

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 120015-EI

In the Matter of:

PETITION FOR INCREASE IN RATES  
BY FLORIDA POWER & LIGHT COMPANY.

VOLUME 18

Pages 2295 through 2482

PROCEEDINGS: HEARING

COMMISSIONERS  
PARTICIPATING: CHAIRMAN RONALD A. BRISÉ  
COMMISSIONER LISA POLAK EDGAR  
COMMISSIONER ART GRAHAM  
COMMISSIONER EDUARDO E. BALBIS  
COMMISSIONER JULIE I. BROWN

DATE: Monday, August 27, 2012

TIME: Commenced at 9:04 a.m.  
Concluded at 10:58 a.m.

PLACE: Betty Easley Conference Center  
Room 148  
4075 Esplanade Way  
Tallahassee, Florida

REPORTED BY: LINDA BOLES, RPR, CRR  
Official FPSC Reporter  
(850) 413-6734

APPEARANCES: (As heretofore noted.)

RECEIVED - FPSC  
12 AUG 30 AM 8:26  
COMMISSION  
CLERK

I N D E X

WITNESSES

NAME: PAGE NO.

J. RANDALL WOOLRIDGE

Direct Examination by Mr. McGlothlin	2300
Prefiled Errata Inserted	2302
Prefiled Direct Testimony Inserted	2303
Cross Examination by Mr. Moyle	2381
Cross Examination by Mr. Guyton	2383
Redirect Examination by Mr. McGlothlin	2416

KEVIN O'DONNELL

Direct Examination by Mr. McGlothlin	2431
Prefiled Direct Testimony Inserted	2434
Cross Examination by Mr. Moyle	2466
Cross Examination by Mr. Guyton	2467

## EXHIBITS

	NUMBER :	ID.	ADMTD.
1			
2			
3	115		2429
4	236		2428
5	237		2428
6	238		2428
7	239		2428
8	240		2428
9	241		2428
10	242		2428
11	243		2428
12	244		2428
13	245		2428
14	246		2428
15	247		2428
16	248		2428
17	249		2428
18	250		2428
19	251		2428
20	252		2428
21	253		2428
22	570	2410	2429
23	571	2430	2430
24	572	2481	
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EXHIBITS

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## P R O C E E D I N G S

1  
2 (Transcript follows in sequence from  
3 Volume 17.)

4 **CHAIRMAN BRISÉ:** Good morning. Glad to see  
5 everybody back. We're going to go ahead and get  
6 started. I think we do have a preliminary matter to  
7 address.

8 Mr. Young.

9 **MR. YOUNG:** Yes, sir. Yesterday staff  
10 received an email from Mr. Hendricks requesting that he  
11 be excused from the hearing until Wednesday due to the  
12 Tropical Storm Isaac. Staff has no objections to this  
13 request. And I spoke with FPL; they do not object  
14 either.

15 **CHAIRMAN BRISÉ:** Okay. Are there any  
16 objections from anyone else? Okay. Seeing none, we'll  
17 grant leave. Okay.

18 **MR. YOUNG:** With that, Mr. Chairman, I think  
19 we are up to Witness Woolridge, beginning of OPC's case.

20 **CHAIRMAN BRISÉ:** All right. Mr. McGlothlin.

21 **MR. MCGLOTHLIN:** Good morning, Commissioners.  
22 The Office of Public Counsel calls as its first witness  
23 Dr. Randall Woolridge. Dr. Woolridge has not been sworn  
24 at this point.

25 **CHAIRMAN BRISÉ:** All right. Is there anyone

1 else present here today that has not been sworn? If  
2 that is the case, if you could stand at this time.

3 Do you swear or affirm that the testimony that  
4 you will provide in this matter is the truth?

5 (Witnesses collectively sworn.)

6 All right. Thank you. You may be seated.

7 Whereupon,

8 **J. RANDALL WOOLRIDGE**

9 was called as a witness on behalf of the Citizens of the  
10 State of Florida and, having been duly sworn, testified  
11 as follows:

12 **DIRECT EXAMINATION**

13 **BY MR. MCGLOTHLIN:**

14 **Q** Dr. Woolridge, please state your full name and  
15 business address for the record.

16 **A** My name is the initial J. Randall Woolridge.  
17 That's spelled W-O-O-L-R-I-D-G-E. My business address  
18 is 304 South Allen Street, State College, Pennsylvania,  
19 and I'm a professor of finance at Penn State.

20 **Q** Dr. Woolridge, on behalf of the Office of  
21 Public Counsel, did you prepare and submit prefiled  
22 testimony in this docket?

23 **A** Yes.

24 **Q** Do you have your prefiled testimony with you?

25 **A** Yes, I do.

1           Q     Do you have any changes or corrections to make  
2 at this time?

3           A     I believe that they've distributed an errata  
4 sheet that goes along with this testimony that I think  
5 was also distributed at the deposition.

6           Q     All right. With the changes reflected in the  
7 errata sheet, do you adopt the prefiled testimony as  
8 your testimony today?

9           A     Yes.

10          Q     Did you also prepare, as part of your  
11 submission, exhibits that were marked JRW-1 through 15,  
12 plus Appendices A, B, and C?

13          A     Yes.

14          Q     And do you have any changes, other than those  
15 shown on the errata sheet, to make to those exhibits?

16          A     No.

17               **MR. McGLOTHLIN:** And, Commissioners, those  
18 have been assigned Numbers 236 through 253 in the  
19 Comprehensive Exhibit List.

20                   Have you prepared a summary of -- excuse me.  
21 I ask that the prefiled testimony be inserted into the  
22 record at this point.

23               **CHAIRMAN BRISÉ:** Okay. Without objection, we  
24 will insert Dr. Woolridge's testimony into the record as  
25 though read.

**Testimony**

<u>Page</u>	<u>Line No.</u>	<u>Testimony</u>	<u>Edit</u>
12	10	'4.45%'	'3.76%'
12	25	'twenty-eight'	'thirty-four'
23	7	'4.5%'	'4.0%'
38	19	'1.0%'	'1.3%'
39	2	'5.0%'	'5.3%'
47	14	'5.06'	'5.11'

**Exhibits**

<u>Exhibit</u>	<u>Page No.</u>	<u>Edit</u>
JRW-5	1	Panel B Title – 'Electric Proxy Group' should be 'NextEra'
JRW-10	4	PNM Resources Projected EPS, DPS BVPS Growth Rates of -7.5%, -0.5%, And 1.5% Should be 15.5%, 10.5%, and 3.0%
JRW-10	4	Mean Projected EPS and DPS Growth Rates of 4.4% and 4.0%, Should be 5.0% and 4.3%
JRW-10	4	Median Projected EPS Growth Rate of 5.0% Should be 5.3%



**DIRECT TESTIMONY****OF****J. RANDALL WOOLRIDGE**

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 120015-EI

**I. IDENTIFICATION OF WITNESS AND PURPOSE OF TESTIMONY****Q. PLEASE STATE YOUR FULL NAME, ADDRESS, AND  
OCCUPATION.**

A. My name is J. Randall Woolridge, and my business address is 120 Haymaker Circle, State College, PA 16801. I am a Professor of Finance and the Goldman, Sachs & Co. and Frank P. Smeal Endowed University Fellow in Business Administration at the University Park Campus of the Pennsylvania State University. I am also the Director of the Smeal College Trading Room and President of the Nittany Lion Fund, LLC. A summary of my educational background, research, and related business experience is provided in Exhibit JRW-1.

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

A. I have been asked by the Florida Office of Public Counsel ("OPC") to provide an opinion as to the appropriate return on equity ("ROE") for Florida Power &

1 Light Company ("FPL" or "Company") and to evaluate FPL's rate of return  
2 testimony in this proceeding.

3  
4 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

5 A. First, I review my ROE recommendation for FPL. Second, I provide an  
6 assessment of capital costs in today's capital markets. Third, I discuss the  
7 selection of a proxy group of electric utility companies ("Electric Proxy  
8 Group") for estimating the cost of capital for FPL. Fourth, I discuss the  
9 relationship between a utility's capital structure and the return on equity that  
10 should be associated with that capital structure. Fifth, I discuss the concept of  
11 the cost of equity capital, and then estimate the equity cost rate for FPL. Finally,  
12 I provide a critique of FPL's rate of return testimony.

13  
14 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING**  
15 **THE APPROPRIATE RATE OF RETURN FOR FPL.**

16 A. I initially show that capital costs, as measured by interest rates, are at  
17 historically low levels. With respect to this case, I show that interest rates on  
18 utility bonds have declined by about 200 basis points since the Company's last  
19 rate case. To estimate an equity cost rate for FPL, I have applied the  
20 Discounted Cash Flow ("DCF") Model and the Capital Asset Pricing Model  
21 ("CAPM") to my Electric Proxy Group. My recommended ROE depends on  
22 the capital structure that is adopted by the Commission. If the Commission  
23 adopts OPC's recommended capital structure with a 50% common equity ratio  
24 that is presented in the testimony of OPC witness Kevin O'Donnell, I  
25 recommend an equity cost rate of 9.0% for FPL. If the Commission adopts

1 the Company's recommended capital structure with a 59.62% common equity  
2 ratio, I recommend an equity cost rate of 8.50%. These findings are  
3 summarized in Exhibit JRW-1.

