BEFORE THE
PUBLIC UTILITY COMMISSION OF FLORIDA

In RE: Petition for rate increase by Progress Energy Florida, Inc.

Docket No. 050078-EI

Direct Testimony and Exhibits of

Michael Gorman
Volume 1 of 2

On behalf of

White Springs Agricultural Chemicals, Inc.
d/b/a PCS Phosphate – White Springs

July 13, 2005

BAI

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

Project 8383

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Direct Testimony of Michael Gorman – Volume 1

1 **Q** **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A** My name is Michael Gorman and my business address is 1215 Fern Ridge

3 Parkway, Suite 208, St. Louis, MO 63141-2000.

4 **Q** **WHAT IS YOUR OCCUPATION?**

5 **A** I am a consultant in the field of public utility regulation and a principal in the firm

6 of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q** **PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPER-**

8 **IENCE.**

9 **A** These are set forth in Appendix A to my testimony.

10 **Q** **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

11 **A** I am appearing on behalf of White Springs Agricultural Chemicals, Inc. d/b/a PCS

12 Phosphate – White Springs (White Springs). White Springs is a manufacturer of

13 fertilizer products with plants and operations located within Progress Energy

14 Florida Inc.'s (PEF) service territory at White Springs, and receives service under

1   numerous rate schedules. During calendar year 2004, White Springs purchased

2   approximately $20 million of power from PEF.

3 **Q   WHAT IS THE SUBJECT OF YOUR VOLUME 1 TESTIMONY?**

4 A   I make recommendations on an appropriate overall rate of return including a

5   return on common equity for PEF.

6 **Q   WHAT IS ADDRESSED IN VOLUME 2 OF YOUR TESTIMONY?**

7 A   Other revenue requirement issues.

8 **Q   PLEASE SUMMARIZE YOUR RECOMMENDATIONS.**

9 A   I recommend that the Commission award PEF a return on common equity of

10   9.8%. My recommended return on equity for PEF would fairly compensate

11   investors for PEF's investment risk. I base my recommendation on Discounted

12   Cash Flow (DCF), Risk Premium (RP) and Capital Asset Pricing Model (CAPM)

13   analyses applied to a group of publicly traded utility companies that proxy PEF's

14   investment risk.

15   My recommended return on common equity will provide PEF an

16   opportunity to earn a fair risk-adjusted return, maintain its bond rating and its

17   financial integrity.

18   I recommend an overall cost of capital for PEF of 7.39%. This overall rate

19   of return is based on the following: (1) PEF's projected 2006 capital structure,

20   excluding two common equity imputation adjustments PEF proposes and lists on

1   its MRF Schedule D-1b, (2) PEF's estimated embedded security costs, and (3)

2   my recommended return on common equity.

3   Next, I respond to PEF witnesses Dr. James Vander Weide's and Dr.

4   Charles J. Cicchetti's testimonies. Setting aside some issues I have with his

5   costing models, I find that Dr. Vander Weide's models – when his unreasonable

6   proposed adjustments are excluded – would support my recommended return on

7   equity of 9.8%. As discussed below, and in my colleague Alan Chalfant's

8   testimony, Dr. Cicchetti's recommended 0.50% common equity return premium

9   as a superior management performance reward is unwarranted and should be

10   rejected.

11   **SUMMARY**

12   **Q**   **PLEASE DESCRIBE PEF'S CAPITAL RESOURCES AND CREDIT QUALITY.**

13   A   PEF is a wholly owned subsidiary of Progress Energy Corp. (Progress), whose

14   primary operating affiliates are Progress Energy Florida and Progress Energy

15   Carolina. Progress' current financial standing is somewhat stressed due to its

16   failure to meet acquisition debt reduction objectives following the merger of

17   Progress Energy Florida and Progress Energy Carolina, and slower than

18   expected divestiture of non-core assets where the proceeds are expected to be

19   used to reduce parent company debt. The primary source of cash for Progress is

20   dividends from its utility affiliates.

21   PEF's common stock is not publicly traded. Hence, Progress' equity

22   infusions and PEF's retained earnings are its sources of common equity capital.

23   Although PEF directly issues debt, its credit rating is impacted by its affiliation

1   with Progress and its unregulated affiliate companies. PEF's current bond rating

2   from Standard & Poor's is BBB, from Moody's is A2, and from Fitch A-.

3   Credit rating agencies generally view PEF's regulatory environment as

4   favorable and consider its strong Florida service area economy as supportive of

5   its credit. Further, PEF's current capitalization mix and coverages are also

6   supportive of its current bond rating.

7 **Q**   **ARE THERE ANY RISK REDUCTION ASPECTS OF FLORIDA PUBLIC**

8   **UTILITY REGULATION THAT SHOULD BE TAKEN INTO CONSIDERATION**

9   **IN ASSESSING PEF'S INVESTMENT RISK?**

10 **A**   Yes. PEF has several rate billing adjustment mechanisms that effectively

11   transfer the risk of cost under-recovery from investors to customers. These

12   billing adjustment rate mechanisms are described in PEF's Rate Schedule BA-1.

13   PEF's billing rate adjustments include rate adjustments for fuel and purchased

14   power energy costs, energy conservation, purchased power capacity costs,

15   environmental costs and gross receipts tax. Each of these mechanisms permit

16   adjustments to reflect changes in the charges to ensure full cost recovery and

17   mitigate regulatory lag. Indeed, as set forth on my Exhibit MPG-1, approximately

18   55% of PEF's annual retail revenues are recovered through these billing rate

19   adjustment factors.

20 **Q**   **HOW DO PEF'S RATE ADJUSTMENT FACTORS REDUCE OPERATING**

21   **RISK?**

1 A Rate adjustment factors reduce PEF's operating risk in several respects. First,

2 they lower PEF's risks relating to recovering the costs of fuel and energy

3 procurement and compliance with environmental regulations. PEF's risk is

4 reduced because these costs are passed through to customers in rate

5 adjustment factors outside of rate cases. Second, PEF's ability to earn its

6 authorized return is strengthened considerably through the implementation of

7 these rate adjustment factors. As operating expenses increase, PEF's rate

8 factors are adjusted and the changes in operating expense are passed on to

9 customers, shielding PEF's earnings from any negative impact.

10 Q **DO PEF'S RATE ADJUSTMENT FACTORS IMPACT PEF'S CUSTOMERS?**

11 A Yes. While these rate adjustment factors significantly reduce PEF's risk, they do

12 not cause the risk to be eliminated but instead shift the risks from PEF to its

13 customers. Customers assume the risk of variations in fuel costs, purchased

14 power costs, environmental and other costs as a result of the exposure to rate

15 adjustment factors.

16 For example, the Company's fuel recovery factor represents over 50% of

17 the Company's total sales revenues as shown on the Company's MFR Schedule

18 C2 at 1. This fuel cost recovery for projected year 2006 represents a significant

19 increase relative to previous fuel surcharges imposed over the last ten years.

20 Specifically, fuel charges for 2005 are approximately 3.8¢ per kilowatthour, which

21 was more than 1¢/kWh higher than the fuel charges for calendar years 2001

22 through 2003. Hence, the fuel factor actually increased fuel prices by almost

23 40%, and total cost by approximately 20%. If the Company had to assume this

1   cost risk it would place it at significant risk of not earning its authorized return. By

2   passing this fuel and purchased power energy cost recovery on to customers,

3   PEF's risk is materially reduced, and customers' price volatility and risks

4   significantly increased.

5 **Q**   **SHOULD THESE RISK REDUCTION FEATURES BE CONSIDERED IN**

6   **ESTABLISHING PEF'S AUTHORIZED RATE OF RETURN?**

7 **A**   Yes. PEF should not be compensated for risk that is shifted to customers.

8   Rather, the Commission should recognize that PEF's customers have already

9   assumed a significant portion of the risk that PEF might otherwise face and

10   therefore the customers should not have to compensate PEF for risks it does not

11   assume. Accordingly, PEF's authorized return on equity should be reduced to

12   reflect its reduced risk created by these rate factors. The lower return will lower

13   retail rates, thus compensating customers for being subjected to the operating

14   cost risk.

15 **Q**   **HAVE CREDIT RATING ANALYSTS RECOGNIZED THE REDUCTION IN**

16   **UTILITY RISK THAT RESULTS FROM THE PRESENCE OF RATE**

17   **ADJUSTMENT MECHANISMS?**

18 **A**   Yes. Standard & Poor's states that it would consider rate mechanisms which

19   enhance a utility's ability to earn its authorized return on equity to be superior to

20   providing a higher authorized return on equity. Standard & Poor's explained:

21   "Regardless of the authorized ROE, a utility's cash
22   flow could be compromised and its financial profile
23   could decline from escalating costs such as pension
24   and health care expenses, and much higher than

1   historical levels of capital spending. <u>Between rate</u>
2   <u>cases, regulatory mechanisms that provide recovery</u>
3   <u>of costs can support a utility's ability to earn its</u>
4   <u>authorized ROE.</u> As utilities seek recovery of these
5   increasing costs in rates and higher capital
6   spending levels, <u>lower ROEs may be acceptable</u> if
7   other costs are recoverable and the authorized ROE
8   can actually be earned." (Standard & Poor's Rating
9   Direct, June 14, 2005) (Emphasis added)

10   Florida's rate adjustment factors permit PEF to recover over 55% of its

11   operating costs through rate adjustment mechanisms. This assurance of cost

12   recovery significantly diminishes PEF's operating risk and significantly enhances

13   its ability to earn its authorized return on equity and, thus reduce PEF's operating

14   risk.

15   This risk reduction should be reflected as a reduction to PEF's authorized

16   return on equity. As Standard & Poor's notes, a reduced equity return to reflect

17   the operating risk reduction aspect would be outweighed by the enhancement to

18   PEF's ability to achieve its authorized equity return and would not diminish PEF's

19   ability to maintain its current bond rating.

20   PEF'S PROPOSED CAPITAL STRUCTURE

21 **Q**   **WHAT CAPITAL STRUCTURE IS PEF PROPOSING TO USE TO DEVELOP**

22   **ITS OVERALL RATE OF RETURN IN THIS PROCEEDING?**

23 A   PEF witness Thomas R. Sullivan is proposing a projected test year 2006 capital

24   structure and "specific adjustments" as detailed on Minimum Rate Filing (MRF)

25   Schedule D-1d. PEF makes significant adjustments to increase its common

26   equity and decrease its long-term debt balance. PEF's asserted purposes for

27   these adjustments are to neutralize the impact on common equity of a CR3

1   nuclear outage, and to offset off-balance sheet debt equivalents related to

2   purchased power obligations. In effect, PEF imputes over $850 million of

3   common equity and reduces its debt balance by $110 million for these

4   adjustments.

5 **Q**   **IS IT REASONABLE TO USE MR. SULLIVAN'S PROPOSED CAPITAL**

6   **STRUCTURE TO SET PEF'S RATE OF RETURN?**

7 **A**   No. There is no sound theoretical or practical reason for this adjustment, and the

8   Commission should summarily reject it. The unavoidable fact is that the

9   adjustment would require PEF's customers to provide a return on common equity

10   investments that shareholders have not made.

11   Mr. Sullivan's proposed capital structure would inflate PEF's revenue

12   requirement by providing a return on over $850 million of "imputed" common

13   equity. Yet, the shareholders have not provided this $850 million in equity and

14   there is no valid theoretical reason to impute this (or any other) amount. Hence,

15   this imputed balance of common equity is not a legitimate cost of providing

16   service to Florida retail customers.

17 **Q**   **WHAT IS MR. SULLIVAN'S PRIMARY REASON FOR REQUESTING TO**

18   **IMPUTE DEBT IN SETTING THE COMPANY'S RATE OF RETURN IN THIS**

19   **PROCEEDING?**

20 **A**   Mr. Sullivan contends that this adjustment is needed to produce a revenue

21   requirement that will support PEF's credit rating. Mr. Sullivan argues that the

22   imputed common equity is necessary to offset PEF's claimed off-balance sheet

1   debt equivalence of purchased power agreement. However, for the reasons

2   discussed below, imputing common equity is not necessary in order to maintain

3   PEF's current bond rating in light of its purchased power debt obligations.

4 **Q**   **DO THE COMPANY'S PROPOSED ADJUSTMENTS TO ITS CAPITAL**

5   **STRUCTURE THAT YOU DESCRIBED ABOVE INCREASE ITS REVENUE**

6   **DEFICIENCY IN THIS PROCEEDING?**

7 **A**   Yes, significantly. The Company's proposal to impute $850 million of

8   hypothetical common equity to balance purchased power debt equivalents and to

9   eliminate the CR3 nuclear outage common equity impact, increases PEF's

10   revenue deficiency by approximately $45.6 million. Hence, this hypothetical

11   imputed common equity amounts to nearly 25% of PEF's claimed $206 million

12   revenue deficiency in this proceeding.

13 **Q**   **WHY SHOULD THE COMMISSION REJECT DEVELOPING PEF'S OVERALL**

14   **RATE OF RETURN USING A CAPITAL STRUCTURE THAT CONTAINS**

15   **HYPOTHETICAL OR IMPUTED COMMON EQUITY BALANCES?**

16 **A**   The bottom line is that it would be grossly unfair to require PEF's customers to

17   pay for equity investments that have not actually been made. To do so would

18   artificially inflate PEF's claimed revenue requirement, thereby forcing its

19   customers to pay costs that have not been incurred. Furthermore, the Company's

20   actual bond rating and cost of debt reflects its <u>actual</u> capital structure and

21   financial risk, not the <u>hypothetical</u> capital structure PEF proposes to use to set

22   rates in this proceeding.

1 Q **WHY DOES AN OVERSTATED BALANCE OF COMMON EQUITY INFLATE**

2 **PEF'S OVERALL RATE OF RETURN?**

3 A Common equity capital is the most expensive form of capital and is subject to

4 income tax expense. For example, assume the Commission authorizes a return

5 on equity of 10%. Customers will pay rates that support the 10% equity return

6 and related income tax expense. Recognizing PEF's 38.6% consolidated

7 Federal and state income tax rate, the revenue requirement, or pre-tax, cost to

8 ratepayers of a 10% return on equity is 16.3% - this includes both the equity

9 return and related income tax expense (10% ÷ (1 – consolidated income tax

10 rate)). In comparison, debt interest expense is tax deductible. Hence, there is

11 no income tax adjustment for the recovery of debt interest expense. The current

12 marginal cost of debt for PEF is around 6%. Accordingly, on a revenue

13 requirement basis, common equity cost would be 16.0%, which is more than two

14 and one-half times as expensive as the revenue requirement cost of debt interest

15 of 6%.

16 Q **CAN A UTILITY HAVE AN INADEQUATE AMOUNT OF COMMON EQUITY?**

17 A Yes. Despite the significant difference in the pre-tax cost of common equity

18 relative to debt, a utility must maintain a capital structure that reasonably

19 balances the amount of common equity and debt capital in order to preserve its

20 financial integrity. A capital structure that is weighted too heavily with debt would

21 have unreasonable amounts of financial risk and would erode the credit quality

22 and limit the utility's ability to attract capital. Conversely, a capital structure that

23 is too heavily weighted with common equity will unnecessarily increase the cost

1   of capital as the utility would be relying too heavily on much more expensive

2   common equity capital. Accordingly, a capital structure that is reasonably

3   balanced with debt and equity minimizes the cost of capital while preserving

4   financial integrity and the ability to attract capital.

