Kimberly-Clark	420.90	400.00	-1.01%	4.74	(0.0480)	0.7889	-3.79%	12.9%
42 Kraft Foods	1533.80	1500.00	-0.44%	2.19	(0.0096)	0.5443	-0.53%	4.8%
43 Lilly (Eli)	1134.30	1100.00	-0.61%	2.91	(0.0178)	0.6508	-1.17%	8.6%
44 Lincoln Nat'l Corp.	264.23	225.00	-3.16%	1.82	(0.0576)	0.4505	-2.59%	8.4%
45 Lockheed Martin	409.00	350.00	-3.07%	4.06	(0.1247)	0.7539	-9.40%	13.2%
46 M&T Bank Corp.	1501.00	1425.00	-1.03%	2.38	(0.0246)	0.5791	-1.42%	11.0%
47 McDonald's Corp.	1165.30	1030.00	-2.44%	4.85	(0.1182)	0.7938	-9.38%	2.3%
48 Medtronic, Inc.	1124.90	980.00	-2.72%	4.48	(0.1218)	0.7766	-9.45%	9.2%
49 Microsoft Corp.	9380.00	7000.00	-5.69%	5.79	(0.3292)	0.8273	-27.23%	-1.2%
50 NIKE, Inc. B'	503.80	455.00	-2.02%	4.19	(0.0846)	0.7615	-6.44%	9.5%
51 Northrop Grumman	337.83	320.00	-1.08%	1.80	(0.0194)	0.4431	-0.86%	8.2%
52 PepsiCo, Inc.	1605.00	1450.00	-2.01%	7.05	(0.1418)	0.8582	-12.17%	10.3%
53 Pfizer, Inc.	6761.00	6600.00	-0.48%	2.23	(0.0107)	0.5511	-0.59%	6.9%
54 Procter & Gamble	3131.90	2950.00	-1.19%	3.10	(0.0368)	0.6770	-2.49%	6.5%
55 Raytheon Co.	426.20	400.00	-1.26%	2.15	(0.0271)	0.5343	-1.45%	8.6%
56 Raytheon Co.	62.03	67.00	1.55%	0.83	0.0129	(0.2056)	-0.26%	11.3%
57 Sigma-Aldrich	132.41	125.00	-1.15%	3.52	(0.0403)	0.7162	-2.89%	13.4%
58 Sysco Corp.	611.84	560.00	-1.76%	7.79	(0.1368)	0.8717	-11.92%	8.8%
59 Sysco Corp.	92.18	75.00	-4.04%	1.65	(0.0668)	0.3946	-2.63%	10.6%
60 United Parcel Serv.	1034.40	980.00	-1.07%	7.25	(0.0779)	0.8620	-6.72%	14.0%
61 United Technologies	981.52	925.00	-1.18%	2.76	(0.0326)	0.6383	-2.08%	11.8%
62 Verizon Communic.	2871.00	2850.00	-0.15%	3.20	(0.0047)	0.6875	-0.32%	8.6%
63 Wal-Mart Stores	3973.00	3500.00	-2.50%	3.36	(0.0841)	0.7024	-5.91%	10.0%
64 Walgreen Co.	991.14	975.00	-0.33%	3.23	(0.0106)	0.6907	-0.73%	11.8%
65 Wells Fargo	3297.10	3650.00	2.05%	2.34	0.0482	0.5733	2.76%	11.7%
66 Wyeth	1337.80	1340.00	0.03%	2.78	0.0009	0.6407	0.06%	14.2%

- (a) www.valueline.com (retrieved Dec. 11, 2008).
(b) Average of High and Low expected market prices.
(c) Computed as (EPS - DPS) / EPS.
(d) Computed as EPS / BVPS.
(e) Product of BVPS and No. Shares Outstanding.
(f) Five-year rate of change.
(g) Computed using the formula $2^{*(1+5\text{-Yr. Change in Equity})/(2+5\text{ Yr. Change in Equity})}$.
(h) Product of year-end "f" for 2011-13 and Adjustment Factor.
(i) Average of High and Low expected market prices divided by 2011-13 BVPS.
(j) Product of change in common shares outstanding and M/B Ratio.
(k) Computed as 1 - B/M Ratio.
(l) Product of "s" and "v".
(m) Product of average "b" and adjusted "r", plus "sv".