4  
5 **Q. PLEASE SUMMARIZE THE PRIMARY ISSUES REGARDING RATE**  
6 **OF RETURN IN THIS PROCEEDING.**

7 A. The Company's recommended capital structure has a common equity ratio of  
8 59.62%, which is well in excess of the range within which the common equity  
9 ratios of most electric utility companies fall. OPC's recommended capital  
10 structure is provided by Mr. Kevin O'Donnell and includes a common equity  
11 ratio of 50.0%. Dr. Avera has attempted to justify FPL's proposed capital  
12 structure by adjusting the capital structure for the Company's purchased power  
13 contracts and by comparing the 59.62% common equity ratio to the common  
14 equity ratios for the operating companies (and not the holding companies) for the  
15 companies in his proxy group. He also compares FPL's regulatory capital  
16 structure to the market value capital structures for the companies in his proxy  
17 group. I demonstrate that these methods represent 'apples' and 'oranges'  
18 comparisons.

19 FPL witness Avera provides the Company's proposed common equity  
20 cost rate. Dr. Avera's equity cost rate estimate is in the 10.25% to 12.25%  
21 range. I have recommended an equity cost rate of 9.0% for FPL using OPC  
22 witness O'Donnell's capital structure. Both Dr. Avera and I have applied the  
23 DCF and the CAPM approaches to groups of publicly-held electric utility  
24 companies. Dr. Avera has also used Risk Premium ("RPM") and Expected  
25 Earnings ("EE") approaches to estimate an equity cost rate for FPL. Dr.

1 Avera employs a proxy group of fourteen electric utility companies. I show  
2 that Dr. Avera's group is riskier than FPL and that some of these companies  
3 have a low percentage of revenues from regulated electric utility operations.  
4 Dr. Avera also employs the equity cost rate results for an inappropriate proxy  
5 group of non-utility companies. With respect to the application of the DCF  
6 model, the major area of disagreement is the expected DCF growth rate. Dr.  
7 Avera relies exclusively on the earnings per share ("EPS") growth rate  
8 forecasts of Wall Street analysts and *Value Line* for his DCF growth rate. I  
9 demonstrate that there is an upward bias to these growth rate forecasts.

10 The CAPM approach requires an estimate of the risk-free interest rate,  
11 beta, and the equity risk premium. The primary error in Dr. Avera's CAPM is  
12 his equity risk premium. This equity risk premium is based on an expected  
13 stock market return of 13.50% over time. I provide evidence that: (1) the  
14 expected stock market return of 13.5% employed by Dr. Avera in his analysis  
15 is not reflective of current market fundamentals; (2) this expected stock  
16 market return is based on an expected EPS growth rate that is not reasonable  
17 given prospective economic and earnings growth; and (3) Dr. Avera's equity  
18 risk premium of 10.5% is well above the equity risk premiums used in the real  
19 world of finance. In contrast to Dr. Avera, I use a market risk premium which  
20 employs (1) alternative approaches to estimating a market premium and (2)  
21 the results of over thirty studies and surveys of the market risk premium. As I  
22 will note, my market risk premium of 5.01% is consistent with the market risk  
23 premiums: (1) discovered in recent academic studies by leading finance  
24 scholars; (2) employed by leading investment banks and management

1 consulting firms; and (3) that result from surveys of financial forecasters and  
2 corporate chief financial officers (“CFOs”).

3 Dr. Avera’s EE approach is subject to a number of errors, and does not  
4 provide a reliable estimate of the Company’s cost of equity capital.  
5 Furthermore, this methodology, which is not market-based, has not been used by  
6 regulatory commissions for years as an equity cost rate approach.

7 In the end, the most significant areas of disagreement in measuring  
8 FPL’s cost of capital are: (1) the Company’s capital structure, and the ROE  
9 that is associated with the capital structure; (2) the appropriate proxy group to  
10 use in estimating an equity cost rate for FPL, and the riskiness of FPL relative  
11 to the proxy group; (3) Dr. Avera’s excessive reliance on the earnings per  
12 share growth rate forecasts of Wall Street analysts to measure expected DCF  
13 growth; (4) the measurement and magnitude of the equity risk premium used  
14 in a CAPM approach and RPM approaches; (5) the validity of the EE equity  
15 cost rate approach; and (6) whether or not adjustments are needed to account  
16 for size and flotation costs.

17  
18 **II. CAPITAL COSTS IN TODAY’S MARKETS**

19  
20 **Q. PLEASE DISCUSS CAPITAL COSTS IN U.S. MARKETS.**

21 **A.** Long-term capital cost rates for U.S. corporations are a function of the  
22 required returns on risk-free securities plus a risk premium. The risk-free rate  
23 of interest is the yield on long-term U.S. Treasury yields. The yields on ten-  
24 year U.S. Treasury bonds from 1953 to the present are provided on page 1 of  
25 Exhibit JRW-2. These yields peaked in the early 1980s and have generally

1           declined since that time. In the summer of 2003, these yields hit a 60-year  
2           low at 3.33%. They subsequently increased and fluctuated between the 4.0%  
3           and 5.0% levels over the next four years in response to ebbs and flows in the  
4           economy. Ten-year Treasury yields began to decline in mid-2007 at the  
5           beginning of the financial crisis. In 2008, Treasury yields declined to below  
6           3.0% as a result of the expansion of the mortgage and subprime market credit  
7           crisis, the turmoil in the financial sector, the government bailout of financial  
8           institutions, the monetary stimulus provided by the Federal Reserve, and the  
9           economic recession. From 2008 until 2011, these rates fluctuated between  
10          2.5% and 3.5%. Over the past six months, the yields on ten-year Treasuries  
11          have declined from 2.5% to below 2.0% as economic uncertainties have  
12          persisted.

13                   Panel B on page 1 of Exhibit JRW-2 shows the differences in yields  
14          between ten-year Treasuries and Moody's Baa rated bonds since the year  
15          2000. This differential primarily reflects the additional risk required by bond  
16          investors for the risk associated with investing in corporate bonds. The  
17          difference also reflects, to some degree, yield curve changes over time. The  
18          Baa rating is the lowest of the investment grade bond ratings for corporate  
19          bonds. The yield differential hovered in the 2.0% to 3.0% area until 2005,  
20          declined to 1.5% until late 2007, and then increased significantly in response  
21          to the financial crisis. This differential peaked at 6.0% at the height of the  
22          financial crisis in early 2009, due to tightening in credit markets, which  
23          increased corporate bond yields and the "flight to quality," which decreased  
24          treasury yields. The differential subsequently declined and has been in the  
25          2.5% to 3.0% range over the past three years.

1           As previously noted, the risk premium is the return premium required  
2           by investors to purchase riskier securities. The risk premium required by  
3           investors to buy corporate bonds is observable based on yield differentials in  
4           the markets. The equity risk premium is the return premium required to  
5           purchase stocks as opposed to bonds. The equity risk premium is not readily  
6           observable in the markets (as are bond risk premiums) since expected stock  
7           market returns are not readily observable. As a result, equity risk premiums  
8           must be estimated using market data. There are alternative methodologies to  
9           estimating the equity risk premium, and the alternative approaches and equity  
10          risk premium results are subject to much debate. One way to estimate the  
11          equity risk premium is to compare the mean returns on bonds and stocks over  
12          long historical periods. Measured in this manner, the equity risk premium has  
13          been in the 5% to 7% range. However, studies by leading academics indicate  
14          that the forward-looking equity risk premium is actually in the 4.0% to 5.0%  
15          range. These lower equity risk premium results are in line with the findings of  
16          equity risk premium surveys of CFOs, academics, analysts, companies, and  
17          financial forecasters.

18  
19          **Q. PLEASE REVIEW THE FINANCIAL CRISIS THAT BEGAN IN 2007**  
20          **AND THE RESPONSE OF THE U.S. GOVERNMENT.**

21          A. The mortgage crisis, subprime crisis, credit crisis, economic recession, and the  
22          restructuring of financial institutions have had tremendous global economic  
23          implications. This issue first surfaced in the summer of 2007 as a mortgage  
24          crisis. It expanded into the subprime area in late 2008 and led to the collapse  
25          of certain financial institutions, notably Bear Stearns, in the first quarter of

1 2008. Commodity and energy prices peaked and then began to decline in the  
2 summer of 2008, as the crisis in the financial markets spread to the global  
3 economy. The turmoil in the financial sector peaked in September of 2008  
4 with the failure of several large financial institutions, Bank of America's  
5 buyout of AIG and Merrill Lynch, and the government takeover of Fannie  
6 Mae and Freddie Mac.

7 In response to the market crisis, the Federal Reserve ("Fed") took  
8 extraordinary steps in an effort to stabilize capital markets. Most  
9 significantly, the Fed has opened its lending facilities to numerous banking  
10 and investment firms to promote credit markets. As a result, the balance sheet  
11 of the Federal Reserve grew by hundreds of billions of dollars in support of  
12 the financial system. The federal government took a series of measures to  
13 shore up the economy and the markets. The Troubled Asset Relief Program  
14 ("TARP") was aimed at providing over \$700 billion in government funds to  
15 the banking system in the form of equity investments. The federal government  
16 spent billions bailing out a number of prominent financial institutions,  
17 including AIG, Citigroup, and Bank of America. The government also bailed  
18 out other industries, most notably the auto industry. In 2009, President  
19 Obama signed into law his \$787 billion economic stimulus, which included  
20 significant tax cuts and government spending aimed at creating jobs and  
21 turning around the economy.