5   Q   **WHY DO YOU REJECT PEF'S PROPOSAL TO IMPUTE COMMON EQUITY TO**

6   **OFFSET THE CLAIMED DEBT EQUIVALENT OF PURCHASED POWER**

7   **OBLIGATIONS?**

8   A   I reject its proposal to impute common equity for two main reasons. First, it

9   provides PEF with a return on equity investments that have not been made and is

10   inconsistent with setting rates to recover PEF's actual cost of providing utility

11   service. If additional equity investment is truly needed, and it is not, then

12   Progress should infuse equity in PEF to preserve its credit position.

13   Second, PEF's actual capital structure and a fair return on common equity

14   will support its credit rating, considering both on-balance sheet and off-balance

15   sheet debt obligations. Indeed, as set forth in more detail later in my testimony,

16   PEF's actual capital structure, excluding the proposed common equity imputation,

17   will provide adequate coverage of debt obligations and will support PEF's current

18   bond rating. Hence, PEF's contention that a significantly greater balance of

19   common equity is needed to support its current credit rating is unfounded.

20   Q   **DO CREDIT RATING ANALYSTS CONSIDER OFF-BALANCE SHEET**

21   **PURCHASED POWER IN EVALUATING A UTILITY'S CREDIT?**

1   A   Yes. But credit rating analysts consider the company's <u>actual</u> financial position in

2   setting its credit rating. Credit rating analysts don't look to hypothetical

3   imputations of common equity when assessing a utility's credit strength.

4   Accordingly, the decision in this case should be based on PEF's actual

5   capitalization mix and the coverage of debt obligations that is implicit in the

6   proposed rate of return, capital structure, and depreciation and amortization

7   rates. These are the factors that will allow PEF's retail operations to support its

8   current bond ratings. These are the same actual cash flows and balance sheet

9   factors that credit analysts will consider, in whole or in part, in reviewing PEF's

10   credit strength.

11   **Q**   **ARE THERE IMPORTANT CONSIDERATIONS IN ASSESSING THE DEBT-**

12   **LIKE NATURE OF PEF'S CURRENT PURCHASED POWER OBLIGATIONS?**

13   A   Yes. As noted in the exhibits of PEF witness Sullivan, Standard & Poor's

14   consideration of the "debt like" equivalence of purchased power obligations is

15   based on several factors. First, Standard & Poor's considers performance

16   standards in the contracts in assessing their debt-like nature. Performance

17   standards can mitigate the debt like characteristics of a purchased power

18   agreement. For example, if a company can avoid or eliminate capacity payments

19   in the event a supplier fails to delivery capacity and energy under the contract

20   terms, then the debt like characteristics of that financial obligation are reduced

21   considerably.

22   Second, Standard & Poor's also considers any regulatory mechanisms

23   that enhance the utility's ability to fully recover purchased power costs. In PEF's

1   case, it recovers its purchased power demand cost and energy costs through

2   rate adjustment factors. Because these mechanisms shift the risk from PEF to

3   its customers, the debt-like equivalence of PEF's purchased power obligations is

4   reduced.

5 **Q** **DOES PEF'S ACTUAL CAPITAL STRUCTURE SUPPORT ITS BOND RATING**

6   **WITHOUT PEF'S PROPOSED HYPOTHETICAL COMMON EQUITY**

7   **ADJUSTMENTS?**

8 A   Yes. S&P publishes financial ratio benchmarks as a guide to assess the credit

9   strength of utility companies. Based on PEF's projected test year capital

10   structure, excluding its imputed common equity balances, but including PEF's

11   estimated off-balance sheet PPA debt, its total debt to total investor capital will

12   be 52%. This total debt ratio is solidly within S&P's total debt ratio range of 50%

13   to 60% for a BBB-rated utility company with a business profile score of 5, PEF's

14   current rating. Thus, PEF's actual capital structure equity balance is more than

15   adequate to support PEF's credit rating. I review PEF's credit rating financial

16   ratios in more detail later in this testimony.

17 **Q** **ARE YOU PROPOSING TO ELIMINATE THE COMPANY'S PROPOSED CR3**

18   **NUCLEAR OUTAGE ADJUSTMENTS TO ITS COMMON EQUITY BALANCE**

19   **AND LONG-TERM DEBT BALANCE?**

20 A   Yes. PEF contends that the Commission authorized an equity imputation

21   adjustment to its capital structure to reflect the disallowances of replacement

22   power costs, and other costs, related to a 1996 Crystal River Unit 3 outage.

1   While the Commission did permit adjustment to the capital structure for

2   surveillance reporting purposes, it did not authorize an adjustment to PEF's

3   capital structure for the development of based rates.

4   PEF's proposed adjustments to its capital structure will inflate its common

5   equity, and artificially reduce its debt. PEF's proposal in this regard would create

6   a permanent cost to customers related to the 1996 CR3 outage. Indeed, the

7   Company estimates that this CR3 outage adjustment will increase its revenue

8   deficiency in this proceeding by $12.5 million (Response to White Springs'

9   Second Set of Interrogatories, No. 5B).

10   The Company's proposal to artificially increase its claimed revenue

11   deficiency in this proceeding by overstating its common equity balance is

12   inappropriate and should be rejected.

13 **Q** **WHAT CAPITAL STRUCTURE DO YOU RECOMMEND BE USED TO SET**

14 **PEF'S RATE OF RETURN IN THIS PROCEEDING?**

15 **A**   Based on my elimination of certain common equity and long-term debt

16   adjustments proposed by the Company, as described above, I recommend PEF's

17   rate of return be set based on the capital structure shown on my Exhibit MPG-2.

18   Again, these adjustments include the elimination of the imputed off-balance sheet

19   PPA debt and the elimination of the CR3 nuclear outage adjustment to common

20   equity and long-term debt.

1 **Q** **ARE YOU TAKING ISSUE WITH THE COMPANY'S DEVELOPMENT OF**

2 **THE EMBEDDED COST OF LONG-TERM DEBT AND PREFERRED**

3 **STOCK?**

4 **A** No.

5

6 **RETURN ON COMMON EQUITY**

7 **Q** **PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**

8 **COMPANY'S COST OF COMMON EQUITY.**

9 **A** In general, determining a fair cost of common equity for a regulated utility has

10 been framed by two decisions of the U.S. Supreme Court, in Bluefield Water

11 Works v West Virginia PSC (1923) and Federal Power Commission v. Hope

12 Natural Gas Company (1944).

13 These decisions identify the general standards to be considered in

14 establishing the cost of common equity for a public utility. Those general

15 standards are that the authorized return should: (1) be sufficient to maintain

16 financial integrity, (2) attract capital under reasonable terms, and (3) be

17 commensurate with returns investors could earn by investing in other enterprises

18 of comparable risk.

19 **Q** **PLEASE DESCRIBE WHAT IS MEANT BY "UTILITY'S COST OF COMMON**

20 **EQUITY."**

21 **A** The utility's cost of common equity is the return investors expect, or require, in

22 order to make an investment. Investors expect to achieve their return

23 requirement by receiving dividends and experiencing stock price appreciation.

1 Q **PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE**

2 **COST OF COMMON EQUITY FOR PEF.**

3 A I have used several models derived from financial theory to estimate PEF's cost

4 of common equity. These models are: (1) the constant growth discounted cash

5 flow (DCF) model, (2) the bond yield plus equity risk premium model, and (3) a

6 capital asset pricing model (CAPM). I have applied these models to a proxy risk

7 group of publicly traded utilities that I have determined to be reasonably

8 investment risk comparable to PEF.

9 Q **HOW DID YOU SELECT YOUR PROXY RISK GROUP OF PUBLICLY**

10 **TRADED UTILITIES IN ESTIMATING A FAIR RETURN FOR PEF?**

11 A I first reviewed the proxy risk group of electric and gas utility companies relied on

12 by PEF witness Dr. James Vander Weide. Based on a careful review of the

13 companies included in his comparable groups, I have determined that those two

14 groups are reasonably risk comparable to PEF. Hence, in an effort to minimize

15 the issues between the methods I will use to estimate a fair return for PEF, and

16 those contained in Dr. Vander Weide's analysis, I will use the same two proxy

17 groups used by Dr. Vander Weide. I have reached this decision after reviewing

18 the risk parameters of these groups and determined that they are reasonable risk

19 proxies for use in estimating the cost of equity to PEF.

20 Q **WHY HAVE YOU CONCLUDED THAT THESE PROXY UTILITY GROUPS ARE**

21 **REASONABLE RISK PROXIES FOR PEF'S INVESTMENT RISK?**

1 A An evaluation of appropriate risk factors, in comparison to PEF, is shown on my

2 Exhibit MPG-3. As shown on this exhibit, the electric utility group's average S&P

3 and Moody's bond ratings of BBB+ and Baa1 are very similar to PEF's current

4 bond rating. Further, the electric group's business position ranking from S&P is

5 5, which is identical to Progress' current business profile score. Finally, the

6 average common equity ratio to total long-term capital for the comparable electric

7 group is 47%, and 43% when short-term debt is included. These common equity

8 ratios exhibit somewhat greater financial risk, but are reasonably comparable to

9 PEF. Specifically, PEF's common equity ratio of total capital, including short-

10 term debt of 49%, is somewhat stronger, exhibiting lower financial risk than the

11 proxy group's average of 43%.

12 Similarly, as shown on Exhibit MPG-4, PEF's risk factors exhibit

13 comparable risk to the gas proxy group. Specifically, the gas proxy's S&P bond

14 rating is somewhat stronger, and the Moody's bond rating is comparable. The

15 gas group has somewhat lower business risk and the common equity ratios

16 exhibit comparable financial risk. Hence, the gas comparable group may be

17 slightly lower risk than PEF, but reasonably comparable.

18 It is difficult to find publicly traded utility company stocks, as most utilities

19 are wholly owned subsidiaries of parent companies that own both regulated and

20 non-regulated operations. Nevertheless, the two proxy groups of electric and

21 gas companies I will use to estimate PEF's current market-required return on

22 common equity exhibit very comparable risk characteristics and represent a

23 reasonable risk proxy for PEF.

1 **DISCOUNTED CASH FLOW (DCF) MODEL**

2 **Q   PLEASE DESCRIBE THE DCF MODEL.**

3 A   The DCF model posits that a stock price is valued by summing the present value

4   of expected future cash flows discounted at the investor's required rate of return

5   (ROR) or cost of capital. This model is expressed mathematically as follows:

6      $$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \ldots \ldots \frac{D_{\bullet\bullet}}{(1+K)^{\bullet\bullet}} \text{ where}$$ (Equation 1)
7
8   P_0 = Current stock price
9   D = Dividends in periods 1 - $\bullet\bullet$
10   K = Investor's required return

11   This model can be rearranged in order to estimate the discount rate or

12   investor required return, "K." If it is reasonable to assume that earnings and

13   dividends will grow at a constant rate, then Equation 1 can be rearranged as

14   follows:

15           $K = D_1/P_0 + G$ (Equation 2)

16   K = Investor's required return
17   D_1 = Dividend in first year
18   P_0 = Current stock price
19   G = Expected constant dividend growth rate

20   Equation 2 is referred to as the "constant growth" annual DCF model.

21 **Q   PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF**

22   **MODEL.**

23 A   As shown under Equation 2 above, the DCF model requires a current stock price,

24   expected dividend, and expected growth rate in dividends.

1 Q **WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR**

2 **CONSTANT GROWTH DCF MODEL?**

3 A I relied on the average of the weekly high and low stock prices over a 13-week

4 period ending June 13, 2005. An average stock price is less susceptible to

5 market price variations than is a spot price. Therefore, an average stock price is

6 less susceptible to aberrant market price movements, which may not be

7 reflective of the stock's long-term value.

8 A 13-week average stock price is short enough to contain data that

9 reasonably reflects current market expectations, but is not too short a period to

10 be susceptible to market price variations that may not be reflective of the

11 security's long-term value. Therefore, in my judgment, a 13-week average stock

12 price is a reasonable balance between the need to reflect current market

13 expectations and to capture sufficient data to smooth out aberrant market

14 movements.

15 I used the most recently paid quarterly dividend, as reported in the Value

16 Line Investment Survey. This dividend was annualized (multiplied by 4) and

17 adjusted for next year's estimated growth to produce the D_1 factor for use in

18 Equation 2 above.

19 Q **WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR DCF**

20 **MODEL?**

21 A There are several methods one can use in order to estimate the expected growth

22 in dividends. However, for purposes of determining the market required return

23 on common equity, one must attempt to estimate what the consensus of

1   investors believes the dividend or earnings growth rate will be, and not what an

2   individual investor or analyst may use to form individual investment decisions.

3   Security analysts' growth estimates have been shown to be more

4   accurate predictors of future returns than growth rates derived from historical

5   data.[1] Because they are more reliable estimates, and assuming the market, in

6   general, makes rational investment decisions, analysts' growth projections are

7   the most likely growth estimates that are built into stock prices.

8   For my constant growth DCF analysis, I have relied on a consensus, or

9   mean, of professional security analysts' earnings growth estimates as a proxy for

10   the investor consensus dividend growth rate expectations. I used the average of

11   three published sources of customer growth rate estimates, including Zack's

12   Detailed Analyst Estimates, Reuters and Thomson Financial. All consensus

13   analyst projections used were available on June 24, 2005, as reported on-line.

14   Each consensus growth rate projection is based on a survey of security analysts.

15   The consensus estimate is a simple arithmetic average of surveyed analysts'

16   earnings growth forecasts. A simple average of the growth forecasts gives equal

17   weight to all surveyed analysts' projections. It is problematic as to whether any

18   particular analyst's forecast is most representative of general market

19   expectations.   Therefore, a simple average, or arithmetic mean, of analysts'

20   forecasts is a good proxy for market consensus expectations. The growth rates I

21   used in my DCF analysis are shown on my Exhibit MPG-5, Pages 1 and 2.

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[1] See, for example, David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, Spring 1989.

1   Q   **WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?**

2   A   The results of my DCF analyses are shown on my Exhibit MPG-6 and Exhibit

3   MPG-7. My DCF cost of common equity estimates for the electric and gas proxy

4   groups are 9.0% and 9.4%, respectively.

5   Q   **DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR**

6   **DCF ANALYSIS?**

7   A   Yes. I believe my DCF analyses are based on sound investment and economic

8   parameters and reasonably reflect prevailing low cost, low inflation, capital

9   market.

10   Specifically, the consensus analysts' growth rates for my comparable

11   groups are 4.32% to 5.42%, respectively. These growth rates are reasonable, if

12   not highly conservative, for several reasons. First, these growth rates are

13   reasonably consistent with the consensus of economists' five and ten-year

14   projected GDP growth rate of 5.3%.[2] Growth rates that approximate the long-

15   term projected GDP growth rate represent the maximum sustainable growth rate

16   for electric utility companies. This is true because electric utility companies

17   cannot grow indefinitely at a growth rate that is faster than the economy in which

18   they sell their services. A utility's earnings are tied to its investment in utility

19   plant, and utility plant is typically made to meet growing customer demands.