FORWARD-LOOKING CAPM

UTILITY PROXY GROUP

Company	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	S&P 500			Risk-Free	Risk	Beta	Implied
	Div Yield	Proj. Growth	Cost of Equity	Rate	Premium		Cost of Equity
1 ALLETE	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
2 Alliant Energy	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
3 Consolidated Edison	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
4 Dominion Resources	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
5 Duke Energy	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
6 FPL Group, Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
7 Integrys Energy Group	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
8 MDU Resources Group	3.6%	9.6%	13.2%	3.2%	10.0%	0.95	12.7%
9 NSTAR	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
10 OGE Energy Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
11 PG&E Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
12 Portland General Elec.	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
13 Progress Energy	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
14 SCANA Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
15 Sempra Energy	3.6%	9.6%	13.2%	3.2%	10.0%	0.90	12.2%
16 Southern Company	3.6%	9.6%	13.2%	3.2%	10.0%	0.55	8.7%
17 Vectren Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
18 Wisconsin Energy	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
19 Xcel Energy, Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
Average							10.5%

- (a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Dec. 18, 2008).
- (b) Weighted average of Value Line, IBES, First Call, and Zacks earnings growth rates for the dividend paying firms in the S&P 500 based on data from www.valueline.com (retrieved Dec. 18, 2008), www.finance.yahoo.com (retrieved Dec. 19, 2008), *First Call Valuation Report* (retrieved Dec. 19, 2008), and www.zacks.com (retrieved Dec. 19, 2008).
- (c) (a) + (b).
- (d) Average yield on 20-year Treasury bonds for December 2008 from the Federal Reserve Board at <http://www.federalreserve.gov/releases/h15/data.htm>.
- (e) (c) - (d).
- (f) *The Value Line Investment Survey* (Nov. 7, Nov. 28, & Dec 26, 2008).
- (g) (d) + (e) x (f).