22 The spillover of the financial crisis to the economy has been ongoing.  
23 According to the National Bureau of Economic Research ("NBER"), the  
24 economy slipped into a recession in the 4<sup>th</sup> quarter of 2007. The NBER has  
25 indicated that the recession ended in the 2<sup>nd</sup> quarter of 2009. Nonetheless, the



1 recovery of the economy has lagged the recoveries from previous recessions.  
2 Since the 2<sup>nd</sup> quarter of 2009, economic growth has been only 2.4% per year,  
3 and just 1.8% in the first quarter of 2012. Furthermore, the muted economic  
4 recovery in the U.S. has been hindered by global economic concerns,  
5 especially continuing fiscal and monetary issues in Europe and the prospect of  
6 slowing economic growth in China. As a result, the U.S. is still saddled with  
7 relatively high unemployment, large government budget deficits, continued  
8 housing market issues, and uncertainty about future economic growth. The  
9 stalled economic recovery is reflected in the stock market. The stock market  
10 bottomed out in March of 2009, and then increased about 100% over the next  
11 two years. However, since that time, the stock market advance has been  
12 slowed by the U.S. and global economic uncertainties and concerns.

13 In summary, the Federal Reserve and the U.S. government have taken  
14 extraordinary actions and committed great sums of money to rescue the  
15 economy, certain industries, and the capital markets. But the economy is still  
16 on an uncertain path.

17  
18 **Q. PLEASE PROVIDE ADDITIONAL INFORMATION ON THE**  
19 **ACTIONS OF THE GOVERNMENT AND THEIR IMPACT ON U. S.**  
20 **CAPITAL COSTS.**

21 A. The yields on United States Treasury securities have declined to levels not seen  
22 since the 1950s. The yields on Treasury bills securities decreased significantly  
23 at the onset of the financial crisis and have remained at very low levels. The  
24 decline in interest rates reflects several factors, including: (1) the “flight to  
25 quality” in the credit markets as investors sought out low-risk investments

1 during the financial crisis; (2) the very aggressive monetary actions of the  
2 Federal Reserve, which were aimed at restoring liquidity and faith in the  
3 financial system as well as maintaining low interest rates to boost economic  
4 growth; and (3) the continuing slow recovery from the recession.

5 The credit market for corporate and utility debt experienced higher  
6 rates due to the credit crisis. The short-term credit markets were initially hit  
7 with credit issues, leading to the demise of several large financial institutions.  
8 The primary indicator of the short-term credit market is the 3-month London  
9 Interbank Offered Rate ("LIBOR"). LIBOR peaked in the third quarter of  
10 2008 at 4.75%. It has since declined to below 0.5% as the short-term credit  
11 markets opened up and U.S. Treasury rates have remained low. The long-  
12 term corporate credit markets tightened up during the financial crisis, but have  
13 improved significantly since 2009. Interest rates on utility and corporate debt  
14 have declined to historically low levels. These low rates reflect the weak  
15 economy, as the Federal Reserve has significantly scaled back its aggressive  
16 monetary policy actions.

17 Panel A of page 1 of Exhibit JRW-3 provides the yields on A, BBB+,  
18 and BBB rated public utility bonds. These yields peaked in November 2008,  
19 and have since declined by nearly 400 basis points. For example, the yields  
20 on 'A'-rated utility bonds, which peaked at about 7.75% in November of  
21 2008, have declined to 3.76% as of June 1, 2012. Panel B of Exhibit JRW-3  
22 provides the yield spreads on A, BBB+, and BBB rated public utility bonds  
23 relative to Treasury bonds. These yield spreads increased dramatically in the  
24 third quarter of 2008 during the peak of the financial crisis and have decreased  
25 significantly since that time. For example, the yield spreads between 30-year

1 U.S. Treasury bonds and 'A'-rated utility bonds peaked at over 3.50% in  
2 November of 2008, declined to 1.0% in the summer of 2012, and have since  
3 increased to about 1.25%.

4 In sum, while the economy continues to face significant problems, the  
5 actions of the government and Federal Reserve had a large effect on the credit  
6 markets. The capital costs for utilities, as measured by the yields on 30-year  
7 utility bonds, have declined to below pre-financial crisis levels.

8  
9 **Q. PLEASE DISCUSS THE RECENT PERFORMANCE OF UTILITY**  
10 **STOCKS.**

11 A. Utility stocks have performed quite well during the recent period of  
12 uncertainty. Page 2 of Exhibit JRW-3 graphs the performance of the Dow  
13 Jones Utility Index versus the Standard & Poor's 500 index (S&P 500) over  
14 the past year. When the S&P 500 declined by over 10% in early August of  
15 2011, utility stocks declined by much less. As the S&P 500 recovered in the  
16 fourth quarter of 2011, utility stocks continued to increase in value as well. In  
17 the first quarter of 2012, the S&P 500 performed much better than the stocks  
18 of utilities. However, utility stocks have outperformed the S&P 500 during  
19 the second quarter of 2012 as the S&P 500 has declined by about 7.0% while  
20 utility stocks have appreciated about 2.0%.

21 Overall, utility stocks have proven to be safe havens in volatile  
22 markets since utility stocks have low risk relative to the overall stock market.  
23 Utility stocks did not decline as much as the overall market in the market  
24 decline of the third quarter of 2011 and second quarter of 2012, and they did  
25 not increase in value as much as the overall market in the recovery of the

1 stock market in the first quarter of 2012. The low relative volatility and risk  
2 of utility stocks is reflected in their low betas.

3  
4 **Q. OVERALL, WHAT DOES YOUR REVIEW OF THE CAPITAL**  
5 **MARKET CONDITIONS INDICATE ABOUT THE EQUITY COST**  
6 **RATE FOR UTILITIES TODAY?**

7 A. The market data suggests that capital costs for utilities are at relatively low  
8 levels. The rates on 30-year utility bonds are at historically low levels. As  
9 shown on page 2 of Exhibit JRW-3, the yield on long-term 'A'-rated utility  
10 bonds is only 4.45%. In addition, utility stocks have proven to be steady  
11 performers over the past year relative to the overall market. As such, equity  
12 cost rates for utilities are at relatively low levels. As demonstrated later in my  
13 testimony, this observation is supported by the DCF and CAPM data for  
14 electric utility companies.

15  
16 **III. PROXY GROUP SELECTION**

17  
18 **Q. PLEASE DESCRIBE YOUR APPROACH TO DEVELOPING A FAIR**  
19 **RATE OF RETURN RECOMMENDATION FOR FPL.**

20 A. To develop a fair rate of return recommendation for FPL, I evaluated the  
21 return requirements of investors on the common stock of a proxy group of  
22 publicly-held electric utility companies ("Electric Proxy Group").

23  
24 **Q. PLEASE DESCRIBE YOUR PROXY GROUP OF COMPANIES.**

25 A. My Electric Proxy Group consists of twenty-eight electric utility companies.

1 The selection criteria include the following:

- 2 1. Listed as Electric Utility by *Value Line Investment Survey* and listed as  
3 an Electric Utility or Combination Electric & Gas company in *AUS Utilities*  
4 *Report*;
- 5 2. At least 50% of revenues from regulated electric operations as reported  
6 by *AUS Utilities Report*;
- 7 3. An investment grade bond rating as reported by *AUS Utilities Report*;
- 8 4. Has paid a cash dividend for the past three years, with no cuts or  
9 omissions;
- 10 5. Not involved in an acquisition of another utility, and/or was not the  
11 target of an acquisition, in the past six months; and
- 12 6. Analysts' long-term EPS growth rate forecasts available from Yahoo,  
13 Reuters, and Zacks.

14 The Electric Proxy Group includes thirty-four companies. Summary  
15 financial statistics for the proxy group are listed on page 1 of Exhibit JRW-4.<sup>1</sup>  
16 The median operating revenues and net plant for the Electric Proxy Group are  
17 \$4,075.1M and \$9,144.0M, respectively. The group receives 77% of revenues  
18 from regulated electric operations, has an A-/BBB+ bond rating from Standard  
19 & Poor's, a current common equity ratio of 45.3%, and an earned return on  
20 common equity over of 9.9%.

---

<sup>1</sup> In my testimony, I present financial results using both mean and medians as measures of central tendency. However, due to outliers among means, I have used the median as a measure of central tendency.

1           **IV.    CAPITAL STRUCTURE RATIOS AND DEBT COST RATES**

2  
3           **Q.    WHAT IS FPL'S CURRENT CAPITAL STRUCTURE FOR**  
4           **RATEMAKING PURPOSES?**

5           A.    FPL's recommended capital structure from investor capital sources for  
6           ratemaking purposes includes 2.22% short-term debt, 38.16% long-term debt,  
7           and 59.62% common equity. This is provided in Panel A of Exhibit JRW-5.

8  
9           **Q.    HOW DOES FPL'S RECOMMENDED CAPITAL STRUCTURE**  
10           **COMPARE TO THAT OF ITS PARENT, NEXTERA?**

11          A.    Panel B of Exhibit JRW-5 shows NextEra's average quarterly capitalization  
12          over the past year. This average quarterly capital structure includes 8.75%  
13          short-term debt, 52.33% long-term debt, and 38.92% common equity. These  
14          ratios highlight the fact that, on a composite basis, NextEra employs much  
15          more debt and much less equity than its regulated subsidiary, FPL. Hence,  
16          NextEra has a higher degree of financial risk than FPL. These ratios indicate  
17          that NextEra finances its other businesses, such as NextEra Energy Resources,  
18          with more debt and less equity than the capital structure it employs for FPL.