20   Growing customer demand is, in turn, a function of the growth in the service area

21   economy. Hence, growth in the service area economy represents the maximum

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[2] Blue Chip Financial Forecast, March 10, 2005.

1   sustainable long-term growth for utility plant investment and earnings. I would

2   note, however, the Energy Information Administration has tracked historical GDP

3   growth in utility earnings and has noted that utility sales growth lags the overall

4   economy, EIA concludes that "... demand for electricity has been related to

5   economic growth, that positive relationship is expected to continue."[3]

6   Accordingly, the nominal GDP growth rate is a conservative high end, i.e., should

7   be considered the maximum, sustainable growth for electric utility companies in

8   the DCF model. Hence, the growth rates used in my DCF analysis are

9   conservatively high.

10   Second, I conclude the growth rates are conservative in comparison to

11   the GDP growth rate because the growth rate in utility dividends historically has

12   been dramatically lower than the nominal GDP growth rate, see my Exhibit

13   MPG-8. In fact, the dividend growth rate has been closer to that of inflation.

14   Currently, inflation projections over the next five and ten years by a consensus of

15   economists, as published in the Blue Chip Financial Forecast, is 2.5%.

16   Third, the fundamental factor supporting growth for these companies

17   indicates that they are at payout ratios and dividend to book ratios that would

18   support the sustainable dividend growth as projected by security analysts. For

19   example, the payout ratio for my electric group in 2004 is around 65%, and is

20   projected to be around 60% three to five years out. This percentage payout

21   allows the companies to retain adequate earnings to fund growth going forward.

22   Retaining approximately 40% of their earnings would support moderate growth,

23   again, growth that likely does not exceed the growth of the economy in which

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[3] EIA Annual Energy Outlook 2004 at 80.

1   they sell their services. Similarly, the payout ratio for the gas group is around

2   60% in 2004, and is projected to be around 52% three to five years out.

3   Also, the current and projected dividend to book ratios of my electric and

4   gas groups are approximately 6.5% to 7.0%. Hence, an authorized return on

5   equity in the range of 9% to 10% will support the current dividend and allow

6   earnings retention to fund internal future growth.

7   **RISK PREMIUM MODEL**

8   **Q   PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

9   A   This model is based on the principle that investors require a higher ROR to

10   assume greater risk. Common equity investments have greater risk than bonds

11   because bonds have more security of payment in bankruptcy proceedings than

12   common equity and the coupon payments on bonds represent contractual

13   obligations.   In contrast, companies are not required to pay dividends on

14   common equity, or to guarantee returns on common equity investments.

15   Therefore, common equity securities are considered to be more risky than bond

16   securities.

17   This risk premium model is based on two estimates of an equity risk

18   premium. The difference between the required return on common equity and the

19   yield on a bond is the risk premium. I estimated the risk premium on an annual

20   basis for each year over the period 1986 through 2004. The common equity

21   required returns were based on regulatory commission-authorized returns for

22   electric utility companies. These authorized returns are typically based on expert

23   witnesses' estimates of the contemporary investor required return.

1   The 1986-2004 time period was selected because over this period public

2   utility equities have consistently traded at a premium to book value.   This is

3   illustrated on my Exhibit MPG-9, where the market to book ratio since 1986 for

4   the electric utility industry was consistently above 1.0. Therefore, over this time

5   period, authorized returns were sufficient to support market prices that exceeded

6   book value. This is an indication that authorized returns on common equity

7   supported a utility's ability to issue additional common stock, without diluting

8   existing shares and having a detrimental impact on current shareholders.

9   The first estimate uses the difference between the required return on

10 utility common equity investments and Treasury bond yields. Based on this

11 analysis, as shown on my Exhibit MPG-10, the average indicated equity risk

12 premium of authorized electric utility common equity returns over U.S. Treasury

13 bond yields was 4.96%. Of the 19 observations, 12 indicated risk premiums fall

14 in the range of 4.4% to 5.7%. Since the risk premium can vary depending upon

15 market conditions and changing investor risk perceptions, I believe using an

16 estimated range of risk premiums is the best method to measure the current

17 required return on common equity under this methodology.

18   The second equity risk premium method is based on the difference

19 between regulatory commission authorized returns on common equity and

20 contemporary A-rated utility bond yields. As shown on my Exhibit MPG-11, the

21 average indicated equity risk premium of authorized electric utility common equity

22 returns over contemporary Moody's utility bond yields was 3.54% over the period

23 1986-2004. The equity risk premium estimates based on this analysis primarily

24 fall in the range of 3.0% to 4.0% over this time period.

1 Q **HOW DID YOU ESTIMATE PEF'S COST OF COMMON EQUITY WITH THIS**

2 **MODEL?**

3 A I added my estimated equity risk premium over Treasury yields to a projected

4 long-term Treasury bond yield. Blue Chip Financial Forecasts projects the 20-

5 year Treasury bond yield to be 5.5%, and the 10-year Treasury bond yield to be

6 5.1% (June 1, 2005 at 2). Using the projected 20-year bond yield of 5.5%, and

7 an equity risk premium of 4.4% to 5.7%, produces an estimated common equity

8 return in the range of 9.9% to 11.2%, with a mid-point estimate at 10.6%.

9 I next added my equity risk premium over utility bond yields to the current

10 13-week average yield on "A" rated utility bonds for the period ending June 17,

11 2005 of 5.58%. This current A" utility bond yield is developed on my Exhibit

12 MPG-12. Adding the utility bond equity premium of 3.0% to 4.0% to the "A" rated

13 bond yield of 5.57% produces a cost of equity in the range of 8.6% to 9.6%, with

14 a mid-point of 9.1%.

15 My risk premium analyses therefore produce a common equity return

16 estimate in the range of 9.1% to 10.6%, with a mid-point of 9.9%.

17 **CAPITAL ASSET PRICING MODEL**

18 Q **PLEASE DESCRIBE THE CAPM.**

19 A The CAPM method of analysis is based upon the theory that the market required

20 ROR for a security is equal to the risk-free ROR, plus a risk premium associated

21 with the specific security. This relationship between risk and return can be

22 expressed mathematically as follows:

1         $R_i = R_f + B_i \times (R_m - R_f)$ where:

2                $R_i =$ Required return for stock i
3                $R_f =$ Risk-free rate
4                $R_m =$ Expected return for the market portfolio
5                $B_i =$ Beta - Measure of the risk for stock;

6 The stock specific risk term in the above equation is beta. Beta represents the

7 investment risk that cannot be diversified away when the security is held in a

8 diversified portfolio. When stocks are held in a diversified portfolio, firm-specific

9 risks can be eliminated by balancing the portfolio with securities that react in the

10 opposite direction to firm-specific risk factors (e.g., business cycle, competition,

11 product mix and production limitations).

12   The risks that cannot be eliminated when held in a diversified portfolio are

13 nondiversifiable risks. Nondiversifiable risks are related to the market in general

14 and are referred to as systematic risks. Risks that can be eliminated by

15 diversification are regarded as nonsystematic risks. In a broad sense, systematic

16 risks are market risks, and nonsystematic risks are business risks. The CAPM

17 theory suggests that the market will not compensate investors for assuming risks

18 that can be diversified away. Therefore, the only risks that investors will be

19 compensated for are systematic or nondiversifiable risks. The beta is a measure

20 of the systematic or nondiversifiable risks.

21 **Q   PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**

22 A   The CAPM requires an estimate of the market risk-free rate, the company's beta,

23   and the market risk premium.

1   **Q**   **WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE**

2   **RATE?**

3   A   I used Blue Chip Financial Forecasts' projected 20-year Treasury bond yield of

4   5.5% (Blue Chip Financial Forecast, June 1, 2005 at 2).

5   **Q**   **WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN**

6   **ESTIMATE OF THE RISK-FREE RATE?**

7   A   Treasury securities are backed by the full faith and credit of the United States

8   government. Therefore, long-term Treasury bonds are considered to have

9   negligible credit risk. Also, long-term Treasury bonds have an investment

10   horizon similar to that of common stock. As a result, investor-anticipated long-

11   run inflation expectations are reflected in both common stock required returns

12   and long-term bond yields. Therefore, the nominal risk-free rate (or expected

13   inflation rate and real risk-free rate) included in a long-term bond yield is a

14   reasonable estimate of the nominal risk-free rate included in common stock

15   returns.

16   Treasury bond yields, however, do include risk premiums related to

17   unanticipated future inflation and interest rates. Therefore, a Treasury bond yield

18   is not a risk-free rate. Risk premiums related to unanticipated inflation and

19   interest rates are systematic or market risks. Consequently, for companies with

20   betas less than one, using the Treasury bond yield as a proxy for the risk-free

21   rate in the CAPM analysis can produce an overstated estimate of the CAPM

22   return.

1 Q **WHAT BETA DID YOU USE IN YOUR ANALYSIS?**

2 A I relied on the group average beta estimate for the comparable group. Group

3 average beta is more reliable than a single company beta. A group average beta

4 has stronger statistical parameters that better describe the systematic risk of the

5 group, than does an individual company beta. For this reason, a group average

6 beta will produce a more reliable return estimate.

7 I relied on The Value Line Investment Survey published beta for each of

8 the companies in my comparable groups. The betas for each of my comparable

9 groups are shown on my Exhibit MPG-13. The electric and gas group betas are

10 0.80 and 0.81, respectively. For this analysis, I used a beta estimate of 0.80 as a

11 reasonable proxy of betas for electric utilities similar to PEF.

12 Q **HOW DID YOU DERIVE YOUR MARKET PREMIUM ESTIMATE?**

13 A I derived two market premium estimates, a forward-looking estimate and one

14 based on a long-term historical average.

15 The forward-looking estimate was derived by estimating the expected

16 return on the market (S&P 500) and subtracting the risk-free rate from this

17 estimate. I estimated the expected return on the S&P 500 by adding an

18 expected inflation rate to the long-term historical arithmetic average real return

19 on the market. The real return on the market represents the achieved return

20 above the rate of inflation.

21 The Ibbotson and Associates' Stocks, Bonds, Bills and Inflation 2005

22 Year Book publication estimates the historical arithmetic average real market

23 return over the period 1926-2004 as 9.2%. A current five-year consensus

1   analyst inflation projection, as measured by the Consumer Price Index, is 2.5%

2   (Blue Chip Financial Forecasts, March 10, 2005 at 15). Using these estimates,

3   the expected market return is 11.9%. The market premium then is the difference

4   between the 11.9% expected market return, and my 5.5% risk-free rate estimate,

5   or 6.4%.

6   The historical estimate of the market risk premium was also estimated by

7   Ibbotson and Associates in the Stock, Bonds, Bills and Inflation, 2005 Year Book.

8   Over the period 1926 through 2004, Ibbotson's study estimated that the

9   arithmetic average of the achieved total return on the S&P 500 was 12.4%, and

10   the total return on long-term Treasury bonds was 5.8%, producing an indicated

11   equity risk premium of 6.6% (12.4% - 5.8% = 6.6%).

12   **Q   WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**

13   A   As shown on my Exhibit MPG-14, my CAPM estimated return on equity falls in

14   the range of 10.6% to 10.7%, with a mid-point of 10.7%.

15   **RETURN ON EQUITY SUMMARY**

16   **Q   BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON**

17   **EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON**

18   **EQUITY DO YOU RECOMMEND FOR PEF?**

19   A   Based on my analyses, I estimate an appropriate return on equity for PEF to be

20   9.8%.

TABLE 1

Return on Common Equity Summary

Description	Percent
Constant Growth DCF	9.2%
Risk Premium	9.9%
CAPM	10.7%

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1 My recommended return on equity of 9.8% is at the mid-point of my

2 estimated return on equity range for PEF of 9.2% to 10.3%. The high end of my

3 estimated range is based on the average of my risk premium and CAPM

4 analyses, and the low end of my estimated range is based on my DCF analyses.

5 Q **WHAT OVERALL RATE OF RETURN DO YOU RECOMMEND BE USED TO**

6 **SET PEF'S REVENUE REQUIREMENT IN THIS PROCEEDING?**

7 A My proposed capital structure and return on equity, along with PEF's proposed

8 embedded debt and preferred equity costs, are shown on my Exhibit MPG-2.

9 This capital structure and component costs produce a weighted average cost of

10 capital of 7.39%. I recommend this overall rate of return be used to set PEF's

11 revenue requirement in this proceeding.

12 Q **WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT**

13 **PEF'S CURRENT BOND RATING FROM S&P?**

14 A Yes. I have reached this conclusion by comparing the financial ratios for PEF

15 with my recommended return on equity, capital structure and depreciation

1   expense adjustments I describe later, to S&P's financial benchmark ratios for a

2   "BBB" rated utility with a business profile score of 5 - PEF's current rating.

3   **Q**   **PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS**

4   **IN ITS CREDIT RATING REVIEW.**

5   A   S&P evaluates a utility's credit rating based on an assessment of its financial and

6   business risks. A combination of financial and business risks equates to the

7   overall assessment of the Company's <u>total</u> credit risk exposure. S&P publishes a

8   matrix of financial ratios that defines the level of financial risk as a function of the

9   level of business risk.

10   S&P rates a utility's business risk based on a business profile score of 1,

11   lowest risk, up to 10, highest risk. Integrated electric utilities typically have a

12   business profile score from S&P of 4, 5 and 6. PEF's current business profile

13   score is 5.

14   For a business profile score of 5, S&P publishes ranges for three primary

15   financial ratios that is uses as guidance in its credit review for utility companies.

16   The three primary financial ratio benchmarks it relies on in its credit rating

17   process include: (1) funds from operations (FFO) to debt interest expense, (2)

18   FFO to total debt, and (3) total debt to total capital.

19   **Q**   **HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE**

20   **REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?**

21   A   I calculated each of S&P's financial ratios based on PEF's cost of service for

22   Florida retail operations. While Standard & Poor's would normally look at total

1   PEF, and Progress' consolidated financial ratios in its credit review process, my

2   investigation in this proceeding is to judge the reasonableness of my proposed

3   cost of service for rate setting in PEF's retail operations. Hence, I am attempting

4   to determine whether the rate of return and cash flow generation opportunity

5   reflected in my proposed retail rates for PEF will support its current bond rating

6   and financial integrity.

7 Q   **PLEASE DESCRIBE THE RESULTS OF THIS ANALYSIS.**

8 A   The S&P financial metric calculations for PEF's Florida retail operations are

9   developed on my Exhibit MPG-15. This exhibit contains 5 pages. On the first

10   page I show PEF's S&P financial matrix. As shown on this schedule, based on

11   my recommendations in this proceeding, PEF will be provided an opportunity to

12   produce a Funds From Operations (FFO) to debt interest expense of 4.0x. This

13   FFO to interest coverage ratio is at the high end of S&P's benchmark ratio range

14   for a BBB-rated utility company (with a business profile score of 5) of 2.8x to

15   3.8x. This indicates a very strong BBB rating to a weak "A" rating.