FORWARD-LOOKING CAPM
NON-UTILITY PROXY GROUP

	(g)						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Company	S&P 500			Risk-Free Rate	Risk Premium	Beta	Implied Cost of Equity
	Div Yield	Proj. Growth	Cost of Equity				
1 3M Company	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
2 Abbott Labs.	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
3 Aflac Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.95	12.7%
4 Allergan, Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
5 Allstate Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	1.05	13.7%
6 AT&T Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
7 Bard (C.R.)	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
8 Baxter Intl Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
9 Becton, Dickinson	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
10 Bemis Co.	3.6%	9.6%	13.2%	3.2%	10.0%	0.90	12.2%
11 Boeing	3.6%	9.6%	13.2%	3.2%	10.0%	0.90	12.2%
12 Brown-Forman 'B'	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
13 Chevron Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.90	12.2%
14 Chubb Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.95	12.7%
15 Coca-Cola	3.6%	9.6%	13.2%	3.2%	10.0%	0.55	8.7%
16 Colgate-Palmolive	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
17 Commerce Bancorp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
18 ConocoPhillips	3.6%	9.6%	13.2%	3.2%	10.0%	1.10	14.2%
19 Du Pont	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
20 Eaton Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	1.10	14.2%
21 Ecolab Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.90	12.2%
22 Emerson Electric	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
23 Everest Re Group Ltd.	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
24 Exxon Mobil Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
25 Fortune Brands	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
26 Gallagher (Arthur J.)	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
27 Gen'l Dynamics	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
28 Gen'l Mills	3.6%	9.6%	13.2%	3.2%	10.0%	0.55	8.7%
29 Genuine Parts	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
30 Grainger (W.W.)	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
31 Heinz (H.J.)	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
32 Hewlett-Packard	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
33 Home Depot	3.6%	9.6%	13.2%	3.2%	10.0%	0.95	12.7%
34 Honeywell Intl	3.6%	9.6%	13.2%	3.2%	10.0%	1.10	14.2%
35 Hormel Foods	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
36 Illinois Tool Works	3.6%	9.6%	13.2%	3.2%	10.0%	1.05	13.7%
37 Ingersoll-Rand	3.6%	9.6%	13.2%	3.2%	10.0%	1.20	15.2%
38 Intl Business Mach.	3.6%	9.6%	13.2%	3.2%	10.0%	0.90	12.2%
39 ITT Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.95	12.7%
40 Johnson & Johnson	3.6%	9.6%	13.2%	3.2%	10.0%	0.55	8.7%
41 Kimberly-Clark	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
42 Kraft Foods	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
43 Lilly (Eli)	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
44 Lincoln Nat'l Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	1.40	18.2%
45 Lockheed Martin	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
46 Mammoth Fin'l	3.6%	9.6%	13.2%	3.2%	10.0%	1.25	15.7%
47 McDonald's Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
48 Medtronic, Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
49 Microsoft Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
50 NIKE, Inc. 'B'	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
51 Northrop-Grumman	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
52 PepsiCo, Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.60	9.2%
53 Pfizer, Inc.	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
54 Procter & Gamble	3.6%	9.6%	13.2%	3.2%	10.0%	0.55	8.7%
55 Raytheon Co.	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
56 Reinsurance Group	3.6%	9.6%	13.2%	3.2%	10.0%	0.85	11.7%
57 Sigma-Aldrich	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
58 Sysco Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
59 Torchmark Corp.	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
60 United Parcel Serv.	3.6%	9.6%	13.2%	3.2%	10.0%	0.80	11.2%
61 United Technologies	3.6%	9.6%	13.2%	3.2%	10.0%	1.00	13.2%
62 Verizon Communic.	3.6%	9.6%	13.2%	3.2%	10.0%	0.75	10.7%
63 Wal-Mart Stores	3.6%	9.6%	13.2%	3.2%	10.0%	0.65	9.7%
64 Walgreen Co.	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
65 Wells Fargo	3.6%	9.6%	13.2%	3.2%	10.0%	1.05	13.7%
66 Wyeth	3.6%	9.6%	13.2%	3.2%	10.0%	0.70	10.2%
Average							11.5%

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Dec. 18, 2008)
 (b) Weighted average of Value Line, IBES, First Call, and Zacks earnings growth rates for the dividend paying firms in the S&P 500 based on data from www.valueline.com (retrieved Dec. 18, 2008), www.finmca.yahoo.com (retrieved Dec. 19, 2008), First Call Valuation Report (retrieved Dec. 19, 2008), and www.zacks.com (retrieved Dec. 19, 2008).
 (c) (a) + (b).
 (d) Average yield on 20-year Treasury bonds for December 2008 from the Federal Reserve Board at <http://www.federalreserve.gov/releases/h15/data.htm>.
 (e) (c) - (d).
 (f) www.valueline.com (retrieved Dec. 11, 2008).
 (g) (d) + (e) x (f).
 (h) Excludes highlighted figures.

EXPECTED EARNINGS APPROACHDocket No. 080677-EI
Expected Earnings Approach
Exhibit WEA-13, Page 1 of 1**UTILITY PROXY GROUP**