19          **Q.    PLEASE DISCUSS THE CAPITAL STRUCTURES OF THE**  
20          **COMPANIES IN THE ELECTRIC PROXY GROUP.**

21          A.    Panel C of Exhibit JRW-5 provides the average quarterly capitalization ratios for  
22          the companies in the Electric Proxy Group. Pages 2-6 of Exhibit JRW-5 provide  
23          the supporting company data. The average of the quarterly capitalization data  
24          for the proxy group is 6.55% short-term debt, 48.02% long-term debt, 0.38%  
25          preferred stock, and 45.01% common equity. These are the capital structure

1 ratios for the holding companies that trade in the markets and are used to  
2 estimate an equity cost rate for FPL. These ratios indicate that: (1) the  
3 Electric Proxy Group has, on average, a much lower common equity ratio and  
4 higher financial risk than FPL; and (2) FPL's parent, NextEra, has somewhat  
5 more debt and financial risk than the Electric Proxy Group.

6  
7 **Q. YOU HAVE REFERRED SEVERAL TIMES TO THE DIFFERING**  
8 **EQUITY RATIOS OF THE ELECTRIC PROXY UTILITY GROUP,**  
9 **NEXTERA, AND FPL. PLEASE ELABORATE ON THE**  
10 **SIGNIFICANCE OF THE AMOUNT OF EQUITY THAT IS**  
11 **INCLUDED IN AN ELECTRIC UTILITY'S CAPITAL STRUCTURE.**

12 A. An electric utility's decision as to the amount of equity capital it will  
13 incorporate in its capital structure involves fundamental trade-offs relating to  
14 the amount of financial risk the firm carries, the overall revenue requirements  
15 its customers are required to bear through the rates they pay, and the return on  
16 equity that investors will require.

17  
18 **Q. PLEASE DISCUSS A UTILITY'S DECISION TO USE DEBT VERSUS**  
19 **EQUITY TO MEET ITS CAPITAL NEEDS.**

20 A. Utilities satisfy their capital needs through a mix of equity and debt. Because  
21 equity capital is more expensive than debt, the issuance of debt enables a  
22 utility to raise more capital with a given commitment of dollars than it could  
23 raise with just equity. Debt is therefore a means of "leveraging" capital  
24 dollars. However, as the amount of debt in the capital structure increases, its  
25 financial risk increases and the risk of the utility perceived by equity investors

1 also increases. Significantly for this case, the converse is also true. As the  
2 amount of debt in the capital structure decreases, the financial risk decreases.  
3 The required return on equity capital is a function of the amount of overall  
4 risk that investors perceive, including financial risk in the form of debt.

5  
6 **Q. WHY IS THIS RELATIONSHIP IMPORTANT TO THE UTILITY'S**  
7 **CUSTOMERS?**

8 A. Just as there is a direct correlation between the utility's authorized return on  
9 equity and the utility's revenue requirements (the higher the return, the greater  
10 the revenue requirement), there is a direct correlation between the amount of  
11 equity in the capital structure and the revenue requirements the customers are  
12 called on to bear. Again, equity capital is more expensive than debt. Not only  
13 does equity command a higher cost rate, it also adds more to the income tax  
14 burden that ratepayers are required to pay through rates. As the equity ratio  
15 increases, the utility's revenue requirements increase and rates paid by  
16 customers increase. If the proportion of equity is too high, rates will be higher  
17 than they need to be. For this reason, the utility's management must pursue a  
18 capital acquisition strategy that results in the proper balance in the capital  
19 structure.

20  
21 **Q. HOW HAVE ELECTRIC UTILITIES TYPICALLY STRUCK THIS**  
22 **BALANCE?**

23 A. Due to regulation and the essential nature of its output, an electric utility is  
24 exposed to less business risk than other companies that are not regulated. This  
25 means that an electric utility can reasonably carry relatively more debt in its



1 capital structure than most unregulated companies. The utility should take  
2 appropriate advantage of its lower business risk to employ cheaper debt  
3 capital at a level that will benefit its customers through lower revenue  
4 requirements. Typically, one may see equity ratios for electric utilities  
5 ranging from the 40% to 50% range. As I stated earlier, the average amount  
6 of common equity in the average capital structure of the utilities in my proxy  
7 group is 45%. In my experience, this value is typical for large electric  
8 utilities. It is also significant that NextEra has significantly less equity in its  
9 overall capital structure—i.e., is significantly more leveraged—than its  
10 subsidiary, FPL. In this light, FPL has significantly more equity in its capital  
11 structure than other electric utilities.

12  
13 **Q. GIVEN YOUR VIEW THAT FPL'S EQUITY RATIO IS MUCH**  
14 **HIGHER THAN THAT OF THE PROXY GROUP, WHAT SHOULD**  
15 **THE COMMISSION DO IN THIS RATEMAKING PROCEEDING?**

16 A. When a regulated electric utility's actual capital structure contains too high an  
17 equity ratio, the options are: (1) to impute a more reasonable capital structure  
18 and reflect the imputed capital structure in revenue requirements; or (2) to  
19 recognize the downward impact that an unusually high equity ratio will have  
20 on the financial risk of a utility and authorize a lower common equity cost  
21 rate.

22  
23 **Q. PLEASE ELABORATE ON THIS "DOWNWARD IMPACT."**

24 A. As I stated earlier, there is a direct correlation between the amount of debt in a  
25 utility's capital structure and the financial risk that an equity investor will

1 associate with that utility. A relatively lower proportion of debt translates into  
2 a lower required return on equity, all other things being equal. Stated  
3 differently, a utility cannot expect to “have it both ways.” Specifically, a  
4 utility cannot maintain an unusually high equity ratio and not expect to have  
5 the resulting lower risk reflected in its authorized return on equity. The  
6 fundamental relationship between the lower risk and the appropriate  
7 authorized return should not be ignored.

8  
9 **Q. GIVEN THIS DISCUSSION, HOW ARE YOU EVALUATING THE**  
10 **CAPITAL STRUCTURE AND EQUITY COST RATE IN THIS**  
11 **PROCEEDING?**

12 A. I have estimated an equity cost rate in the range of 8.50% to 9.0% based on  
13 my evaluation of the Electric Proxy Group. The proxy group has a common  
14 equity ratio of 45%. As such, the financial risk of the proxy group is less than  
15 that of FPL. OPC witness O’Donnell has recommended a capital structure for  
16 FPL that includes a common equity ratio of 50.0%. To recognize the risk  
17 trade-off of the alternative proposed capital structures, I am recommending an  
18 equity cost rate of 8.5% if the Commission adopts FPL’s requested 59.62%  
19 equity capital structure. If the Commission adopts OPC’s imputed capital  
20 structure, I recommend an equity cost rate of 9.0% for FPL.

1           **V.     THE COST OF COMMON EQUITY CAPITAL**

2                               **A.     OVERVIEW**

3  
4           **Q.     WHY MUST AN OVERALL COST OF CAPITAL OR FAIR RATE OF**  
5           **RETURN BE ESTABLISHED FOR A PUBLIC UTILITY?**

6           A.     In a competitive industry, the return on a firm's common equity capital is  
7                     determined through the competitive market for its goods and services. Due to  
8                     the capital requirements needed to provide utility services and to the economic  
9                     benefit to society from avoiding duplication of these services, some public  
10                    utilities are monopolies. It is not appropriate to permit monopoly utilities to  
11                    set their own prices because of the lack of competition and the essential nature  
12                    of the services. Thus, regulation seeks to establish prices that are fair to  
13                    consumers and, at the same time, sufficient to meet the operating and capital  
14                    costs of the utility (i.e., provide an adequate return on capital to attract  
15                    investors).

16  
17           **Q.     PLEASE PROVIDE AN OVERVIEW OF THE COST OF CAPITAL IN**  
18           **THE CONTEXT OF THE THEORY OF THE FIRM.**

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

24                    Normative economic models of the firm, developed under very  
25                    restrictive assumptions, provide insight into the relationship between firm

1 performance or profitability, capital costs, and the value of the firm. Under  
2 the economist's ideal model of perfect competition, where entry and exit are  
3 costless, products are undifferentiated, and there are increasing marginal costs  
4 of production, firms produce up to the point where price equals marginal cost.  
5 Over time, a long-run equilibrium is established where price equals average  
6 cost, including the firm's capital costs. In equilibrium, total revenues equal  
7 total costs, and because capital costs represent investors' required return on  
8 the firm's capital, actual returns equal required returns, and the market value  
9 must equal the book value of the firm's securities.

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

20 James M. McTaggart, founder of the international management  
21 consulting firm Marakon Associates, described this essential relationship  
22 between the return on equity, the cost of equity, and the market-to-book ratio  
23 in the following manner:<sup>2</sup>

---

<sup>2</sup> James M. McTaggart, "The Ultimate Poison Pill: Closing the Value Gap," *Commentary* (Spring 1988), p. 2.

1 Fundamentally, the value of a company is determined  
2 by the cash flow it generates over time for its owners,  
3 and the minimum acceptable rate of return required by  
4 capital investors. This “cost of equity capital” is used  
5 to discount the expected equity cash flow, converting it  
6 to a present value. The cash flow is, in turn, produced  
7 by the interaction of a company’s return on equity and  
8 the annual rate of equity growth. High return on equity  
9 (ROE) companies in low-growth markets, such as  
10 Kellogg, are prodigious generators of cash flow, while  
11 low ROE companies in high-growth markets, such as  
12 Texas Instruments, barely generate enough cash flow to  
13 finance growth.