16   PEF's total debt ratio, including off-balance sheet debt obligations to total

17   capital is 52% This is toward the low end of S&P's BBB-rated utility range of 50%

18   to 60%, indicating a strong BBB rating.

19   Finally, PEF's retail operations FFO to total debt coverage would be 24%,

20   which is at the high end of S&P's financial metric range for a BBB-rated utility

21   company. Again, this indicates a strong BBB rating.

1 **Q   DID YOU REFLECT PEF'S CLAIMED OFF-BALANCE SHEET PPA**

2 **OBLIGATIONS IN YOUR FINANCIAL RATIO ANALYSIS?**

3 A   Yes, I used S&P's method of recognizing the PPA debt equivalence. This

4 consisted of discounting the PPA fixed obligations at a discount rate of 10%,

5 adjusted by my risk factor, and assuming an annual debt interest expense of

6 10% on the debt equivalent balance. PEF has estimated the off-balance sheet

7 debt equivalent of these PPA obligations using S&P's formula to be $757 million.

8 I relied on PEF's off-balance sheet debt estimate and assumed an annual debt

9 interest expense for PPA obligations of 10%.

10 **Q   WHAT DEPRECIATION EXPENSE DID YOU REFLECT IN THIS ANALYSIS?**

11 A   I reflected PEF's requested Florida retail depreciation expense, less my

12 proposed $85.2 million adjustment described in Volume 2 of my testimony.

13 **PEF'S RETURN ON COMMON EQUITY PROPOSAL**

14 **Q   WHAT RETURN ON COMMON EQUITY IS PEF REQUESTING IN THIS**

15 **PROCEEDING?**

16 A   PEF is requesting a return on equity of 12.8%. This return on equity is based on

17 the direct testimony of PEF witnesses Dr. James Vander Weide and Dr. Charles

18 J. Cicchetti. Dr. Vander Weide has applied various financial models to estimate

19 the current return on equity for PEF to be 12.3%. Dr. Cicchetti is recommending

20 a 50 basis point premium to the return on equity, thus raising PEF's requested

21 return to 12.8% from 12.3%. Dr. Cicchetti's proposed return adder is to reward

22 PEF for alleged superior management performance.

1 Q **HOW DID THE COMPANY ARRIVE AT ITS 12.8% RETURN ON EQUITY?**

2 A As shown below in Table 2, the Company's 12.8% return on equity was created

3 in essentially three steps. First, Dr. Vander Weide estimated a current market

4 required return on two utility risk proxy groups of 11.4%. Second, he proposes to

5 increase the proxy groups' return on equity of 11.4% up to 12.3% to reflect his

6 belief that PEF has greater financial risk than does his proxy groups. Finally, Dr.

7 Cicchetti proposes to increase the authorized return on equity by 50 basis points

8 to reflect his belief that PEF has exhibited superior management performance

9 and thereby deserves a return on equity reward.

TABLE 2

PEF's ROE Recommendation

Line	Description	Return	Revenue Requirement Amount (Millions)
1	Comparable Group Return	11.4%	
2	PEF Financial Risk Adjustment	0.9%	$ 40
3	PEF Management Reward	0.5%	$ 22

10 As shown above in Table 2, Dr. Vander Weide's proposal to increase

11 PEF's authorized return on equity by 90 basis points above the indicated return

12 of the proxy group increases PEF's claimed revenue deficiency by approximately

13 $40 million. Further, Dr. Cicchetti's proposal for a 50 basis point equity risk

14 premium increases the claimed revenue deficiency by approximately $22 million.

1   Hence, these two adjustments alone amount to over $62 million of the

2   claimed $206 million revenue deficiency, or approximately 30%. These return on

3   equity adjustments represent extraordinary requests by the Company and are out

4   of line with normal regulatory commission practice for determinations of fair

5   returns on equity. These proposals, in my opinion, represent a failure of PEF's

6   management to recognize the need to be a competitive supplier of utility services

7   to its customers. I will further address the impropriety of these proposed

8   adjustments below.

9 **Q** **WHY DO YOU RECOMMEND THE REJECTION OF DR. CICCHETTI'S**

10   **PROPOSED 50 BASIS POINT RETURN ON EQUITY PREMIUM REWARD**

11   **FOR SUPERIOR MANAGEMENT PERFORMANCE?**

12 **A** My colleague, Alan Chalfant, will address the improprieties of Dr. Cicchetti's

13   proposed equity return premium reward in his testimony. I will common on only

14   one aspect of Dr. Cicchetti's claim. Specifically, his basis that PEF should be

15   rewarded because it has not increased "base prices" since 1993 (at 39). This

16   claim, however, ignores important external factors that have played a significant

17   role in reducing PEF's cost of service and eliminated the need for a rate

18   increase. These external factors have nothing to do with management

19   performance.

20 **Q** **PLEASE DESCRIBE THESE EXTERNAL FACTORS THAT HAVE HELPED TO**

21   **REDUCE PEF'S COST OF SERVICE AND DELAYED A BASE RATE FILING.**

1 A The first and most significant factor relates to the tremendous reduction in capital

2 market costs that has been experienced over the last ten years. The reduction in

3 capital costs is clearly evident from a comparison of PEF's current embedded

4 cost of debt in this proceeding, compared to its embedded cost of debt in

5 previous rate proceedings.

6 PEF's embedded cost of debt in this proceeding is 5.73%. In its last rate

7 proceeding, which led to a settlement four year ago, PEF's embedded cost of

8 debt was 6.25%. In its 1988 rate case its embedded cost of debt was

9 approximately 9.5%.

10 For each one-percentage point reduction in PEF's cost of debt, its annual

11 debt interest expense is reduced by approximately $21 million based on the

12 amount of debt it is projecting for its 2006 test year. The four-percentage point

13 reduction in the embedded cost of debt since 1988 represents a reduction in cost

14 of service of approximately $84 million. Similarly, PEF's embedded cost of

15 preferred equity securities has also declined, as has its cost of common equity.

16 A second factor that has helped PEF avoid base rate increases was its

17 merger with Carolina Power & Light Company (now Progress Energy Carolina).

18 In its filing seeking permission for this merger, Progress identified several

19 synergies that would be created by the combination. The savings through these

20 merger synergies reduced PEF's cost of service and helped avoid base rate

21 increases. These synergistic savings were not the result of superior

22 management performance, but rather were created by the effect of the merger.

1 **Q** **IS DR. VANDER WEIDE'S PROPOSAL TO INCREASE PEF'S EQUITY**

2 **RETURN TO 12.3% FROM 11.4%, BASED ON HIS FINANCIAL RISK**

3 **ADJUSTMENT, REASONABLE?**

4 A No. PEF's total investment risk is composed of both financial and business risk.

5 Business risk is the risk the Company will be able to recover its financial

6 obligations and earn a fair return on equity due to variations in revenue,

7 operating expense control and factors affecting the revenue, including the service

8 area economy, regulatory management uncertainty, and customers' ability to

9 afford the utility's rates. In contrast, financial risk deals with the amount of

10 financial obligations the utility undertakes that must be satisfied before the

11 Company earns a return for common shareholders. A company with significant

12 financial leverage has significant financial risk, and a company with little to no

13 financial leverage has little to no financial risk. Dr. Vander Weide has only

14 examined PEF's financial risk in supporting the return on equity adjustment.

15 Consequently, he has not done a complete analysis of PEF's investment risk.

16 Dr. Vander Weide's assessment of PEF's financial risk, in comparison to

17 the other utilities, is incomplete. As clearly laid out in PEF's testimony, total

18 financial risk is composed of both on-balance sheet debt obligations and off-

19 balance sheet debt obligations. Dr. Vander Weide completely ignored the

20 differences in off-balance sheet financial obligations of PEF in relation to his

21 proxy groups. Hence, he has failed to do a comprehensive assessment of the

22 differences in financial risk between PEF and his proxy groups. Removing Dr.

23 Vander Weide's financial risk adjustment to the proxy group's market-required

24 return estimate would lower his recommended return from 12.3% down to 11.4%.

1   Finally, Dr. Vander Weide's assessment of differences in financial risk is

2 flawed for a second reason. Specifically, Dr. Vander Weide's financial risk

3 comparison is based on the market weighted capital structure for his two proxy

4 groups, and PEF's book capital structure. Dr. Vander Weide has failed to

5 recognize two important risk aspects. First, on an equal comparison basis,

6 PEF's book capital structure financial risk is actually lower than the financial risk

7 reflected in his two proxy groups' book capital structure. Second, Dr. Vander

8 Weide has not compared the market-based weight financial risk of PEF to the

9 market-based risk of his two proxy groups. Hence, Mr. Vander Weide's analysis

10 is critically flawed and produces unreasonable results.

11 Q   IS DR. VANDER WEIDE'S CURRENT MARKET REQUIRED RETURN ON

12   EQUITY OF 11.4% FOR HIS TWO PROXY GROUPS A REASONABLE

13   RETURN ON EQUITY ESTIMATE FOR PEF?

14 A   No. Dr. Vander Weide supports his return on equity based on a discounted cash

15   flow analysis, an ex-ante and ex-post risk premium analysis, and a capital asset

16   pricing model. These models, as he has used them, develop a common equity

17   return of 11.4%. Dr. Vander Weide applies these models to a proxy group of

18   electric companies and natural gas companies to develop his return estimates.

19   His return on equity results are shown below in Table 3, Column 1. In Column 2,

20   I show my adjustments to Dr. Vander Weide's analyses, which reduce his equity

21   return from 11.4% to 10%. Hence, Dr. Vander Weide's own analyses support my

22   recommended equity return for PEF. My changes include removing

1   unreasonable adjustments he made to the results in his analyses, and reflecting

2   observable market data, rather than his higher projections.

TABLE 3

Dr. Vander Weide's Return on Common Equity Summary

Description	Dr. Vander Weide's Return (1)	As Adjusted (2)
DCF – Electric	9.40%	9.00%
DCF – Gas	9.90%	9.40%
Ex-Ante Risk Premium	11.50%	10.15%
Ex-Post Risk Premium – S&P 500	12.14%	-
Ex-Post Risk Premium – S&P Utilities	11.10%	9.80%
CAPM	11.8% - 12.00%	11.00%
Average	12.30%	9.90%

3   **Q   PLEASE DESCRIBE THE ISSUES YOU HAVE WITH DR. VANDER WEIDE'S**

4   **DCF ANALYSIS.**

5   A   The results of Dr. Vander Weide's DCF analysis are overstated for principally two

6   reasons. First, he reflects the quarterly compounding of dividend income in

7   developing his DCF analysis. A quarterly compounding model overstates the

8   DCF return because it provides investors an opportunity to receive dividend

9   reinvestment returns twice – first through the authorized return on equity, and a

10   second time after dividends are declared, paid and reinvested by investors.

11   Second, Dr. Vander Weide's DCF returns are overstated because he

12   adds a flotation cost adjustment that he has failed to prove is a direct cost to PEF

13   of issuing common equity. Hence, he has increased the return on equity to

1   provide recognition of an expense that has not been shown to be a known and

2   measurable expense for PEF.

3   Q   **PLEASE EXPLAIN WHY USING A QUARTERLY DCF MODEL OVERSTATES**

4   **A FAIR RETURN FOR PEF IN THIS PROCEEDING.**

5   A   As noted above, a quarterly DCF model provides investors an opportunity to earn

6   dividend reinvestment returns twice. First through the authorized return on

7   common equity, and a second time when dividends are actually paid to investors

8   and reinvested.

9   To illustrate this double dip on reinvestment return, I will expand on an

10   example in Dr. Vander Weide's testimony. Dr. Vander Weide supported his

11   quarterly compounding DCF model using the analogy that the quarterly

12   compounding of return is comparable to the yield to maturity on bonds. If this

13   analogy is carefully studied it can clearly be shown that use of a quarterly

14   compounded DCF model overstates the fair return on common equity for

15   ratemaking purposes.

16   Q   **PLEASE ELABORATE.**

17   A   Consider the interest cost to the utility when it issues a bond. The utility's cost of

18   the bond is based on its semi-annual coupon payments to investors. If a utility

19   issues a bond at face value ($1,000) at a 6% coupon, it will pay $30 coupons

20   every six months to investors for an annual cost to the utility of $60, or 6%.

21   However, when the marketplace values that bond, it will price the bond at a yield

22   to maturity of 6.1% to reflect the investors' ability to reinvest the semi-annual

1   coupon payments. Hence, from the utility's perspective, the bond costs 6%

2   because the utility's cost is a $30 coupon payment every six months.

3   However, the annual expected return to the investors from receiving $30

4   of semi-annual coupon payments is 6.1%. The investors receive the two semi-

5   annual $30 coupon payments, and are able to invest the initial $30 coupon

6   payments received at the end of month six for the remaining six months of the

7   year and earn an additional $0.90 return ($30 * (6% ÷ 2)). Hence, at the end of

8   the first year, the investor in the bond will receive $6.00 from the utility, and $0.90

9   from reinvesting the first semi-annual coupon payment. Thus, while the cost of

10   the bond to the utility is 6%, the yield to maturity on the bond, or expected return

11   to investors, is 6.1%.

12   This analogy holds for the required common equity return. The cost to

13   the utility relates to the cost of making the quarterly dividend payments and

14   achieving the expected growth. The utility does not compensate the investors for

15   the additional return they will receive by reinvesting the quarterly dividend

16   payments. Hence, the quarterly DCF model overstates the utility's cost of

17   common equity.

18 **Q** **IS DR. VANDER WEIDE'S ADJUSTMENT FOR A COMMON STOCK**

19   **FLOTATION EXPENSE REASONABLE?**

20 A   No. Dr. Vander Weide estimates a flotation expense adjustment based on a

21   review of other companies' typical flotation cost. He has not shown that the

22   results of his analysis are representative of flotation expenses that PEF has

23   incurred and should recover from customers. Indeed, Dr. Vander Weide has not

1   demonstrated whether there are any flotation costs incurred by PEF that have

2   not been fully recovered from customers in previous rate proceedings, or rate

3   settlements, concerning acquisitions and other activities. Hence, his proposed

4   flotation cost adjustment reflects compensation for expenses that have not been

5   shown to be reflective of PEF's cost of service. Indeed, these expenses are

6   simply not known and measurable expenses. Therefore, in order to preserve the

7   integrity of the ratemaking process, this adjustment should be rejected.

8   Q   **HOW WOULD DR. VANDER WEIDE'S DCF ESTIMATES CHANGE BASED**

9   **ON HIS DATA, EXCLUDING THE QUARTERLY COMPOUNDING AND THE**

10   **ERRONEOUS FLOTATION COST ADJUSTMENT?**

11   A   As shown on the attached Exhibit MPG-16, Dr. Vander Weide's electric and gas

12   DCF would be reduced to 9.0% and 9.4%, respectively.

13   Q   **PLEASE DESCRIBE DR. VANDER WEIDE'S EX-ANTE RISK PREMIUM**

14   **ANALYSIS.**

15   A   Based on a discounted cash flow analysis of a group of electric and gas

16   companies in comparison to the contemporary A-rated utility bond yield, Dr.