	(a)	(b)	(c)
<u>Company</u>	<u>Expected Return on Common Equity</u>	<u>Adjustment Factor</u>	<u>Adjusted Return on Common Equity</u>
1 ALLETE	8.5%	1.0416	8.9%
2 Alliant Energy	10.5%	1.0301	10.8%
3 Consolidated Edison	8.5%	1.0189	8.7%
4 Dominion Resources	15.0%	1.0578	15.9%
5 Duke Energy	8.0%	1.0126	8.1%
6 FPL Group, Inc.	13.5%	1.0379	14.0%
7 Integrys Energy Group	10.0%	1.0173	10.2%
8 MDU Resources Group	12.0%	1.0488	12.6%
9 NSTAR	14.5%	1.0275	14.9%
10 OGE Energy Corp.	11.5%	1.0446	12.0%
11 PG&E Corp.	11.5%	1.0332	11.9%
12 Portland General Elec.	9.0%	1.0406	9.4%
13 Progress Energy	9.5%	1.0192	9.7%
14 SCANA Corp.	10.5%	1.0401	10.9%
15 Sempra Energy	13.5%	1.0256	13.8%
16 Southern Company	14.0%	1.0347	14.5%
17 Vectren Corp.	11.5%	1.0259	11.8%
18 Wisconsin Energy	12.5%	1.0286	12.9%
19 Xcel Energy, Inc.	10.5%	1.0268	10.8%
Average			11.7%

(a) 3-5 year projections from The Value Line Investment Survey (Nov. 7, Nov. 28 & Dec. 26, 2008).

(b) Adjustment to convert year-end "r" to an average rate of return from Exhibit WEA-8.

(c) (a) x (b).

EXHIBIT WEA-14

FPL ADJUSTED CAPITAL STRUCTURE

(December 31, 2010, \$000)

<u>Component</u>	<u>Amount</u>	<u>Percent</u>
Short-term Debt	\$ 161,857	1.1%
Long-term Debt	6,327,047	44.1%
Common Equity	<u>8,178,980</u>	<u>55.8%</u>
Total	\$14,667,884	100.00%

CAPITAL STRUCTURE

Docket No. 080677-EI

Capital Structure – Electric Utility Operating Cos.

Exhibit WEA-15, Page 1 of 1

ELECTRIC UTILITY OPERATING COS.

<u>Company</u>	<u>Long-term Debt</u>	<u>Preferred Stock</u>	<u>Common Equity</u>
1 Alabama Power Company	50.9%	6.6%	42.5%
2 Carolina Power & Light Co.	47.6%	0.8%	51.6%
3 Consolidated Edison of NY	47.3%	1.4%	51.3%
4 Duke Energy Carolinas	44.8%	0.0%	55.2%
5 Duke Energy Indiana	47.8%	0.0%	52.2%
6 Duke Energy Kentucky	41.4%	0.0%	58.6%
7 Duke Energy Ohio	22.9%	0.0%	77.1%
8 Florida Power Corp.	51.5%	0.5%	48.0%
9 Georgia Power	47.8%	2.1%	50.1%
10 Gulf Power	47.2%	6.2%	46.6%
11 Interstate Power & Light	40.7%	9.8%	49.5%
12 Mississippi Power	30.5%	3.5%	66.0%
13 Northern States Power Co. (MN)	46.7%	0.0%	53.3%
14 Northern States Power Co. (WI)	40.4%	0.0%	59.6%
15 NSTAR Electric Co.	52.1%	1.1%	46.8%
16 Oklahoma Gas & Electric	37.2%	0.0%	62.8%
17 Orange & Rockland	48.6%	0.0%	51.4%
18 Pacific Gas & Electric Co.	46.4%	1.5%	52.1%
19 Portland General Electric Co.	49.9%	0.0%	50.1%
20 Public Service Co. of Colorado	39.3%	0.0%	60.7%
21 San Diego Gas & Electric	44.6%	2.1%	53.2%
22 South Carolina Electric & Gas	41.7%	2.3%	56.0%
23 Southern Power Co.	54.6%	0.0%	45.4%
24 Southwestern Public Service Co.	49.6%	0.0%	50.4%
25 Vectren Utility Holdings	49.4%	0.0%	50.6%
26 Virginia Electric Power	45.5%	5.9%	48.6%
27 Wisconsin Electric Power Co.	38.6%	0.7%	60.7%
28 Wisconsin Power & Light	35.2%	3.5%	61.2%
29 Wisconsin Pub Serv. Corp.	38.7%	2.6%	58.7%
Average	44.1%	1.7%	54.2%

Source: At fiscal year-end 2007 from Company Form 10-K Reports and FERC Form-1 Reports.