14 A company’s ROE over time, relative to its cost of  
15 equity, also determines whether it is worth more or less  
16 than its book value. If its ROE is consistently greater  
17 than the cost of equity capital (the investor’s minimum  
18 acceptable return), the business is economically  
19 profitable and its market value will exceed book value.  
20 If, however, the business earns an ROE consistently  
21 less than its cost of equity, it is economically  
22 unprofitable and its market value will be less than book  
23 value.

24 As such, the relationship between a firm’s return on equity, cost of  
25 equity, and market-to-book ratio is relatively straightforward. A firm that  
26 earns a return on equity above its cost of equity will see its common stock sell  
27 at a price above its book value. Conversely, a firm that earns a return on  
28 equity below its cost of equity will see its common stock sell at a price below  
29 its book value.

30  
31 **Q. PLEASE PROVIDE ADDITIONAL INSIGHTS INTO THE**  
32 **RELATIONSHIP BETWEEN RETURN ON EQUITY AND MARKET-**  
33 **TO-BOOK RATIOS.**

1           A.     This relationship is discussed in a classic Harvard Business School case study  
2                   entitled “A Note on Value Drivers.” On page 2 of that case study, the author  
3                   describes the relationship very succinctly.<sup>3</sup>

4                   For a given industry, more profitable firms – those able  
5                   to generate higher returns per dollar of equity – should  
6                   have higher market-to-book ratios. Conversely, firms  
7                   which are unable to generate returns in excess of their  
8                   cost of equity should sell for less than book value.

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14

<u>Profitability</u>	<u>Value</u>
<i>If ROE &gt; K</i>	<i>then Market/Book &gt; 1</i>
<i>If ROE = K</i>	<i>then Market/Book = 1</i>
<i>If ROE &lt; K</i>	<i>then Market/Book &lt; 1</i>

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To assess the relationship by industry, as suggested above, I performed a regression study between estimated return on equity (“ROE”) and market-to-book ratios using natural gas distribution, electric utility and water utility companies. I used all companies in these three industries that are covered by *Value Line* and have estimated ROE and market-to-book ratio data. The results are presented in Panels A-C of Exhibit JRW-6. The average R-squares for the electric, gas, and water companies are 0.52, 0.71, and 0.77, respectively.<sup>4</sup> This demonstrates the strong positive relationship between ROEs and market-to-book ratios for public utilities.

25  
26

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

---

<sup>3</sup> Benjamin Esty, “A Note on Value Drivers,” Harvard Business School, Case No. 9-297-082, April 7, 1997.

<sup>4</sup> R-square measures the percent of variation in one variable (e.g., market-to-book ratios) explained by another variable (e.g., expected ROE). R-squares vary between zero and 1.0, with values closer to 1.0 indicating a higher relationship between two variables.

1 A. Exhibit JRW-7 provides indicators of public utility equity cost rates over the  
2 past decade. Page 1 shows the yields on long-term 'A' rated public utility  
3 bonds. These yields peaked in the early 2000s at over 8.0%, declined to about  
4 5.0% in 2005, and rose to 6.0% in 2006 and 2007. They stayed in that 6.0%  
5 range until the third quarter of 2008 when they spiked to almost 7.5% during  
6 the financial crisis. They have since retreated significantly over the past three  
7 years and now are below 4.5%.

8 Page 2 of Exhibit JRW-7 provides the dividend yields for the proxy  
9 group. The dividend yields for the Electric Proxy Group generally declined  
10 slightly over the decade until 2007. They increased in 2008 and 2009 in  
11 response to the financial crisis, but declined in 2010 and 2011 and now are  
12 about 4.5%.

13 Average earned returns on common equity and market-to-book ratios  
14 for the group are on page 3 of Exhibit JRW-7. The average earned returns on  
15 common equity for the Electric Proxy Group were in the 9.0%-12.0% range  
16 over the past decade, and have hovered in the 10.0% range for the past three  
17 years. The average market-to-book ratio for the group has been in the 1.20X  
18 to 1.80X during the decade. The average declined to about 1.20X in 2009, but  
19 increased to 1.30X in 2010 and 1.40X in 2011.

20  
21 **Q. WHAT FACTORS DETERMINE INVESTORS' EXPECTED OR**  
22 **REQUIRED RATE OF RETURN ON EQUITY?**

23 A. The expected or required rate of return on common stock is a function of  
24 market-wide as well as company-specific factors. The most important market  
25 factor is the time value of money as indicated by the level of interest rates in

1 the economy. Common stock investor requirements generally increase and  
2 decrease with like changes in interest rates. The perceived risk of a firm is the  
3 predominant factor that influences investor return requirements on a  
4 company-specific basis. A firm's investment risk is often separated into  
5 business and financial risk. Business risk encompasses all factors that affect a  
6 firm's operating revenues and expenses. Financial risk results from incurring  
7 fixed obligations in the form of debt in financing its assets.

8  
9 **Q. HOW DOES THE INVESTMENT RISK OF UTILITIES COMPARE**  
10 **WITH THAT OF OTHER INDUSTRIES?**

11 A. Due to the essential nature of their service as well as their regulated status,  
12 public utilities are exposed to a lesser degree of business risk than other, non-  
13 regulated businesses. The relatively low level of business risk allows public  
14 utilities to meet much of their capital requirements through borrowing in the  
15 financial markets, thereby incurring greater-than-average financial risk.  
16 Nonetheless, the overall investment risk of public utilities is below most other  
17 industries.

18 Exhibit JRW-8 provides an assessment of investment risk for 100  
19 industries as measured by beta, which according to modern capital market  
20 theory, is the only relevant measure of investment risk. These betas come  
21 from the *Value Line Investment Survey* and are compiled annually by Aswath  
22 Damodaran of New York University.<sup>5</sup> The study shows that the investment  
23 risk of utilities is very low. The average beta for electric, water, and gas  
24 utility companies are 0.73, 0.66, and 0.66, respectively. These are well below

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<sup>5</sup> Available at <http://www.stern.nyu.edu/~adamodar>.



1 the *Value Line* average of 1.15. As such, the cost of equity for utilities is  
2 among the lowest of all industries in the U.S.

3  
4 **Q. HOW CAN THE EXPECTED OR REQUIRED RATE OF RETURN ON**  
5 **COMMON EQUITY CAPITAL BE DETERMINED?**

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

12 According to valuation principles, the present value of an asset equals  
13 the discounted value of its expected future cash flows. Investors discount  
14 these expected cash flows at their required rate of return that, as noted above,  
15 reflects the time value of money and the perceived riskiness of the expected  
16 future cash flows. As such, the cost of common equity is the rate at which  
17 investors discount expected cash flows associated with common stock  
18 ownership.

19 Models have been developed to ascertain the cost of common equity  
20 capital for a firm. Each model, however, has been developed using restrictive  
21 economic assumptions. Consequently, judgment is required in selecting  
22 appropriate financial valuation models to estimate a firm's cost of common  
23 equity capital, in determining the data inputs for these models, and in  
24 interpreting the models' results. All of these decisions must take into

1 consideration the firm involved as well as current conditions in the economy  
2 and the financial markets.

3  
4 **Q. HOW DO YOU PLAN TO ESTIMATE THE COST OF EQUITY**  
5 **CAPITAL FOR THE COMPANY?**

6 A. I rely primarily on the discounted cash flow (“DCF”) model to estimate the  
7 cost of equity capital. Given the investment valuation process and the relative  
8 stability of the utility business, I believe that the DCF model provides the best  
9 measure of equity cost rates for public utilities. It is my experience that this  
10 Commission has traditionally relied on the DCF method. I have also  
11 performed a capital asset pricing model (“CAPM”) study, but I give these  
12 results less weight because I believe that risk premium studies, of which the  
13 CAPM is one form, provide a less reliable indication of equity cost rates for  
14 public utilities.

15 **B. DCF ANALYSIS**

16  
17 **Q. DESCRIBE THE THEORY BEHIND THE TRADITIONAL DCF**  
18 **MODEL.**

19 A. According to the DCF model, the current stock price is equal to the discounted  
20 value of all future dividends that investors expect to receive from investment  
21 in the firm. As such, stockholders’ returns ultimately result from current as  
22 well as future dividends. As owners of a corporation, common stockholders  
23 are entitled to a *pro rata* share of the firm’s earnings. The DCF model  
24 presumes that earnings that are not paid out in the form of dividends are  
25 reinvested in the firm so as to provide for future growth in earnings and

1 dividends. The rate at which investors discount future dividends, which  
 2 reflects the timing and riskiness of the expected cash flows, is interpreted as  
 3 the market's expected or required return on the common stock. Therefore, this  
 4 discount rate represents the cost of common equity. Algebraically, the DCF  
 5 model can be expressed as:

$$6 \quad P = \frac{D_1}{(1+k)^1} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_n}{(1+k)^n}$$

7  
 8  
 9  
 10 where P is the current stock price,  $D_n$  is the dividend in year n, and k is the  
 11 cost of common equity.

12  
 13 **Q. IS THE DCF MODEL CONSISTENT WITH VALUATION**  
 14 **TECHNIQUES EMPLOYED BY INVESTMENT FIRMS?**

15 A. Yes. Virtually all investment firms use some form of the DCF model as a  
 16 valuation technique. One common application for investment firms is called  
 17 the three-stage DCF or dividend discount model ("DDM"). The stages in a  
 18 three-stage DCF model are presented in Exhibit JRW-9. This model presumes  
 19 that a company's dividend payout progresses initially through a growth stage,  
 20 then proceeds through a transition stage, and finally assumes a steady-state  
 21 stage. The dividend-payment stage of a firm depends on the profitability of its  
 22 internal investments, which, in turn, is largely a function of the life cycle of  
 23 the product or service.