17   Vander Weide estimates a risk premium for electric and gas companies of 4.3%

18   and 4.69%, respectively. He then adds these equity risk premiums to his

19   forecasted yield on A-rated utility bonds of 6.94%. As a result, Dr. Vander Weide

20   estimates a return on common equity in the range of 11.3% to 11.6%, with a mid-

21   point of 11.5%.

1 Q IS DR. VANDER WEIDE'S EX-ANTE RISK PREMIUM ANALYSIS

2 REASONABLE?

3 A No. Dr. Vander Weide's risk premium analysis overstates the cost of equity

4 because he uses a projected A-rated utility bond yield of 6.94% rather than the

5 current yield. The current A-rated utility bond yield is approximately 5.6%. Dr.

6 Vander Weide's projected yield of 6.94% is a 1.34 percentage point increase to

7 the prevailing market rate for single-A utility bonds. Using the more appropriate

8 current yield would reduce Dr. Vander Weide's ex-ante risk premium from 11.5%

9 to 10.15%.

10 Q IS IT REASONABLE TO USE A PROJECTED A-RATED UTILITY BOND

11 YIELD AS DR. VANDER WEIDE HAS DONE IN HIS RISK PREMIUM

12 STUDIES?

13 A Projected bond yields are highly problematic, especially if the projection is not

14 based on an independent source that may reflect the consensus of investors'

15 expectations. Dr. Vander Weide's projected bond yield is not based on an

16 independent source, but rather is based on his own projections supporting his

17 inflated return on equity in this proceeding. Further, Dr. Vander Weide's

18 projected A-rated utility bond yield has not been shown to be reasonably

19 reflective of any market participant other than possibly himself. Consequently,

20 Dr. Vander Weide's utility bond yield projections are unreliable and a biased

21 estimate.

22 Further, Treasury bond yields and corporate bond yields are projected to

23 increase relative to current levels. However, I would note there is significant

1   uncertainty with respect to this expectation. Specifically, Treasury bond yields

2   have been projected to increase significantly for several years now. However,

3   those projected increases to prevailing spot yields has not been realized over the

4   last several years. Hence, economic projections for increased long-term yield

5   rates are highly uncertain and are not an appropriate means by themselves to

6   support a utility's authorized return on equity in a current rate base. This is true

7   because if interest rates do ultimately increase over time, utilities are free to seek

8   rate relief and request returns on equity that reflect higher capital costs.

9   However, if interest rates do not increase, as they have failed to do over the last

10   few years, then authorizing a return on equity based on today's current yields,

11   along with some consideration of projected increases to those yields, as I have

12   captured in my return on equity estimates, provides a fair and balanced means of

13   estimating a fair return on equity. Dr. Vander Weide's method does not meet this

14   standard.

15   **Q   PLEASE DESCRIBE DR. VANDER WEIDE'S EX-POST RISK PREMIUM**

16   **ANALYSIS.**

17   A   Dr. Vander Weide's ex-post risk premium analysis consists of reviewing the

18   historical achieved returns on common equity investments from two proxy

19   indexes, relative to the achieved return on investing in Moody's A-rated utility

20   bonds. Dr. Vander Weide estimates an equity risk premium in the range of

21   4.16% to 5.27%. The 4.16% equity risk premium is based on the achieved return

22   of the S&P utility stock index relative to the achieved return on Moody's A-rated

23   utility bonds. The 5.27 percentage point equity risk premium is based on the

1   achieved return of the S&P 500 relative to Moody's A-rated utility bonds. He

2   adds these equity risk premiums to his projected A-rated utility bond yield of

3   6.94%, and then adds 25 basis points for a flotation cost adjustment. With this

4   method he estimates a return on equity for PEF of 11.9%.

5 **Q   DOES DR. VANDER WEIDE'S EX-POST RISK PREMIUM ANALYSIS**

6 **OVERSTATES A FAIR RETURN FOR PEF?**

7 A   Yes. Both of Dr. Vander Weide's ex-post risk premium analysis should be

8   rejected.

9 **Q   PLEASE EXPLAIN.**

10 A   His equity risk premium based on a comparison of the S&P 500 to A-rated utility

11   bond yields should be rejected because it does not measure an appropriate risk-

12   adjusted return for PEF. Dr. Vander Weide has not shown any evidence that the

13   S&P 500 is an appropriate proxy index for PEF's investment risk. Indeed, his

14   CAPM analysis is an implicit admission that PEF has a lower risk than the overall

15   market. Hence, the equity risk premium to the S&P 500 overstates the equity

16   risk premium for PEF.

17   His second ex-post analysis also is flawed. It compares the S&P utilities

18   index to the yield on utility bonds. The S&P utilities index includes companies

19   that may not be risk comparable to PEF. Dr. Vander Weide has not shown that

20   this index is an appropriate risk proxy for PEF. Nevertheless, applying the equity

21   risk premium derived in this analysis to the current A-rated utility bond yield of

22   5.6%, rather than Dr. Vander Weide's exaggerated projected A-rated utility bond

1   yield of 6.9%, would produce an ex-post risk premium cost projection of about

2   9.8%. Hence, this analysis, excluding flotation cost adjustments for the same

3   reasons discussed above, would support my return on equity recommendation

4   for PEF.

5   Q   **PLEASE DESCRIBE DR. VANDER WEIDE'S CAPM ANALYSIS.**

6   A   Dr. Vander Weide relies on a projected Treasury bond yield of 5.7%, a beta

7   estimate for utility companies of 0.81, and estimates of the market risk premium

8   of 7.2% and 8.45%. With these parameters, and a 25 basis point flotation cost

9   adjustment, Dr. Vander Weide estimates a CAPM return in the range of 11.8% to

10   12.0%.

11   Q   **IS DR. VANDER WEIDE'S CAPM ANALYSIS REASONABLE?**

12   A   No. Dr. Vander Weide's CAPM result is overstated, largely because his

13   estimated risk premium for the marketplace is overstated and not supported.

14   First, his market risk premium estimate is based on Ibbotson & Associates'

15   market return relative to Treasury bond income returns. I reject this method of

16   estimating the market risk premium. Ibbotson & Associates estimates this

17   market risk premium by looking at the historical achieved return on common

18   equity, relative to the contemporary utility bond yields. Specifically, Ibbotson &

19   Associates excludes returns investors receive due to changes in bond prices

20   over time. This method of estimating market to risk premium is unreasonable for

21   two reasons. First, it is not possible to invest in utility bonds without experiencing

22   changes in the bond market value over time. Hence, the market risk premium is

1   overstated because it does not reflect significant gains investors have received

2   by investing in Treasury bonds as a result of reductions in interest rates. These

3   declines in interest rates likely did have a positive impact on the returns earned

4   on common stocks.

5   Second, the analysis is, on its face, inappropriate. Specifically, the

6   common equity return is based on a historical achieved return on utility stocks.

7   The Treasury bond yields are based on income returns based on the bond yield

8   returns at any given point. Hence, the yield is a forward-looking return estimate.

9   Consequently, the risk premium is based on a historical equity return, and a

10   forward-looking bond return. This is an inconsistent apples to oranges method of

11   estimating risk premium.

12   Dr. Vander Weide estimates a second CAPM analysis and market risk

13   premium based on a DCF return for the S&P 500 of 13.15%, less his risk free

14   rate estimate of 5.7%. This implies a market risk premium of 7.45%. Dr. Vander

15   Weide's estimated return of 13.15% reflects his quarterly compounding DCF

16   model assumption, which overstates DCF return estimates for the reasons

17   discussed above. Eliminating this double-counting assumption in the DCF cost

18   estimate would reduce his market risk premium and reduce his CAPM estimate.

19   Further, a projected return on the market of 13.15% seems highly problematic, if

20   not overly optimistic, given today's very low cost capital market and historical

21   tendency of the S&P 500 to earn a return of around 12%, much lower than Dr.

22   Vander Weide's projections.

23   In any event, eliminating the flotation cost adjustment of 0.25% from Dr.

24   Vander Weide's risk premium analysis, and relying on a more reasonable, yet

1 conservative, market risk premium estimate of 6.6% (my high end estimate

2 described above), would support a CAPM return estimate of approximately

3 11.0%, as described above.

4 **Q** **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

5 A Yes.

Qualifications of Michael Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Michael P. Gorman. My business mailing address is P. O. Box 412000, 1215

3 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

4 **Q PLEASE STATE YOUR OCCUPATION.**

5 A I am a consultant in the field of public utility regulation and a managing principal

6 with Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK**

8 **EXPERIENCE.**

9 A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from

10 Southern Illinois University, and in 1986, I received a Masters Degree in

11 Business Administration with a concentration in Finance from the University of

12 Illinois at Springfield. I have also completed several graduate level economics

13 courses.

14 In August of 1983, I accepted an analyst position with the Illinois

15 Commerce Commission (ICC). In this position, I performed a variety of analyses

16 for both formal and informal investigations before the ICC, including: marginal

17 cost of energy, central dispatch, avoided cost of energy, annual system produc-

18 tion costs, and working capital. In October of 1986, I was promoted to the

19 position of Senior Analyst. In this position, I assumed the additional respon-

20 sibilities of technical leader on projects, and my areas of responsibility were

21 expanded to include utility financial modeling and financial analyses.

1   In 1987, I was promoted to Director of the Financial Analysis Department.

2   In this position, I was responsible for all financial analyses conducted by the staff.

3   Among other things, I conducted analyses and sponsored testimony before the

4   ICC on rate of return, financial integrity, financial modeling and related issues. I

5   also supervised the development of all Staff analyses and testimony on these

6   same issues. In addition, I supervised the Staff's review and recommendations

7   to the Commission concerning utility plans to issue debt and equity securities.

8   In August of 1989, I accepted a position with Merrill-Lynch as a financial

9   consultant. After receiving all required securities licenses, I worked with indi-

10   vidual investors and small businesses in evaluating and selecting investments

11   suitable to their requirements.

12   In September of 1990, I accepted a position with Drazen-Brubaker &

13   Associates, Inc. In April 1995 the firm of Brubaker & Associates, Inc. (BAI) was

14   formed. It includes most of the former DBA principals and Staff. Since 1990, I

15   have performed various analyses and sponsored testimony on cost of capital,

16   cost/benefits of utility mergers and acquisitions, utility reorganizations, level of

17   operating expenses and rate base, cost of service studies, and analyses relating

18   industrial jobs and economic development. I also participated in a study used to

19   revise the financial policy for the municipal utility in Kansas City, Kansas.

20   At BAI, I also have extensive experience working with large energy users

21   to distribute and critically evaluate responses to requests for proposals (RFPs)

22   for electric, steam, and gas energy supply from competitive energy suppliers.

23   These analyses include the evaluation of gas supply and delivery charges,

24   cogeneration and/or combined cycle unit feasibility studies, and the evaluation of

25   third-party asset/supply management agreements. I have also analyzed

1   commodity pricing indices and forward pricing methods for third party supply

2   agreements. Continuing, I have also conducted regional electric market price

3   forecasts.

4   In addition to our main office in St. Louis, the firm also has branch offices

5   in Phoenix, Arizona; Chicago, Illinois; Corpus Christi, Texas; and Plano, Texas.

6   **Q   HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

7   A   Yes. I have sponsored testimony on cost of capital, revenue requirements, cost

8   of service and other issues before the regulatory commissions in Arizona,

9   Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Michigan, Missouri,

10   New Mexico, New Jersey, Oklahoma, Oregon, South Carolina, Tennessee,

11   Texas, Utah, Vermont, West Virginia, Wisconsin, Wyoming, and before the

12   provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also

13   sponsored testimony before the Board of Public Utilities in Kansas City, Kansas;

14   presented rate setting position reports to the regulatory board of the municipal

15   utility in Austin, Texas, the St. Louis Metropolitan Sanitation District, and Salt

16   River Project, Arizona, on behalf of industrial customers; and negotiated rate

17   disputes for industrial customers of the Municipal Electric Authority of Georgia in

18   the LaGrange, Georgia district.

19   **Q   PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR**
20   **ORGANIZATIONS TO WHICH YOU BELONG.**

21   A   I earned the designation of Chartered Financial Analyst (CFA) from the

22   Chartered Financial Analyst Society. The CFA charter was awarded after

23   successfully completing three examinations which covered the subject areas of

1   financial accounting, economics, fixed income and equity valuation and profes-

2   sional and ethical conduct. I am a member of the St. Louis CFA Society.

MPG:cs/8383/69404

PROGRESS ENERGY FLORIDA, INC.

Billing Adjustments as a Percent of Total Sales of Electricity

Line	Description	Projected Test Year Ended 12/31/2006		Prior Year Ended 12/31/2005		Historical Year Ended 12/31/2004	
		Amount	Percent	Amount	Percent	Amount	Percent
		(1)	(2)	(3)	(4)	(5)	(6)
1	Fuel & Capacity Cost	$2,030,649	53.1%	$2,129,600	55.8%	$1,774,925	54.1%
2	Conservation (ECCR)	65,961	1.7%	61,936	1.6%	60,419	1.8%
3	Environmental (ECRC)	27,305	0.7%	48,418	1.3%	20,790	0.6%
4	Total Adjustments	2,123,915	55.5%	2,239,954	58.7%	1,856,134	56.6%
5	Total Sales of Electricity	$3,827,499		$3,816,490		$3,280,758	

Source:
Column 1 - MFR Section C, Schedule C-2, page 1.
Column 3 - MFR Section C, Schedule C-2, page 4.
Column 5 - MFR Section C, Schedule C-1, page 6.