CAPITAL STRUCTURE

Docket No. 080677-EI
 Capital Structure – Utility Proxy Group
 Exhibit WEA-16, Page 1 of 1

UTILITY PROXY GROUP

	Company	At Fiscal Year-End 2007 (a)			Value Line Projected (b)		
		Long-term Debt	Preferred	Common Equity	Long-term Debt	Other	Common Equity
1	ALLETE	59.7%	0.2%	40.1%	47.5%	0.0%	52.5%
2	Alliant Energy	34.5%	5.4%	60.0%	32.0%	4.0%	64.0%
3	Consolidated Edison	47.4%	1.2%	51.4%	50.0%	0.5%	49.5%
4	Dominion Resources	59.2%	2.2%	38.7%	48.5%	1.0%	50.5%
5	Duke Energy	34.0%	0.0%	66.0%	44.5%	0.0%	55.5%
6	FPL Group, Inc.	54.2%	0.0%	45.8%	54.5%	0.0%	45.5%
7	Integrys Energy Group	41.4%	0.9%	57.7%	38.0%	0.5%	61.5%
8	MDU Resources Group	34.1%	0.4%	65.5%	30.0%	0.5%	69.5%
9	NSTAR	53.7%	1.1%	45.2%	49.0%	1.0%	50.0%
10	OGE Energy Corp.	44.5%	0.0%	55.5%	53.5%	0.0%	46.5%
11	PG&E Corp.	48.1%	1.5%	50.4%	50.5%	0.5%	49.0%
12	Portland General Elec.	49.9%	0.0%	50.1%	48.0%	0.0%	52.0%
13	Progress Energy	52.8%	0.5%	46.7%	51.5%	0.5%	48.0%
14	SCANA Corp.	50.3%	1.8%	47.9%	53.5%	1.0%	45.5%
15	Sempra Energy	34.5%	1.4%	64.2%	40.0%	1.0%	59.0%
16	Southern Company	53.2%	3.8%	43.0%	52.0%	3.0%	45.0%
17	Vectren Corp.	50.2%	0.0%	49.8%	50.5%	0.0%	49.5%
18	Wisconsin Energy	53.0%	0.5%	46.6%	49.0%	0.5%	50.5%
19	Xcel Energy, Inc.	52.1%	0.8%	47.1%	51.0%	0.5%	48.5%
	Average	47.7%	1.1%	51.1%	47.0%	0.8%	52.2%

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

(b) The Value Line Investment Survey (Nov. 7, Nov. 28, & Dec. 26, 2008).

EXHIBIT WEA-17

ENDNOTES TO DIRECT TESTIMONY OF WILLIAM E. AVERA

- ¹ *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679 (1923).
- ² *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).
- ³ Kearns, Jeff, "VIX 'Exploding' as Stocks Plunge on Growing Recession Concern," *Bloomberg* (Oct. 15, 2008).
- ⁴ Riddell, Kelly, "Cash-Starved Companies Scrap Dividends, Tap Credit," *Pittsburgh Post-Gazette* (Oct. 2, 2008).
- ⁵ *Letter to House of Representatives*, Thomas R. Kuhn, President, Edison Electric Institute (Sep. 24, 2008).
- ⁶ Smith, Rebecca, "Corporate News: Utilities' Plans Hit by Credit Markets," *Wall Street Journal* at B4 (Oct. 1, 2008).
- ⁷ *Rudden's Energy Strategy Report* (Oct. 1, 2008).
- ⁸ Standard & Poor's Corporation, "Industry Report Card: U.S. Electric Utility Credit Quality Remains Strong Amid Continuing Economic Downturn," *RatingsDirect* (Dec. 19, 2008).
- ⁹ Fitch Ratings Ltd., "EEI 2008 Wrap-Up: Cost of Capital Rising," *Global Power North America Special Report* (Nov. 17, 2008).
- ¹⁰ Fitch Ratings Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22, 2008).
- ¹¹ *Id.*
- ¹² Kruger, Daniel and Cordell Eddings, "Treasury Bills Trade at Negative Rates as Haven Demand Surges," www.bloomberg.com (Dec. 9, 2008).
- ¹³ Standard & Poor's Corporation, "Credit Trends: U.S. Composite Credit Spreads Daily (Dec. 2, 2008)," *RatingsDirect* (Dec. 2, 2008).
- ¹⁴ Gongloff, Mark, "Ahead of the Tape: The Shocks Are Getting A Workout," *The Wall Street Journal* at C1 (Sep. 17, 2008).
- ¹⁵ Grabelsky, Glen, "Surviving the Present, Preparing for the Future," *Fitch Ratings' 20th Annual Global Power Breakfast* (Nov. 10, 2008).
- ¹⁶ Fitch Ratings, Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22, 2008).
- ¹⁷ Moody's Investors Service, "U.S. Electric Utility Sector," *Industry Outlook* (Jan. 2008).
- ¹⁸ Standard & Poor's Corporation, "Top Ten Credit Issues Facing U.S. Utilities," *RatingsDirect* (Jan. 29, 2007).