24 1. Growth stage: Characterized by rapidly expanding sales, high profit  
 25 margins, and abnormally high growth in earnings per share. Because of  
 26 highly profitable expected investment opportunities, the payout ratio is low.

1 Competitors are attracted by the unusually high earnings, leading to a decline  
2 in the growth rate.

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

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

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

15

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

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

$$21 \quad P = \frac{D_1}{k - g}$$

22 where  $D_1$  represents the expected dividend over the coming year and  $g$  is the  
23 expected growth rate of dividends. This is known as the constant-growth  
24 version of the DCF model. To use the constant-growth DCF model to  
25  
26  
27

1 estimate a firm's cost of equity, one solves for  $k$  in the above expression to  
2 obtain the following:

$$3 \quad k = \frac{D_1}{P} + g$$

6

7 **Q. IN YOUR OPINION, IS THE CONSTANT-GROWTH DCF MODEL**  
8 **APPROPRIATE FOR PUBLIC UTILITIES?**

9 A. Yes. The economics of the public utility business indicate that the industry is  
10 in the steady-state or constant-growth stage of a three-stage DCF. The  
11 economics include the relative stability of the utility business, the maturity of  
12 the demand for public utility services, and the regulated status of public  
13 utilities (especially the fact that their returns on investment are effectively set  
14 through the ratemaking process). The DCF valuation procedure for  
15 companies in this stage is the constant-growth DCF. In the constant-growth  
16 version of the DCF model, the current dividend payment and stock price are  
17 directly observable. However, the primary problem and controversy in  
18 applying the DCF model to estimate equity cost rates entails estimating  
19 investors' expected dividend growth rate.

20

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

23 A. One should be sensitive to several factors when using the DCF model to  
24 estimate a firm's cost of equity capital. In general, one must recognize the  
25 assumptions under which the DCF model was developed in estimating its  
26 components (the dividend yield and expected growth rate). The dividend

1 yield can be measured precisely at any point in time, but tends to vary  
 2 somewhat over time. Estimation of expected growth is considerably more  
 3 difficult. One must consider recent firm performance, in conjunction with  
 4 current economic developments and other information available to investors,  
 5 to accurately estimate investors' expectations.

6  
 7 **Q. PLEASE DISCUSS EXHIBIT JRW-10.**

8 A. My DCF analysis is provided in Exhibit JRW-10. The DCF summary is on  
 9 page 1 of this Exhibit, and the supporting data and analysis for the dividend  
 10 yield and expected growth rate are provided on the following pages of the  
 11 Exhibit.

12  
 13 **Q. WHAT DIVIDEND YIELDS ARE YOU EMPLOYING IN YOUR DCF**  
 14 **ANALYSIS FOR THE PROXY GROUP?**

15 A. The dividend yields on the common stock for the companies in the proxy  
 16 group are provided on page 2 of Exhibit JRW-10 for the six-month period  
 17 ending June 2012. For the DCF dividend yields for the Group, I use the  
 18 average of the six-month and June 2012 dividend yields. The table below  
 19 shows these dividend yields.

20

Proxy Group	June 2012 Dividend Yield	6-Month Average Dividend Yield	DCF Dividend Yield
Electric Proxy Group	4.3%	4.4%	4.35%

21  
 22 **Q. PLEASE DISCUSS THE APPROPRIATE ADJUSTMENT TO THE**  
 23 **SPOT DIVIDEND YIELD.**

1           A.     According to the traditional DCF model, the dividend yield term relates to the  
 2                 dividend yield over the coming period. As indicated by Professor Myron  
 3                 Gordon, who is commonly associated with the development of the DCF model  
 4                 for popular use, this is obtained by: (1) multiplying the expected dividend  
 5                 over the coming quarter by 4, and (2) dividing this dividend by the current  
 6                 stock price to determine the appropriate dividend yield for a firm that pays  
 7                 dividends on a quarterly basis.<sup>6</sup>

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

15

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

18           A.     I will adjust the dividend yield by one-half (1/2) the expected growth to reflect  
 19                 growth over the coming year. This is the approach employed by the Federal  
 20                 Energy Regulatory Commission (“FERC”).<sup>7</sup> The DCF equity cost rate (“K”)  
 21                 is computed as:

22

23

$$K = [ (D/P) * (1 + 0.5g) ] + g$$

---

<sup>6</sup> *Petition for Modification of Prescribed Rate of Return*, Federal Communications Commission, Docket No. 79-05, Direct Testimony of Myron J. Gordon and Lawrence I. Gould at 62 (April 1980).

<sup>7</sup> Opinion No. 414-A, *Transcontinental Gas Pipe Line Corp.*, 84 FERC ¶61,084 (1998).

1

2 **Q. PLEASE DISCUSS THE GROWTH RATE COMPONENT OF THE**  
3 **DCF MODEL.**

4 A. There is much debate as to the proper methodology to employ in estimating  
5 the growth component of the DCF model. By definition, this component is  
6 investors' expectation of the long-term dividend growth rate. Presumably,  
7 investors use some combination of historical and/or projected growth rates for  
8 earnings and dividends per share and for internal or book value growth to  
9 assess long-term potential.

10 **Q. WHAT GROWTH DATA HAVE YOU REVIEWED FOR THE PROXY**  
11 **GROUP?**

12 A. I have analyzed a number of measures of growth for companies in the Electric  
13 Proxy Group. I reviewed *Value Line's* historical and projected growth rate  
14 estimates for earnings per share ("EPS"), dividends per share ("DPS"), and  
15 book value per share ("BVPS"). In addition, I utilized the average EPS  
16 growth rate forecasts of Wall Street analysts as provided by Yahoo, Reuters,  
17 and Zacks. These services solicit five-year earnings growth rate projections  
18 from securities analysts and compile and publish the means and medians of  
19 these forecasts. Finally, I also assessed prospective growth as measured by  
20 prospective earnings retention rates and earned returns on common equity.

21

22 **Q. PLEASE DISCUSS HISTORICAL GROWTH IN EARNINGS AND**  
23 **DIVIDENDS AS WELL AS INTERNAL GROWTH.**



1           A.     Historical growth rates for EPS, DPS, and BVPS are readily available to  
2 investors and are presumably an important ingredient in forming expectations  
3 concerning future growth. However, one must use historical growth numbers  
4 as measures of investors' expectations with caution. In some cases, past  
5 growth may not reflect future growth potential. Also, employing a single  
6 growth rate number (for example, for five or ten years), is unlikely to  
7 accurately measure investors' expectations due to the sensitivity of a single  
8 growth rate figure to fluctuations in individual firm performance as well as  
9 overall economic fluctuations (i.e., business cycles). However, one must  
10 appraise the context in which the growth rate is being employed. According  
11 to the conventional DCF model, the expected return on a security is equal to  
12 the sum of the dividend yield and the expected long-term growth in dividends.  
13 Therefore, to best estimate the cost of common equity capital using the  
14 conventional DCF model, one must look to long-term growth rate  
15 expectations.

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

24

25           **Q.     PLEASE DISCUSS THE SERVICES THAT PROVIDE ANALYSTS' EPS**

1           **FORECASTS.**

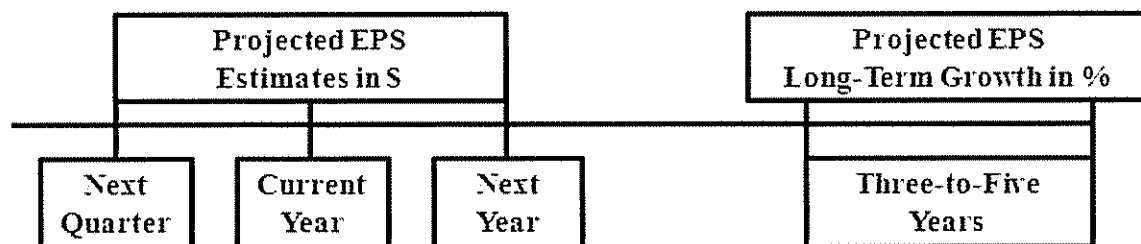
2           A.     Analysts' EPS forecasts for companies are collected and published by a number  
3                   of different investment information services, including Institutional Brokers  
4                   Estimate System ("I/B/E/S"), Bloomberg, FactSet, Zacks, First Call and Reuters,  
5                   among others. Thompson Reuters publishes analysts' EPS forecasts under  
6                   different product names, including IBES, First Call, and Reuters. Bloomberg,  
7                   FactSet, and Zacks publish their own set of analysts' EPS forecasts for  
8                   companies. These services do not reveal: (1) the analysts who are solicited for  
9                   forecasts; or (2) the actual analysts who actually provide the EPS forecasts that  
10                  are used in the compilations published by the services. IBES, Bloomberg,  
11                  FactSet, and First Call are fee-based services. These services usually provide  
12                  detailed reports and other data in addition to analysts' EPS forecasts. Thompson  
13                  Reuters and Zacks do provide limited EPS forecasts data free-of-charge on the  
14                  internet. Yahoo finance (<http://finance.yahoo.com>) lists Thompson Reuters as  
15                  the source of its summary EPS forecasts. The Reuters website  
16                  ([www.reuters.com](http://www.reuters.com)) also publishes EPS forecasts from Thompson Reuters, but  
17                  with more detail. Zacks ([www.zacks.com](http://www.zacks.com)) publishes its summary forecasts on  
18                  its website. Zacks estimates are also available on other websites, such as  
19                  msn.money (<http://money.msn.com>).