Progress Energy Florida

Capital Structure

Line	Class of Capital	Total per Books (1)	Specific Adjustments (2)	Allocation (3)	Pro-Rate Adjustments (4)	System Adjustments (5)	Jurisdictional Factor (6)	Jurisdictional Capital Structure (7)	Ratio (8)	Cost Rate (9)	Weighted Cost Rate (10)
1	Common Equity	$ 2,715,814	$ 8,094	49.68%	$ (8,126)	$ 2,715,782	74.93%	$ 2,034,936	49.95%	9.80%	4.89%
2	Preferred Stock	$ 33,497	$ -	0.61%	$ (100)	$ 33,397	74.99%	$ 25,044	0.61%	4.51%	0.03%
3	Long Term Debt - Fixed	$ 2,131,302	$ 12,210	38.99%	$ (6,377)	$ 2,137,135	75.00%	$ 1,602,851	39.34%	5.73%	2.25%
4	Short Term Debt	$ 72,288	$ (38,652)	1.32%	$ (216)	$ 33,420	75.25%	$ 25,148	0.62%	4.04%	0.02%
	Customer Deposits	$ -	$ -		$ -						
5	Active	$ 136,401	$ -	2.50%	$ (408)	$ 135,993	74.99%	$ 101,981	2.50%	5.92%	0.15%
6	Inactive	$ -	$ -		$ -	$ -		$ -	0.00%		
	Investment Tax Credit	$ -	$ -		$ -						
7	Post 70 Total	$ 26,572	$ 1,587	0.49%	$ (80)	$ 28,079					
8	Equity	$ -	$ -		$ -		74.98%	$ 11,760	0.29%	9.74%	0.03%
9	Debt	$ -	$ -		$ -		74.98%	$ 9,294	0.23%	5.43%	0.01%
10	Deferred IncomeTaxes	$ 407,236	$ 6,593	7.45%	$ (1,218)	$ 412,611	74.99%	$ 309,400	7.59%		
11	FAS 109 D/T -Net	$ (56,547)	$ (5,098)	-1.03%	$ 169	$ (61,476)	74.97%	$ (46,088)	-1.13%		
12	Total	$ 5,466,563	$ (15,266)	100.00%	$ (16,356)	$ 5,434,941	74.96%	$ 4,074,327	100%		7.39%

Progress Energy Florida

Specific Adjustments

Line	Class of Capital	Description of Specific Adjustments	Test Year 2006 (1)
1	Common Equity	Neutralize Common Equity - CR3 Nuclear Outage	$ -
2		Non-Utility Property(Net)	$ 8,094
3		Imputted Equity for off-balance sheet adjustments for PP obligations	$ -
4		**Subtotal Common Equity**	$ 8,094
5	Long-term Debt Fixed Rate	Remove Sebring Long Term Debt	$ (7,277)
6		Neutralize Common Equity - CR3 Nuclear Outage	$ -
7		Remove Tiger Bay Retail LT Debt	
8		Convert to Daily Wighted Average Balance	
9		Offset Accumulated Deferred Income Taxes	$ 19,487
10		**Subtotal Long Term Debt Fixed Rate**	$ 12,210
11	Short-term Debt Variable Rate	Offset Accumulated Deferred Income Taxes	
12		Convert to Daily Wighted Average Balance	
13		Remove AFUDC Short-term Debt	
14		Unrecovered Fuel	$ (38,652)
15		**Subtotal Short-term Variable Rate**	$ (38,652)
16	Deferred Income Taxes	Nuclear Decommissioning	$ 33,908
17		Direct Assignment of Wholesale Depreciation	$ 115,545
18		Remove Effects of ARO	$ (7,829)
19		Remove Effects of Storm Costs	$ (137,563)
20		Overlay Adjustmnts	$ 2,532
21		**Subtotal Deferred Income Taxes**	$ 6,593
22	Deferred Income Taxes - FAS 109	Adjust to FPSC Calculated Balance of FAS 109	$ (5,098)
23		Adjust to FPSC Calculated Balance of Accumulated Deferred ITC	$ 1,587
24		**Total Spesific Adjustments**	$ (15,266)

Progress Energy Florida

Comparable Group - Electric Utilities

Line	Electric Utility	Bond Ratings S&P (1)	Bond Ratings Moody's (2)	Business Position Rating[3] (3)	2004 Common Equity Ratios Value Line[1] (4)	2004 Common Equity Ratios C.A. Turner[2] (5)
1	Alliant Energy	BBB+	A3	6	51%	48%
2	Ameren Corp.	A-	A3	5	53%	49%
3	Cinergy Corp.	BBB+	Baa2	6	49%	47%
4	Consolidated Edison	A	A2	2	51%	48%
5	Constellation Energy	BBB+	Baa1	7	49%	48%
6	Dominion Resources	BBB+	Baa1	7	42%	38%
7	DTE Energy	BBB	Baa2	6	43%	40%
8	Duke Energy	BBB	Baa1	7	49%	44%
9	Energy East Corp.	BBB+	Baa2	3	41%	41%
10	Entergy Corp.	BBB	Baa3	6	53%	49%
11	FirstEnergy Corp.	BBB-	Baa3	6	45%	43%
12	FPL Group	A	A2	6	49%	45%
13	Great Plains Energy	BBB	Baa2	7	53%	46%
14	Hawaiian Electric	BBB+	Baa1	6	51%	28%
15	MDU Resources	A-	A3	7	65%	64%
16	Northeast Utilities	BBB	Baa2	5	34%	31%
17	NSTAR	A	A2	1	40%	33%
18	OGE Energy	BBB+	Baa1	6	47%	44%
19	Pepco Holdings	BBB+	Baa2	5	41%	37%
20	Pinnacle West Capital	BBB	Baa2	6	53%	49%
21	PPL Corp	BBB	Ba1	7	38%	35%
22	Progress Energy	BBB	Baa2	6	44%	41%
23	Puget Energy Inc.	BBB-	Ba1	4	39%	40%
24	SCANA Corp.	A-	A3	4	43%	41%
25	Sempra Energy	BBB+	Baa1	7	53%	50%
26	Southern Co.	A	A3	4	44%	41%
27	Vectren Corp.	A-	Baa2	4	51%	47%
28	Wisconsin Energy	BBB+	A3	5	43%	42%
29	WPS Resources	A	A1	5	52%	50%
30	Xcel Energy Inc.	BBB	Baa1	5	44%	34%
31	**AVERAGE**	**BBB+**	**Baa1**	**5**	**47%**	**43%**
32	Progress Energy Florida	BBB	A3	5	54%[4]	49%[4]

Sources:
[1] The Value Line Investment Survey, March 4, April 1, May 13, June 3 &17, 2005.
[2] C.A. Turner Utility Report; June, 2005.
[3] U.S. Utilities and Power Ranking List, March 05, 2005.
[4] MRF, Schedule D-2, Page 1.

Progress Energy Florida

Comparable Group - Gas Utility

Line	Gas Utility	Bond Ratings S&P (1)	Moody's (2)	Business Position Rating[3] (3)	2004 Common Equity Ratios Value Line[1] (4)	C.A. Turner[2] (5)
1	AGL Resources	A-	A3	4	46%	46%
2	Atmos Energy	BBB	Baa3	4	57%	42%
3	Equitable Resources	A-	A2	6	59%	42%
4	KeySpan Corp.	A	A3	4	47%	48%
5	New Jersey Resources	A+	Aa3	2	60%	55%
6	NICOR Inc.	AA	Baa1	3	60%	59%
7	Northwest Natural Gas	A+	A3	2	54%	54%
8	ONEOK, Inc.	BBB+	Baa1	6	54%	41%
9	Peoples Energy	A-	A3	5	49%	49%
10	Piedmont Natural Gas	A	A3	2	56%	52%
11	Questar Corp.	A-	A2	6	61%	59%
12	Southwest Gas	BBB-	Baa2	3	36%	36%
13	WGL Holdings Inc.	AA-	A2	3	57%	57%
14	**AVERAGE**	**A**	**A3**	**4**	**54%**	**49%**
15	Progress Energy Florida	BBB	A3	5	54%[4]	49%[4]

Sources:

[1] The Value Line Investment Survey, dated June 17, 2005.

[2] C.A. Turner Utility Report; June, 2005.

[3] U.S. Utilities and Power Ranking List, March 05, 2005.

[4] MRF, Schedule D-2, Page 1.

Progress Energy Florida

Growth Rate Estimates - Electric Group

Line	Electric Utility	Zacks Estimated Growth %[1] (1)	Number of Estimates (2)	Reuters Estimated Growth %[2] (3)	Number of Estimates (4)	Thomson Estimated Growth %[3] (5)	Number of Estimates (6)	AVG of Growth Rates (7)
1	Alliant Energy	4.00%	2	3.25%	4	3.25%	4	3.50%
2	Ameren Corp.	4.92%	6	4.36%	7	3.36%	7	4.21%
3	Cinergy Corp.	4.50%	10	4.50%	8	4.50%	8	4.50%
4	Consolidated Edison	3.00%	7	3.00%	8	2.67%	6	2.89%
5	Constellation Energy	9.78%	9	10.14%	7	9.43%	7	9.78%
6	Dominion Resources	6.33%	12	6.44%	9	5.57%	7	6.11%
7	DTE Energy	4.60%	5	4.50%	6	4.20%	5	4.43%
8	Duke Energy	6.09%	11	5.83%	12	4.92%	13	5.61%
9	Energy East Corp.	5.00%	4	3.33%	3	3.75%	4	4.03%
10	Entergy Corp.	7.00%	9	5.71%	7	6.89%	3	6.53%
11	FirstEnergy Corp.	4.33%	6	4.43%	7	4.20%	5	4.32%
12	FPL Group	5.33%	12	4.67%	9	4.78%	9	4.93%
13	Great Plains Energy	3.00%	3	2.95%	6	3.00%	4	2.98%
14	Hawaiian Electric	3.50%	3	2.90%	5	2.90%	5	3.10%
15	MDU Resources	7.67%	1	8.00%	4	8.00%	4	7.89%
16	Northeast Utilities	4.50%	4	4.20%	5	4.50%	4	4.40%
17	NSTAR	4.75%	4	4.25%	4	4.33%	3	4.44%
18	OGE Energy	3.50%	2	3.00%	3	3.00%	3	3.17%
19	Pepco Holdings	4.40%	5	3.86%	7	4.00%	6	4.09%
20	Pinnacle West Capital	5.20%	5	5.00%	4	4.50%	4	4.90%
21	PPL Corp	5.33%	9	5.10%	10	5.11%	9	5.18%
22	Progress Energy	3.83%	9	3.98%	8	3.98%	9	3.93%
23	Puget Energy Inc.	4.80%	5	5.13%	8	4.00%	4	4.64%
24	SCANA Corp.	4.57%	7	4.40%	5	4.50%	6	4.49%
25	Sempra Energy	5.42%	6	6.80%	5	6.00%	4	6.07%
26	Southern Co.	4.50%	12	4.73%	11	4.80%	10	4.68%
27	Vectren Corp.	5.00%	5	6.67%	3	4.00%	1	5.22%
28	Wisconsin Energy	6.14%	7	6.25%	8	6.20%	5	6.20%
29	WPS Resources	4.50%	2	4.33%	3	4.33%	3	4.39%
30	Xcel Energy Inc.	4.17%	6	4.22%	9	3.33%	6	3.91%
31	**AVERAGE**	**4.99%**	**6**	**4.86%**	**7**	**4.60%**	**6**	**4.82%**

Sources:

[1] www.zacksadvisors.com, Detailed Research.

[2] www.investor.reuters.com, Earnings Estimates.

[3] http://ec.thomsonfn.com, Earnings Estimates.

Progress Energy Florida

Growth Rate Estimates - Gas Group

Line	Gas Utility	Zacks Estimated Growth %[1] (1)	Number of Estimates (2)	Reuters Estimated Growth %[2] (3)	Number of Estimates (4)	Thomson Estimated Growth %[3] (5)	Number of Estimates (6)	AVG of Growth Rates (7)
1	AGL Resources	4.67%	6	4.29%	7	4.33%	6	4.43%
2	Atmos Energy	5.29%	7	5.39%	7	6.13%	4	5.60%
3	Equitable Resources	9.70%	6	10.20%	5	10.25%	4	10.05%
4	KeySpan Corp.	2.75%	2	3.90%	5	3.38%	4	3.34%
5	New Jersey Resources	6.00%	4	5.20%	5	5.33%	3	5.51%
6	NICOR Inc.	2.25%	2	2.60%	4	2.17%	3	2.34%
7	Northwest Natural Gas	5.13%	4	4.92%	6	5.75%	2	5.27%
8	ONEOK, Inc.	6.88%	4	7.75%	4	7.13%	4	7.25%
9	Peoples Energy	4.00%	3	4.50%	4	4.00%	1	4.17%
10	Piedmont Natural Gas	4.84%	7	4.89%	7	4.10%	2	4.61%
11	Questar Corp.	8.78%	4	9.17%	6	8.70%	5	8.88%
12	Southwest Gas	6.00%	1	4.38%	3	5.00%	1	5.13%
13	WGL Holdings Inc.	4.00%	5	3.91%	7	3.80%	5	3.90%
14	**AVERAGE**	**5.41%**	**4**	**5.47%**	**5**	**5.39%**	**3**	**5.42%**

Sources:

[1] www.zacksadvisors.com, Detailed Research.

[2] www.investor.reuters.com, Earnings Estimates.

[3] http://ec.thomsonfn.com, Earnings Estimates.

Progress Energy Florida

Constant Growth DCF Model - Electric Group

Line	Electric Utility	13-Week AVG Stock Price[1] (1)		AVG (%) Growth (2)	Annual Dividend[2] (3)		Adjusted Yield (4)	Constant Growth DCF (5)
1	Alliant Energy	$	26.91	3.50%	$	1.06	4.08%	7.58%
2	Ameren Corp.	$	51.75	4.21%	$	2.54	5.11%	9.33%
3	Cinergy Corp.	$	40.75	4.50%	$	1.92	4.92%	9.42%
4	Consolidated Edison	$	43.91	2.89%	$	2.28	5.34%	8.23%
5	Constellation Energy	$	52.56	9.78%	$	1.34	2.80%	12.58%
6	Dominion Resources	$	72.86	6.11%	$	2.68	3.90%	10.02%
7	DTE Energy	$	46.01	4.43%	$	2.06	4.68%	9.11%
8	Duke Energy	$	28.21	5.61%	$	1.10	4.12%	9.73%
9	Energy East Corp.	$	26.86	4.03%	$	1.10	4.26%	8.29%
10	Entergy Corp.	$	71.88	6.53%	$	2.16	3.20%	9.73%
11	FirstEnergy Corp.	$	43.07	4.32%	$	1.65	4.00%	8.32%
12	FPL Group	$	40.47	4.93%	$	1.42	3.68%	8.61%
13	Great Plains Energy	$	30.93	2.98%	$	1.66	5.53%	8.51%
14	Hawaiian Electric	$	25.75	3.10%	$	1.24	4.97%	8.07%
15	MDU Resources	$	27.63	7.89%	$	0.72	2.81%	10.70%
16	Northeast Utilities	$	19.25	4.40%	$	0.70	3.80%	8.20%
17	NSTAR	$	51.58	4.44%	$	1.16	2.35%	6.79%
18	OGE Energy	$	27.42	3.17%	$	1.33	5.01%	8.18%
19	Pepco Holdings*	$	21.78	4.09%	$	1.00	4.78%	8.87%
20	Pinnacle West Capital	$	43.05	4.90%	$	1.90	4.63%	9.53%
21	PPL Corp	$	55.12	5.18%	$	1.84	3.51%	8.69%
22	Progress Energy	$	42.82	3.93%	$	2.36	5.73%	9.66%
23	Puget Energy Inc.	$	22.08	4.64%	$	1.00	4.74%	9.38%
24	SCANA Corp.	$	39.60	4.49%	$	1.56	4.12%	8.61%
25	Sempra Energy	$	39.46	6.07%	$	1.16	3.12%	9.19%
26	Southern Co.	$	33.12	4.68%	$	1.49	4.71%	9.39%
27	Vectren Corp.	$	26.96	5.22%	$	1.18	4.60%	9.83%
28	Wisconsin Energy	$	35.56	6.20%	$	0.88	2.63%	8.82%
29	WPS Resources	$	53.88	4.39%	$	2.22	4.30%	8.69%
30	Xcel Energy Inc.	$	17.76	3.91%	$	0.83	4.87%	8.77%
31	**AVERAGE**	$	38.63	4.82%	$	1.52	4.21%	**9.0%**

Sources:

[1] http://finance.yahoo.com, Historical Prices.