- ¹⁹ Moody's Investors Service, "Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector," *Special Comment* at 6 (Aug. 2007).
- ²⁰ Fitch Ratings, Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North American Special Report* (Dec. 22, 2008).
- ²¹ Standard & Poor's Corporation, "Florida Power & Light Co.," *RatingsDirect* (Aug. 20, 2008).
- ²² Moody's Investors Service, "U.S. Investor-Owned Electric Utilities: Six-Month Industry Update," *Industry Outlook* (July 2008).
- ²³ Standard & Poor's Corporation, "Ratings Roundup: Utility Sector Experienced Equal Number Of Upgrades And Downgrades During Second Quarter Of 2008," *RatingsDirect* (Jul. 22, 2008).
- ²⁴ Fitch Ratings Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22, 2008).
- ²⁵ Standard & Poor's Corporation, "Top Ten Credit Issues Facing U.S. Utilities," *RatingsDirect* (Jan. 29, 2007).
- ²⁶ Moody's Investors Service, "U.S. Investor-Owned Electric Utilities: Six-Month Industry Update," *Industry Outlook* (July 2008).
- ²⁷ Fitch Ratings, Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22, 2008).
- ²⁸ Standard & Poor's Corporation, "Measuring Nuclear Risk in a Competitive Environment," *CreditWeek* (Aug. 8, 1994).
- ²⁹ Moody's Investors Service, "New Nuclear Generation in the United States: Keeping Options Open vs. Addressing An Inevitable Necessity," *Special Comment* (Oct. 2007).
- ³⁰ *Id.*
- ³¹ *Id.*
- ³² Fitch Ratings Ltd., "Florida Power & Light Company," *Global Power North American Credit Analysis* (Feb. 12, 2008).
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- ³⁴ Parcell, David C., "The Cost of Capital – A Practitioner's Guide," *Society of Utility and Regulatory Financial Analysts* at Part 2, p. 4 (1997).
- ³⁵ Thomson Financial, an arm of Thomson Reuters, separately compiles and publishes consensus securities analyst growth rates under the IBES and First Call brands.
- ³⁶ Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports, Inc.* at 58 (1994).

³⁷ The constant growth DCF model is dependent on a number of strict assumptions, which in practice are never strictly met. These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (*i.e.*, no changes in risk or interest rate levels and a flat yield curve); and all of the above extend to infinity.

³⁸ The Value Line Investment Survey (Sep. 15, 1995 at 161, Dec. 28, 2007 at 695).

³⁹ Association for Investment Management and Research, "Finding Reality in Reported Earnings: An Overview" at 1 (Dec. 4, 1996).

⁴⁰ The Value Line Investment Survey, *Subscriber's Guide* at 53.

⁴¹ Block, Stanley B., "A Study of Financial Analysts: Practice and Theory", *Financial Analysts Journal* (July/August 1999).

⁴² *Id.* at 88.