20  
21           **Q.     PLEASE PROVIDE AN EXAMPLE.**

22           A.     These services solicit the EPS forecasts of analysts of investment and financial  
23                   service firms and publish the average EPS estimates for future quarterly and  
24                   annual time periods as well as the average long-term EPS growth rate forecasts.  
25                   As shown in the figure below, the projected EPS near-term estimates are usually

provided for the next quarter, the current fiscal year, and the next fiscal year.

The long-term projected EPS growth rate is for a three-to-five-year time period.



**Q. PLEASE PROVIDE AN EXAMPLE OF THESE EPS FORECASTS.**

A. The following example provides the EPS forecasts compiled by Reuters for American Electric Power (stock symbol “AEP”).

Consensus Earnings Estimates  
American Electric Power (AEP)  
[www.reuters.com](http://www.reuters.com)  
June 1, 2012

	# of Estimates	Mean	High	Low
<b>Earnings (per share)</b>				
Quarter Ending Jun-12	9	0.69	0.81	0.64
Quarter Ending Sep-12	9	1.06	1.17	0.94
Year Ending Dec-12	21	3.06	3.18	2.57
Year Ending Dec-13	19	3.15	3.32	3.00
LT Growth Rate (%)	8	3.90	6.00	1.40

1           These figures can be interpreted as follows. The top line shows that nine  
2           analysts have provided EPS estimates for the quarter ending June 30, 2012.  
3           The mean, high, and low estimates are \$0.69, \$0.81, and \$0.64, respectively.  
4           The second line shows the quarterly EPS estimates for the quarter ending  
5           September 30, 2012. Lines three and four show the annual EPS estimates for  
6           the fiscal years ending December 2012 and December 2013. The quarterly and  
7           annual EPS forecasts in lines 1-4 are expressed in dollars and cents. As in the  
8           AEP case shown here, it is common for more analysts to provide estimates of  
9           annual EPS as opposed to quarterly EPS. The bottom line shows the projected  
10          long-term EPS growth rate which is expressed as a percentage. For AEP, eight  
11          analysts have provided long-term EPS growth rate forecasts, with mean, high,  
12          and low growth rates of 3.90%, 6.00%, and 1.40%, respectively.

13  
14          **Q.   WHICH OF THESE EPS FORECASTS IS USED IN DEVELOPING A**  
15          **DCF GROWTH RATE?**

16          A.   The DCF growth rate is the long-term projected growth rate in EPS, DPS, and  
17          BVPS. Therefore, in developing an equity cost rate using the DCF model, the  
18          projected long-term growth rate is the projection used in the DCF model.

19  
20          **Q.   WHY ARE YOU NOT RELYING EXCLUSIVELY ON THE EPS**  
21          **FORECASTS OF WALL STREET ANALYSTS IN ARRIVING AT A**  
22          **DCF GROWTH RATE FOR THE PROXY GROUP?**

23          A.   There are several issues with using the EPS growth rate forecasts of Wall  
24          Street analysts as DCF growth rates. First, the appropriate growth rate in the  
25          DCF model is the dividend growth rate, not the earnings growth rate.

1           Nonetheless, over the very long-term, dividends and earnings will have to  
2           grow at a similar growth rate. Therefore, consideration must be given to other  
3           indicators of growth, including prospective dividend growth, internal growth,  
4           as well as projected earnings growth. Second, a new study by Lacina, Lee,  
5           and Xu (2011) has shown that analysts' long-term earnings growth rate  
6           forecasts are not more accurate at forecasting future earnings than naïve  
7           random walk forecasts of future earnings.<sup>8</sup> Employing data over a twenty-  
8           year period, these authors demonstrate that using the most recent year's EPS  
9           figure to forecast EPS in the next 3-5 years proved to be just as accurate as  
10          using the EPS estimates from analysts' long-term earnings growth rate  
11          forecasts. In the authors' opinion, these results indicate that analysts' long-  
12          term earnings growth rate forecasts should be used as inputs for valuation and  
13          cost of capital purposes with caution. Finally, and most significantly, it is  
14          well known that the long-term EPS growth rate forecasts of Wall Street  
15          securities analysts are overly optimistic and upwardly biased. This has been  
16          demonstrated in a number of academic studies over the years. This issue is  
17          discussed at length in Appendix B of this testimony. Hence, using these  
18          growth rates as a DCF growth rate will provide an overstated equity cost rate.  
19          On this issue, a study by Easton and Sommers (2007) found that optimism in  
20          analysts' growth rate forecasts leads to an upward bias in estimates of the cost  
21          of equity capital of almost 3.0 percentage points.<sup>9</sup>

---

<sup>8</sup> M. Lacina, B. Lee and Z. Xu, *Advances in Business and Management Forecasting (Vol. 8)*, Kenneth D. Lawrence, Ronald K. Klimberg (ed ), Emerald Group Publishing Limited, pp.77-101.

<sup>9</sup> Easton, P., & Sommers, G. (2007). Effect of analysts' optimism on estimates of the expected rate of return implied by earnings forecasts. *Journal of Accounting Research*, 45(5), 983-1015.

1           **Q.    IS IT YOUR OPINION THAT STOCK PRICES REFLECT THE**  
2           **UPWARD BIAS IN THE EPS GROWTH RATE FORECASTS?**

3           A.    Yes, I do believe that investors are well aware of the bias in analysts' EPS  
4           growth rate forecasts, and therefore, stock prices reflect the upward bias.

5

6           **Q.    HOW DOES THAT AFFECT THE USE OF THESE FORECASTS IN A**  
7           **DCF EQUITY COST RATE STUDY?**

8           A.    According to the DCF model, the equity cost rate is a function of the dividend  
9           yield and expected growth rate. Since stock prices reflect the bias, it would  
10          affect the dividend yield. In addition, the DCF growth rate needs to be adjusted  
11          downward from the projected EPS growth rate to reflect the upward bias.

12

13          **Q.    PLEASE DISCUSS THE HISTORICAL GROWTH OF THE**  
14          **COMPANIES IN THE ELECTRIC PROXY GROUP AS PROVIDED**  
15          **BY *VALUE LINE*.**

16          A.    Page 3 of Exhibit JRW-10 provides the 5- and 10-year historical growth rates  
17          for the companies in the group, as published in the *Value Line Investment*  
18          *Survey*. The historical growth measures in EPS, DPS, and BVPS for the  
19          Electric Proxy Group, as measured by the medians, range from 1.0% to 4.5%,  
20          with an average of 3.3%.

21

22          **Q.    PLEASE SUMMARIZE *VALUE LINE*'S PROJECTED GROWTH**  
23          **RATES FOR THE COMPANIES IN THE PROXY GROUP.**

24          A.    *Value Line*'s projections of EPS, DPS, and BVPS growth for the companies in  
25          the Electric Proxy Group are shown on page 4 of Exhibit JRW-10. As noted

1 above, due to the presence of outliers, the medians are used in the analysis.  
2 For the group, the medians range from 3.5% to 5.0%, with an average of  
3 4.3%.

4 Also provided on page 4 of Exhibit JRW-10 is prospective sustainable  
5 growth for the proxy group as measured by *Value Line*'s average projected  
6 retention rate and return on shareholders' equity. As noted above, sustainable  
7 growth is significant as a primary driver of long-run earnings growth. For the  
8 Electric Proxy Group, the median prospective sustainable growth rate is 4.0%.

9 **Q. PLEASE ASSESS GROWTH FOR THE PROXY GROUP AS**  
10 **MEASURED BY ANALYSTS' FORECASTS OF EXPECTED LONG-**  
11 **TERM EPS GROWTH.**

12 A. Yahoo, Zacks, and Reuters collect, summarize, and publish Wall Street  
13 analysts' long-term EPS growth rate forecasts for the companies in the proxy  
14 group. These forecasts are provided for the companies in the proxy group on  
15 page 5 of Exhibit JRW-10. The median of analysts' projected EPS growth  
16 rates for the Electric Proxy Group is 4.5%.<sup>10</sup>

17  
18 **Q. PLEASE SUMMARIZE YOUR ANALYSIS OF THE HISTORICAL**  
19 **AND PROSPECTIVE GROWTH OF THE PROXY GROUP.**

20 A. Page 6 of Exhibit JRW-10 shows the summary DCF growth rate indicators for  
21 the proxy group. A growth rate of 3.3% is indicated by the historic growth rate  
22 measures. *Value Line*'s projected growth for EPS, DPS, and BVPS is 4.3%,

---

<sup>10</sup> Since there is considerable overlap in analyst coverage between the three services, and not all of the companies have forecasts from the different services, I have averaged the expected five-year EPS growth rates from the three services for each company to arrive at an expected EPS growth rate by company.

1 while prospective sustainable growth rate, measured using *Value Line* inputs,  
 2 is 4.0%. Analysts' projected EPS growth is 4.5% for the group. Given these  
 3 figures, and giving greater weight to projected growth rate measures, an  
 4 expected DCF growth rate in the range of 4.0% to 4.5% is reasonable for the  
 5 Electric Proxy Group. I will use the midpoint of the range, 4.25%, as my  
 6 DCF growth rate for the Electric Proxy Group.