[2] The Value Line Investment Survey, March 4, April 1, May 13, June 3 &17, 2005.

Notes:

* Pepco Holdings reported dividends from Sep. 2002 to Dec. 2004.

Progress Energy Florida

Constant Growth DCF Model - Gas Group

Line	Gas Utility	13-Week AVG Stock Price[1] (1)		AVG (%) Growth (2)	Annual Dividend[2] (3)		Adjusted Yield (4)	Constant Growth DCF (5)
1	AGL Resources	$	35.00	4.43%	$	1.24	3.70%	8.13%
2	Atmos Energy	$	27.39	5.60%	$	1.24	4.78%	10.38%
3	Equitable Resources	$	60.21	10.05%	$	1.68	3.07%	13.12%
4	KeySpan Corp.	$	38.86	3.34%	$	1.82	4.84%	8.18%
5	New Jersey Resources	$	44.41	5.51%	$	1.36	3.23%	8.74%
6	NICOR Inc.	$	38.01	2.34%	$	1.86	5.01%	7.35%
7	Northwest Natural Gas	$	36.06	5.27%	$	1.30	3.79%	9.06%
8	Oneok, Inc.	$	30.21	7.25%	$	1.12	3.98%	11.23%
9	Peoples Energy	$	41.52	4.17%	$	2.18	5.47%	9.64%
10	Piedmont Natural Gas	$	23.42	4.61%	$	0.92	4.11%	8.72%
11	Questar, Inc.	$	59.63	8.88%	$	0.90	1.64%	10.53%
12	Southwest Gas	$	24.78	5.13%	$	0.82	3.48%	8.60%
13	WGL Holdings Inc.	$	31.40	3.90%	$	1.33	4.41%	8.31%
14	**AVERAGE**	$	37.76	5.42%	$	1.37	3.96%	9.4%

Sources:

[1] http://finance.yahoo.com, Historical Prices.

[2] The Value Line Investment Survey, June 17, 2005.

Progress Energy Florida

Growth Rates

| Line | Gas Utility | Dividend Growth | | | 5 Yr CPI[2] | Inflation 10 Yr CPI[2] | 3-5 Yrs CPI[2] | Nominal GDP | |
| | | Past 5 Yrs[1] | Past 10 Yrs[1] | 3-5 Yrs Projection[1] | | | | Past 5 Yrs[1] | Past 10 Yrs[1] |
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Alliant Energy	-3.5%	-1.0%	-3.5%					
2	Ameren Corp.	N/A	1.0%	N/A					
3	Cinergy Corp.	0.5%	1.0%	2.0%					
4	Consolidated Edison	1.0%	1.5%	1.0%					
5	Constellation Energy	-9.0%	-3.5%	12.5%					
6	Dominion Resources	N/A	0.5%	3.0%					
7	DTE Energy	N/A	0.5%	0.5%					
8	Duke Energy	N/A	2.0%	4.0%					
9	Energy East Corp.	5.5%	-0.5%	6.5%					
10	Entergy Corp.	-3.5%	-0.5%	11.5%					
11	FirstEnergy Corp.	2.0%	1.0%	3.5%					
12	FPL Group	4.0%	-0.5%	10.5%					
13	Great Plains Energy	N/A	1.5%	N/A					
14	Hawaiian Electric	N/A	1.0%	N/A					
15	MDU Resources	5.0%	4.0%	5.0%					
16	Northeast Utilities	37.5%	-10.5%	9.0%					
17	NSTAR	2.5%	2.5%	3.5%					
18	OGE Energy	N/A	N/A	1.0%					
19	Pepco Holdings*	N/A	N/A	13.0%					
20	Pinnacle West Capital	7.0%	17.5%	5.0%					
21	PPL Corp	3.0%	-0.5%	7.5%					
22	Progress Energy	3.0%	3.0%	2.0%					
23	Puget Energy Inc.	-10.5%	-5.0%	1.0%					
24	SCANA Corp.	-1.0%	N/A	5.5%					
25	Sempra Energy	-8.5%	-4.0%	4.5%					
26	Southern Co.	1.0%	2.0%	3.5%					
27	Vectren Corp.	N/A	N/A	3.5%					
28	Wisconsin Energy	-12.0%	-5.0%	4.5%					
29	WPS Resources	2.0%	2.0%	2.0%					
30	Xcel Energy Inc.	-9.0%	-3.5%	3.5%					
31	**Average**	**0.8%**	**0.3%**	**4.6%**	**2.6%**	**2.5%**	**2.50%**	**4.9%**	**5.2%**

Sources:

[1]Value Line Investment Survey, March 4, April 1, May 13, June 3 & 17, 2005.

[2]Mergent Public Utility Manual 2003 at a15 and a21.

Progress Energy Florida

Growth Rates

Line	Gas Utility	Dividend Growth			5 Yr CPI[2]	Inflation 10 Yr CPI[2]	3-5 Yrs CPI[2]	Nominal GDP	
		Past 5 Yrs[1]	Past 10 Yrs[1]	3-5 Yrs Projection[1]				Past 5 Yrs[1]	Past 10 Yrs[1]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	AGL Resources	6.0%	0.5%	8.0%					
2	Atmos Energy	2.5%	3.5%	2.0%					
3	Equitable Resources	11.5%	6.5%	11.5%					
4	KeySpan Corp.	4.0%	3.0%	2.0%					
5	New Jersey Resources	2.5%	2.0%	3.0%					
6	NICOR Inc.	4.5%	4.5%	1.5%					
7	Northwest Natural Gas	1.0%	1.0%	2.5%					
8	ONEOK, Inc.	4.0%	3.5%	8.0%					
9	Peoples Energy	2.0%	1.5%	1.5%					
10	Piedmont Natural Gas	5.0%	5.5%	4.0%					
11	Questar Corp.	4.0%	3.5%	2.5%					
12	Southwest Gas	N/A	1.0%	1.5%					
13	WGL Holdings Inc.	1.5%	1.5%	1.5%					
14	**Average**	**4.0%**	**2.9%**	**3.8%**	**2.6%**	**2.5%**	**2.5%**	**4.9%**	**5.2%**

Sources:

[1]Value Line Investment Survey, June 17, 2005.

[2]Mergent Public Utility Manual 2003 at a15 and a21.

Progress Energy Florida
Market/Book Ratio - Electric Utilities
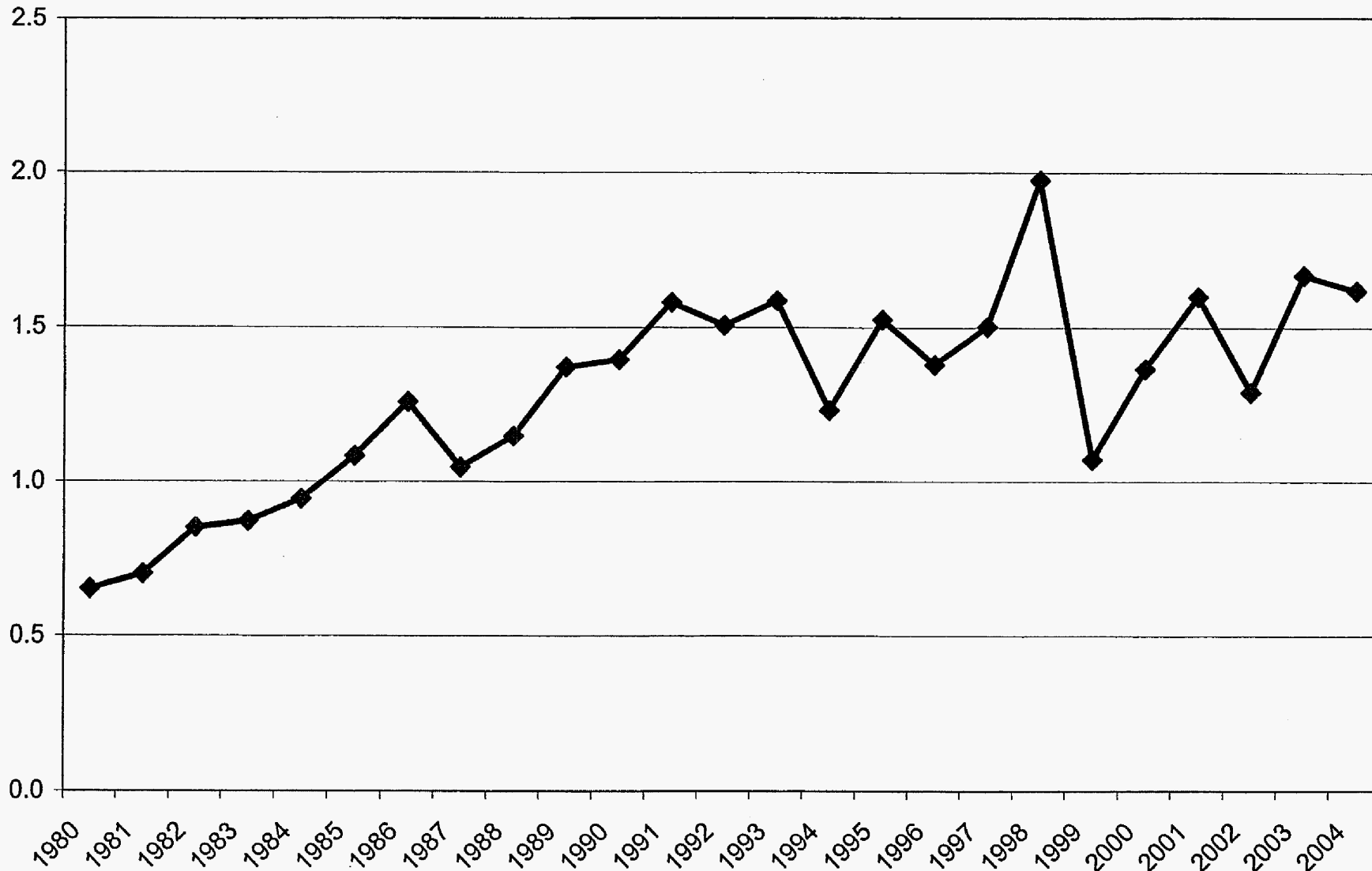
Sources:
2002-2005: C.A. Turner Utility Reports.
1980 - 2000: Mergent Public Utility Manual, 2003; at a15, and a17.

Progress Energy Florida

Equity Risk Premium - Treasury Bond

Line	Date	Treasury Bond Yield[1] (1)	Authorized Electric Returns[2] (2)	Indicated Risk Premium (3)
1	1986	7.78%	13.93%	6.15%
2	1987	8.59%	12.99%	4.40%
3	1988	8.96%	12.79%	3.83%
4	1989	8.45%	12.97%	4.52%
5	1990	8.61%	12.70%	4.09%
6	1991	8.14%	12.55%	4.41%
7	1992	7.67%	12.09%	4.42%
8	1993	6.59%	11.41%	4.82%
9	1994	7.37%	11.34%	3.97%
10	1995	6.88%	11.55%	4.67%
11	1996	6.71%	11.39%	4.68%
12	1997	6.61%	11.40%	4.79%
13	1998	5.58%	11.66%	6.08%
14	1999	5.87%	10.77%	4.90%
15	2000	5.94%	11.43%	5.49%
16	2001	5.49%	11.09%	5.60%
17	2002	5.42%	11.16%	5.74%
18	2003	5.02%	10.97%	5.95%
19	2004	5.05%	10.73%	5.68%
20	**Average**	**6.88%**	**11.84%**	**4.96%**

Sources:

[1] Economic Report of the President, January, 2001 and the St. Louis Federal Reserve Bank Website.

[2] Regulatory Research Associates, Inc., Regulatory Focus, Jan.90-Dec.04.

Progress Energy Florida

Equity Risk Premium - Utility Bond

Line	Date	Average "A" Rating Utility Bond Yield[1] (1)	Authorized Electric Returns[2] (2)	Indicated Risk Premium (3)
1	1986	9.58%	13.93%	4.35%
2	1987	10.10%	12.99%	2.89%
3	1988	10.49%	12.79%	2.30%
4	1989	9.77%	12.97%	3.20%
5	1990	9.86%	12.70%	2.84%
6	1991	9.36%	12.55%	3.19%
7	1992	8.69%	12.09%	3.40%
8	1993	7.59%	11.41%	3.82%
9	1994	8.31%	11.34%	3.03%
10	1995	7.89%	11.55%	3.66%
11	1996	7.75%	11.39%	3.64%
12	1997	7.60%	11.40%	3.80%
13	1998	7.04%	11.66%	4.62%
14	1999	7.62%	10.77%	3.15%
15	2000	8.24%	11.43%	3.19%
16	2001	7.78%	11.09%	3.31%
17	2002	7.36%	11.16%	3.80%
18	2003	6.57%	10.97%	4.40%
19	2004	6.01%	10.73%	4.72%
20	**Average**	**8.30%**	**11.84%**	**3.54%**

Sources:

[1] Mergent Public Utility Manual, Mergent weekly News Reports, 2003.

[2] Regulatory Research Associates, Inc., Regulatory Focus, Jan.90-Dec.04.

Progress Energy Florida

Series "A" Utility Bond Yields

Line	Date	"A" Rating Utility Bond Yield (1)
1	06/17/05	5.48%
2	06/10/05	5.44%
3	06/03/05	5.38%
4	05/27/05	5.49%
5	05/20/05	5.50%
6	05/13/05	5.53%
7	05/06/05	5.65%
8	04/29/05	5.54%
9	04/22/05	5.58%
10	04/15/05	5.62%
11	04/08/05	5.76%
12	04/01/05	5.71%
13	03/25/05	5.81%
14	**Average**	**5.58%**

Source:
www.moodys.com, Bond Yields and Key Indicators.

Progress Energy Florida

Comparable Group Beta

Line	Electric Utility	Value Line Beta (1)
1	Alliant Energy	0.80
2	Ameren Corp.	0.75
3	Cinergy Corp.	0.85
4	Consolidated Edison	0.60
5	Constellation Energy	0.90
6	Dominion Resources	0.90
7	DTE Energy	0.70
8	Duke Energy	1.15
9	Energy East Corp.	0.85
10	Entergy Corp.	0.75
11	FirstEnergy Corp.	0.75
12	FPL Group	0.75
13	Great Plains Energy	0.80
14	Hawaiian Electric	0.65
15	MDU Resources	0.85
16	Northeast Utilities	0.80
17	NSTAR	0.70
18	OGE Energy	0.70
19	Pepco Holdings	0.85
20	Pinnacle West Capital	0.85
21	PPL Corp	0.95
22	Progress Energy	0.85
23	Puget Energy Inc.	0.75
24	SCANA Corp.	0.75
25	Sempra Energy	0.95
26	Southern Co.	0.65
27	Vectren Corp.	0.75
28	Wisconsin Energy	0.70
29	WPS Resources	0.75
30	Xcel Energy Inc.	0.80
31	**AVERAGE**	**0.80**

Sources:
The Value Line Investment Survey, March 4, April 1, May 13,
June 3 &17, 2005.