⁴³ Liu, Jing, Nissim, Doron, & Thomas, Jacob, "Is Cash Flow King in Valuations?," *Financial Analysts Journal*, Vol. 63, No. 2 at 56 (March/April 2007).

⁴⁴ Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports, Inc.* at 154-155 (1994).

⁴⁵ *Southern California Edison Company*, 92 FERC ¶ 61,070 (2000) at p. 22.

⁴⁶ *Kern River Gas Transmission Company*, Opinion No. 486, 117 FERC ¶ 61,077 at P 140 & n. 227 (2006).

⁴⁷ *Id.*

⁴⁸ Moody's Investors Service, www.credittrends.com.

⁴⁹ As highlighted on Exhibit WEA-7, these DCF estimates were 6.9 percent and 5.7 percent, respectively

⁵⁰ *ISO New England, Inc.*, 109 FERC ¶ 61,147 at P 205 (2004).

⁵¹ Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports* at 65 (1994).

⁵² The forward-looking CAPM is more comparable to the arithmetic mean than the geometric mean. This distinction was made clear in the new edition of the text used by the Chartered Financial Analyst (CFA) program worldwide: "the geometric mean is appropriate for making investment statements about past performance...the arithmetic mean is appropriate for making investment statements in a forward-looking context." DeFusco, Richard A., CFA, McLeavey, Dennis W., CFA, Pinto, Jerald E., CFA, Runkle, David E., CFA, *Quantitative Investment Analysis (Second Edition)*, at 127 (2007).

⁵³ The Value Line Investment Survey at 687 (Dec. 26, 2008).

⁵⁴ The Value Line Investment Survey 446 (Dec. 12, 2008).

⁵⁵ Roger A. Morin, "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports* (1994) at 166.

⁵⁶ Application of Yankee Gas Services Company for a Rate Increase, DPUC Docket No. 04-06-01, Direct Testimony of George J. Eckenroth (Jul. 2, 2004) at Exhibit GJE-11.1. Updating the results presented by Mr. Eckenroth through April 2005 also resulted in an average flotation cost percentage of 3.6%.

⁵⁷ Staff witness Mr. Maurey utilized a 26 basis point adjustment in Docket No. 000824-EI, with the FPSC incorporating a 4 percent flotation cost adjustment in its June 10, 2004 Order No. PSC-04-0587-PAA-WS.

⁵⁸ Fitch Ratings Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," *Global Power North America Special Report* (Dec. 22, 2008).

⁵⁹ *Id.*

⁶⁰ Fitch Ratings Ltd., "Florida Power & Light Company," *Global Power North America Credit Analysis* (Feb. 12, 2008).

⁶¹ Moody's Investors Service, "Regulatory Pressures Increase For U.S. Electric Utilities," *Special Comment* (March 2007).

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⁶³ Standard & Poor's Corporation, "Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements," *RatingsDirect* (May 7, 2007).

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ Standard & Poor's Corporation, "Implications Of Operating Leases On Analysis Of U.S. Electric Utilities," *RatingsDirect* (Jan. 15, 2008).

⁶⁷ Standard & Poor's Corporation, "Florida Power & Light Co.," *RatingsDirect* (Aug. 20, 2008).

⁶⁸ Apart from the immediate impact that the fixed obligation of purchased power costs has on the utility's financial risk, higher fixed charges also reduce ongoing financial flexibility, and the utility may face other uncertainties, such as potential replacement power costs in the event of supply disruption.

⁶⁹ *Stipulation and Settlement*, Docket No. 050045-EI at P 15 (Aug. 22, 2005).

⁷⁰ Moody's Investors Service, "Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector," *Special Comment* (Aug. 2007); "U.S. Electric Utility Sector," *Industry Outlook* (Jan. 2008).

⁷¹ Moody's Investors Service, "U.S. Investor-Owned Electric Utilities," *Industry Outlook* (Jan. 2009).

⁷² *Id.*

⁷³ Moody's Investors Service, "U.S. Investor-Owned Electric Utilities: Six-Month Industry Update," *Industry Outlook* (July 2008).