Progress Energy Florida

Comparable Group Beta

Line	Gas Utility	Value Line Beta (1)
1	AGL Resources	0.85
2	Atmos Energy	0.70
3	Equitable Resources	0.80
4	KeySpan Corp.	0.80
5	New Jersey Resources	0.75
6	NICOR Inc.	1.10
7	Northwest Natural Gas	0.70
8	ONEOK, Inc.	0.95
9	Peoples Energy	0.80
10	Piedmont Natural Gas	0.75
11	Questar Corp.	0.85
12	Southwest Gas	0.75
13	WGL Holdings Inc.	0.75
14	**AVERAGE**	**0.81**

Sources:
The Value Line Investment Survey, dated June 17, 2005.

Progress Energy Florida

CAPM Return Estimate - Electric Utilities

Line	Description	Historical Premium (1)
1	Risk Free Rate[1]	5.5%
2	Risk Premium[2]	6.6%
3	Beta[3]	0.80
4	CAPM	10.7%

Line	Description	Prospective Premium (1)
5	Risk Free Rate[1]	5.5%
6	Risk Premium[2]	6.4%
7	Beta[3]	0.80
8	CAPM	10.6%
9	**CAPM Average**	**10.7%**

Sources:

[1] Blue Chip Financial Forcasts; June 1, 2005, at pp.2.

[2] SBBI; 2004 at pp. 33 & 118.

[2] The Value Line Investment Survey, March 4, April 1, May 13, June 3 &17, 2005.

Progress Energy Florida

S&P Credit Rating Financial Ratios

Line	Description	PEF Ratio at 9.8% Equity Return (1)	S&P "A" Rating (BP: 5) Benchmark (2)	S&P "BBB" Rating (BP: 5) Benchmark* (3)	Reference (4)
1	Rate Base	$ 4,683,052			Page 2; Line 6, Col. 1
2	Weighted Common Return	4.94%			Page 3; Sum of Line 1, 8 and 9, Col. 10
3	Income to Common	$ 231,114			Line1 x Line2
4	Depreciation Expense	$ 364,870			Page 2; Line 3, Col. 1
5	Investment Tax Credit Amort.	$ (5,499)			MFR C-1, Col. G
6	Deferred Income Tax	$ (57,397)			MFR C-22 at 2, Retail Allo. (92.619%)
7	Funds from Operations (FFO)	$ 533,088			Line 3 though 6
8	Interest Expense	$ 175,835			Page 4, Line 3, Col. 3
9	FFO Plus Interest	$ 708,924			Line 7 + Line 9
10	Cash Interest Expenditure	$ 175,165			Page 4; Line 8, Col. 3
11	FFO Interest Coverage **	4.0x	4.5x - 3.8x	3.8x - 2.8x	Line 9 / Line 10
12	Total Debt Ratio **	52%	42% - 50%	50% - 60%	Page 5; Sum of Line 3, 4 and 5, Col. 2
13	FFO to Total Debt **	24%	30% - 22%	22% - 15%	Line 7 / (Line 1 x page 5 line 7)

Sources:
* Standard and Poors. New Business Profile Scores Assigned to U.S. Utility and Power Companies; Financial Guidelines Revised; June 2, 2004.
** Adjusted for $757 Million PPA Debt Equivalent

Progress Energy Florida

S&P Credit Rating Financial Ratios
(Depreciation Expense)

Line	Description	Amount (1)
1	Reatil Depreciation & Amort. Expense	$ 310,893
2	Proposed Depr. Expense Adjustment	$ 85,200
	Depr. Add Back:	
3	Recoverable ECCR	$ 82
4	Recoverable ECRC	$ 95
5	Recoverable SCRC	$ 139,000
6	Adjusted Depreciation Expense	$ 364,870
	Rate Base Impact	
7	Retail Rate Base	$ 4,640,452
8	Acc. Depreciation Adjustment	$ 42,600
9	Adjusted Rate Base	$ 4,683,052

Source:
  MRF Schedules A-1 and C-1.

Progress Energy Florida

S&P Credit Rating Financial Ratios
(Adjusted Capital Structure)

Line	Class of Capital	Total per Books (1)	Specific Adjustments (2)	Allocation (3)	Pro-Rate Adjustments (4)	System Adjustments (5)	Jurisdictional Factor (6)	Jurisdictional Capital Structure (7)	Ratio (8)	Cost Rate (9)	Weighted Cost Rate (10)	Pre-Tax Weighted Cost Rate (11)
1	Common Equity	$ 2,715,814	$ 8,094	49.68%	$ (8,126)	$ 2,715,782	74.93%	$ 2,034,936	49.95%	9.80%	4.89%	7.97%
2	Preferred Stock	$ 33,497	$ -	0.61%	$ (100)	$ 33,397	74.99%	$ 25,044	0.61%	4.51%	0.03%	0.05%
3	Long Term Debt - Fixed	$ 2,131,302	$ 12,210	38.99%	$ (6,377)	$ 2,137,135	75.00%	$ 1,602,851	39.34%	5.73%	2.25%	2.25%
4	Short Term Debt	$ 72,288	$ (38,652)	1.32%	$ (216)	$ 33,420	75.25%	$ 25,148	0.62%	4.04%	0.02%	0.02%
	Customer Deposits	$ -	$ -		$ -							
5	Active	$ 136,401	$ -	2.50%	$ (408)	$ 135,993	74.99%	$ 101,981	2.50%	5.92%	0.15%	0.15%
6	Inactive	$ -	$ -		$ -	$ -		$ -	0.00%			
	Investment Tax Credit	$ -	$ -		$ -							
7	Post 70 Total	$ 26,572	$ 1,587	0.49%	$ (80)	$ 28,079						
8	Equity	$ -	$ -		$ -		74.98%	$ 11,760	0.29%	9.74%	0.03%	0.05%
9	Debt	$ -	$ -		$ -		74.98%	$ 9,294	0.23%	5.43%	0.01%	0.02%
10	Deferred IncomeTaxes	$ 407,236	$ 6,593	7.45%	$ (1,218)	$ 412,611	74.99%	$ 309,400	7.59%			
11	FAS 109 D/T -Net	$ (56,547)	$ (5,098)	-1.03%	$ 169	$ (61,476)	74.97%	$ (46,088)	-1.13%			
12	Total	$ 5,466,563	$ (15,266)	100.00%	$ (16,356)	$ 5,434,941	74.96%	$ 4,074,327	100%		7.39%	10.51%

Composite Tax Rate	38.58%
Fed	35.00%
State	5.50%

Source:
MRF Schedules C-44, D-1a and D-1b.

Progress Energy Florida

S&P Credit Rating Financial Ratios
(Interest Expense)

Line	Description	Total Electric (000) (1)	Rate Base Retail Allocation (2)	Retail Allocated Debt Interest (000) (3)
1	Total Interest Expense Exc. Customer Deposit	$ 122,451	88.7%	$ 108,661
2	Off-Balance Sheet PPA Debt*	$ 75,700	88.7%	$ 67,175
3	Total Interest	$ 198,151		$ 175,835
	Cash Interst Cost:			
4	Total Interest Expense Exc. Customer Deposit	$ 198,151		
5	Amort Debt Interest	$ (2,110)		
6	Amort Loss on Reacquired Debt	$ (2,135)		
7	AFUDC Debt	$ 3,490		
8	Cash Interest Expenditure	$ 197,396	88.7%	$ 175,165

Line	**Retail Allocation:**		Source
9	Florida Retail Rate Base As adjusted	$ 4,683,052	Page 2
10	Total Electric Rate Base	$ 5,277,387	MRF B-1
11	Retail to Total	88.7%	Line 9 / Line 10

Sources:
MFR Schedules C-22 and B-1.
* Page 5, Line 5, Col. 1 x 10%

Progress Energy Florida

S&P Credit Rating Financial Ratios
(Capital Ratios)

Line	Class of Capital	Unadjusted Amount (1)	Weight (2)
1	Common Equity	$ 2,715,814	43.68%
2	Preferred Stock	$ 33,497	0.54%
3	Long Term Debt	$ 2,131,302	34.28%
4	Short Term Debt	$ 72,288	1.16%
5	Off-Balance Sheet PPA Debt	$ 757,000	12.17%
6	Customer Deposits	$ 136,401	2.19%
	Investment Tax Credit		
7	Equity	$ 11,760	0.19%
8	Debt	$ 9,294	0.15%
9	Deferred IncomeTaxes	$ 407,236	6.55%
10	FAS 109 D/T -Net	$ (56,547)	-0.91%
11	**Total**	**$ 6,218,045**	**100%**
7	**Total Debt Ratio**		**47.6%**
8	**Total Debt Ratio - Investor Capital**		**51.9%**

Source:
  MRF Schedules C-44, D-1a and D-1b.

Progress Energy Florida

Dr. Vander Weide's DCF Model

Line	Electric Utility	Last Dividend (1)	Stock Price (2)	Annual Growth (3)	Div. Yield with Floatation Costs (4)	Div. Yield without Floatation Costs (5)	1/4 DCF with Floatation Costs (6)	1/4 DCF without Floatation Costs (7)	Annual Growth DCF Model (8)
1	Alliant Energy	0.265	$ 27.223	3.25%	1.03%	0.98%	7.5%	7.3%	7.3%
2	Ameren Corp.	0.635	$ 49.967	3.07%	1.35%	1.28%	8.7%	8.4%	8.3%
3	Cinergy Corp.	0.480	$ 40.613	4.44%	1.26%	1.19%	9.7%	9.5%	9.4%
4	Consolidated Edison	0.570	$ 43.008	3.35%	1.41%	1.34%	9.2%	8.9%	8.8%
5	Constellation Energy	0.335	$ 50.043	7.76%	0.72%	0.68%	10.8%	10.7%	10.6%
6	Dominion Resources	0.670	$ 70.897	5.49%	1.01%	0.96%	9.8%	9.5%	9.5%
7	DTE Energy	0.515	$ 44.137	4.50%	1.24%	1.18%	9.7%	9.5%	9.4%
8	Duke Energy	0.275	$ 26.608	4.26%	1.10%	1.04%	8.9%	8.6%	8.6%
9	Energy East Corp.	0.275	$ 26.020	4.00%	1.12%	1.07%	8.7%	8.5%	8.4%
10	Entergy Corp.	0.540	$ 68.778	6.81%	0.84%	0.80%	10.4%	10.2%	10.2%
11	FirstEnergy Corp.	0.413	$ 40.265	3.83%	1.09%	1.04%	8.4%	8.2%	8.1%
12	FPL Group	0.355	$ 38.772	4.77%	0.98%	0.93%	8.9%	8.7%	8.6%
13	Great Plains Energy	0.415	$ 30.553	3.00%	1.44%	1.37%	9.0%	8.7%	8.6%
14	Hawaiian Electric	0.310	$ 27.508	2.50%	1.19%	1.13%	7.5%	7.2%	7.1%
15	MDU Resources	0.180	$ 26.987	7.80%	0.72%	0.68%	10.9%	10.7%	10.7%
16	Northeast Utilities	0.163	$ 18.748	4.50%	0.93%	0.88%	8.4%	8.2%	8.1%
17	NSTAR	0.580	$ 55.645	4.33%	1.11%	1.05%	9.0%	8.7%	8.7%
18	OGE Energy	0.333	$ 26.340	3.33%	1.34%	1.27%	8.9%	8.7%	8.6%
19	Pepco Holdings*	0.250	$ 21.760	4.00%	1.22%	1.16%	9.1%	8.9%	8.8%
20	Pinnacle West Capital	0.475	$ 42.427	4.50%	1.19%	1.13%	9.5%	9.3%	9.2%
21	PPL Corp	0.460	$ 53.530	5.56%	0.92%	0.87%	9.4%	9.2%	9.2%
22	Progress Energy	0.590	$ 43.343	3.98%	1.45%	1.37%	10.1%	9.8%	9.6%
23	Puget Energy Inc.	0.250	$ 23.302	5.60%	1.14%	1.09%	10.5%	10.2%	10.1%
24	SCANA Corp.	0.390	$ 38.557	4.50%	1.08%	1.02%	9.0%	8.8%	8.7%
25	Sempra Energy	0.250	$ 38.593	6.25%	0.69%	0.66%	9.2%	9.0%	9.0%
26	Southern Co.	0.358	$ 32.720	4.69%	1.16%	1.11%	9.6%	9.3%	9.3%
27	Vectren Corp.	0.295	$ 26.902	6.27%	1.17%	1.11%	11.3%	11.0%	10.9%
28	Wisconsin Energy	0.220	$ 34.662	6.20%	0.68%	0.64%	9.1%	8.9%	8.9%
29	WPS Resources	0.555	$ 51.688	4.33%	1.14%	1.09%	9.1%	8.9%	8.8%
30	Xcel Energy Inc.	0.208	$ 17.655	3.83%	1.25%	1.19%	9.1%	8.8%	8.7%
31	**AVERAGE**						**9.3%**	**9.1%**	**9.0%**

Source:
Replication of Vander Weide's DCF Model with and without Floatation Costs of 5%.

Progress Energy Florida

Dr. Vander Weide's DCF Model

e	Electric Utility	Last Dividend (1)	Stock Price (2)	Annual Growth (3)	Div. Yield with Floatation Costs (4)	Div. Yield without Floatation Costs (5)	1/4 DCF with Floatation Costs (6)	1/4 DCF without Floatation Costs (7)	Annual Growth DCF Model (8)
	AGL Resources	0.310	$ 34.452	4.32%	0.96%	0.91%	8.3%	8.1%	8.1%
	Atmos Energy	0.310	$ 27.517	4.40%	1.20%	1.14%	9.4%	9.2%	9.1%
	Equitable Resources	0.380	$ 58.538	9.50%	0.70%	0.66%	12.5%	12.4%	12.3%
	KeySpan Corp.	0.455	$ 39.428	4.20%	1.23%	1.17%	9.4%	9.1%	9.0%
	New Jersey Resources	0.340	$ 43.520	5.86%	0.83%	0.79%	9.4%	9.2%	9.2%
	NICOR Inc.	0.465	$ 36.955	1.83%	1.33%	1.26%	7.3%	7.1%	7.0%
	Northwest Natural Gas	0.325	$ 34.937	5.50%	0.99%	0.94%	9.7%	9.5%	9.4%
	Oneok, Inc.	0.250	$ 28.908	6.50%	0.92%	0.88%	10.4%	10.2%	10.2%
	Peoples Energy	0.545	$ 43.047	4.25%	1.35%	1.28%	9.9%	9.6%	9.5%
)	Piedmont Natural Gas	0.230	$ 23.250	5.25%	1.05%	1.00%	9.7%	9.5%	9.4%
1	Questar, Inc.	0.215	$ 52.690	8.50%	0.44%	0.42%	10.4%	10.3%	10.3%
2	Southwest Gas	0.205	$ 24.895	6.47%	0.88%	0.84%	10.2%	10.0%	10.0%
3	WGL Holdings Inc.	0.325	$ 30.613	3.88%	1.13%	1.07%	8.6%	8.4%	8.3%
4	**AVERAGE**						**9.6%**	**9.4%**	**9.4%**

Source:
Replication of Vander Weide's DCF Model with and without Floatation Costs of 5%.