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

10 A. My DCF-derived equity cost rate for the group is summarized on page 1 of  
 11 Exhibit JRW-10.

12  
 13 DCF Equity Cost Rate (k) =  $\frac{D}{P}$  + g  
 14  
 15  
 16  
 17

	<b>Dividend Yield</b>	<b>1 + ½ Growth Adjustment</b>	<b>DCF Growth Rate</b>	<b>Equity Cost Rate</b>
<b>Electric Proxy Group</b>	<b>4.35%</b>	<b>1.02125</b>	<b>4.25%</b>	<b>8.70%</b>

18

19 **C. CAPITAL ASSET PRICING MODEL RESULTS**

20 **Q. PLEASE DISCUSS THE CAPITAL ASSET PRICING MODEL**  
 21 **("CAPM").**



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

$$5 \qquad k \qquad = \qquad R_f \qquad + \qquad RP$$

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

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

$$15 \qquad K = (R_f) + \beta * [E(R_m) - (R_f)]$$

16                   Where:

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

25  
26                   To estimate the required return or cost of equity using the CAPM  
27                   requires three inputs: the risk-free rate of interest ( $R_f$ ), the beta ( $\beta$ ), and the  
28                   expected equity or market risk premium  $[E(R_m) - (R_f)]$ .  $R_f$  is the easiest of the  
29                   inputs to measure – it is the yield on long-term Treasury bonds.  $\beta$ , the

1 measure of systematic risk, is a little more difficult to measure because there  
2 are different opinions about what adjustments, if any, should be made to  
3 historical betas due to their tendency to regress to 1.0 over time. And finally,  
4 an even more difficult input to measure is the expected equity or market risk  
5 premium ( $E(R_m) - (R_f)$ ). I will discuss each of these inputs below.

6 **Q. PLEASE DISCUSS EXHIBIT JRW-11.**

7 A. Exhibit JRW-11 provides the summary results for my CAPM study. Page 1  
8 shows the results, and the following pages contain the supporting data.

9  
10 **Q. PLEASE DISCUSS THE RISK-FREE INTEREST RATE.**

11 A. The yield on long-term U.S. Treasury bonds has usually been viewed as the  
12 risk-free rate of interest in the CAPM. The yield on long-term U.S. Treasury  
13 bonds, in turn, has been considered to be the yield on U.S. Treasury bonds  
14 with 30-year maturities.

15  
16 **Q. WHAT RISK-FREE INTEREST RATE ARE YOU USING IN YOUR**  
17 **CAPM?**

18 A. The yield on 30-year Treasury bonds has been in the 2.6% to 4.0% range over  
19 the last six months. These rates are currently at the lower end of this range.  
20 Given the recent range of yields, and the prospect of higher rates in the future,  
21 I will use 4.0% as the risk-free rate, or  $R_f$ , in my CAPM.

22

1           **Q.    WHAT BETAS ARE YOU EMPLOYING IN YOUR CAPM?**

2           A.    Beta ( $\beta$ ) is a measure of the systematic risk of a stock. The market, usually  
3           taken to be the S&P 500, has a beta of 1.0. The beta of a stock with the same  
4           price movement as the market also has a beta of 1.0. A stock whose price  
5           movement is greater than that of the market, such as a technology stock, is  
6           riskier than the market and has a beta greater than 1.0. A stock with below-  
7           average price movement, such as that of a regulated public utility, is less risky  
8           than the market and has a beta less than 1.0. Estimating a stock's beta involves  
9           running a linear regression of a stock's return on the market return.

10                        As shown on page 3 of Exhibit JRW-11, the slope of the regression  
11                        line is the stock's  $\beta$ . A steeper line indicates the stock is more sensitive to the  
12                        return on the overall market. This means that the stock has a higher  $\beta$  and  
13                        greater-than-average market risk. A less steep line indicates a lower  $\beta$  and  
14                        less market risk.

15                        Several online investment information services, such as Yahoo and  
16                        Reuters, provide estimates of stock betas. Usually these services report  
17                        different betas for the same stock. The differences are usually due to: (1) the  
18                        time period over which the  $\beta$  is measured; and (2) any adjustments that are  
19                        made to reflect the fact that betas tend to regress to 1.0 over time. In  
20                        estimating an equity cost rate for the proxy group, I am using the betas for the  
21                        companies as provided in the *Value Line Investment Survey*. As shown on  
22                        page 3 of Exhibit JRW-11, the average beta for the companies in the Electric  
23                        Proxy Group is 0.73.

1           **Q.    PLEASE DISCUSS THE ALTERNATIVE VIEWS REGARDING THE**  
2           **EQUITY RISK PREMIUM.**

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

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

12          A.    Page 4 of Exhibit JRW-11 highlights the primary approaches to and issues in  
13          estimating the expected equity risk premium. The traditional way to measure  
14          the equity risk premium was to use the difference between historical average  
15          stock and bond returns. In this case, historical stock and bond returns, also  
16          called ex post returns, were used as the measures of the market’s expected  
17          return (known as the ex ante or forward-looking expected return). This type  
18          of historical evaluation of stock and bond returns is often called the “Ibbotson  
19          approach” after Professor Roger Ibbotson, who popularized this method of  
20          using historical financial market returns as measures of expected returns.  
21          Most historical assessments of the equity risk premium suggest an equity risk  
22          premium of 5-7 percent above the rate on long-term U.S. Treasury bonds.  
23          However, this can be a problem because: (1) ex post returns are not the same  
24          as ex ante expectations, (2) market risk premiums can change over time,

1 increasing when investors become more risk-averse and decreasing when  
2 investors become less risk-averse, and (3) market conditions can change such  
3 that ex post historical returns are poor estimates of ex ante expectations.

4 The use of historical returns as market expectations has been criticized  
5 in numerous academic studies.<sup>11</sup> The general theme of these studies is that the  
6 large equity risk premium discovered in historical stock and bond returns  
7 cannot be justified by the fundamental data. These studies, which fall under  
8 the category “Ex Ante Models and Market Data,” compute ex ante expected  
9 returns using market data to arrive at an expected equity risk premium. These  
10 studies have also been called “Puzzle Research” after the famous study by  
11 Mehra and Prescott in which the authors first questioned the magnitude of  
12 historical equity risk premiums relative to fundamentals.<sup>12</sup>

13 In addition, there are a number of surveys of financial professionals  
14 regarding the equity risk premium. There have been several published surveys  
15 of academics on the equity risk premium. *CFO Magazine* conducts a quarterly  
16 survey of CFOs, which includes questions regarding their views on the current  
17 expected returns on stocks and bonds. Usually over 500 CFOs participate in  
18 the survey.<sup>13</sup> Questions regarding expected stock and bond returns are also  
19 included in the Federal Reserve Bank of Philadelphia’s annual survey of  
20 financial forecasters, which is published as the *Survey of Professional*  
21 *Forecasters*.<sup>14</sup> This survey of professional economists has been published for

---

<sup>11</sup> The problems with using ex post historical returns as measures of ex ante expectations will be discussed at length later in my testimony.

<sup>12</sup> R. Mehra and Edward Prescott, “The Equity Premium: A Puzzle,” *Journal of Monetary Economics* (1985).

<sup>13</sup> See, [www.cfosurvey.org](http://www.cfosurvey.org).

<sup>14</sup> Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters*, (February 12, 2012). The *Survey of Professional Forecasters* was formerly conducted by the American Statistical Association (“ASA”) and the

1 almost 50 years. In addition, Pablo Fernandez conducts occasional surveys of  
2 financial analysts and companies regarding the equity risk premiums they use  
3 in their investment and financial decision-making.

4 **Q. PLEASE PROVIDE A SUMMARY OF THE EQUITY RISK PREMIUM**  
5 **STUDIES.**

6 A. Derrig and Orr (2003), Fernandez (2007), and Song (2007) have completed  
7 the most comprehensive reviews to date of the research on the equity risk  
8 premium.<sup>15</sup> Derrig and Orr's study evaluated the various approaches to  
9 estimating equity risk premiums as well as the issues with the alternative  
10 approaches and summarized the findings of the published research on the  
11 equity risk premium. Fernandez examined four alternative measures of the  
12 equity risk premium – historical, expected, required, and implied. He also  
13 reviewed the major studies of the equity risk premium and presented the  
14 summary equity risk premium results. Song provides an annotated  
15 bibliography and highlights the alternative approaches to estimating the equity  
16 risk summary.

17 Page 5 of Exhibit JRW-11 provides a summary of the results of the  
18 primary risk premium studies reviewed by Derrig and Orr, Fernandez, and  
19 Song, as well as other more recent studies of the equity risk premium. In  
20 developing page 5 of Exhibit JRW-11, I have categorized the studies as

---

National Bureau of Economic Research ("NBER") and was known as the ASA/NBER survey. The survey, which began in 1968, is conducted each quarter. The Federal Reserve Bank of Philadelphia, in cooperation with the NBER, assumed responsibility for the survey in June 1990.

<sup>15</sup> See Richard Derrig and Elisha Orr, "Equity Risk Premium: Expectations Great and Small," Working Paper (version 3.0), Automobile Insurers Bureau of Massachusetts, (August 28, 2003); Pablo Fernandez, "Equity Premium: Historical, Expected, Required, and Implied," IESE Business School Working Paper, (2007); Zhiyi Song, "The Equity Risk Premium: An Annotated Bibliography," CFA Institute, (2007).

1 discussed on page 4 of Exhibit JRW-11. I have also included the results of the  
2 “Building Blocks” approach to estimating the equity risk premium, including  
3 a study I performed, which is presented in Appendix C. The Building Blocks  
4 approach is a hybrid approach employing elements of both historic and *ex*  
5 *ante* models.

6  
7 **Q. PLEASE DISCUSS PAGE 5 OF EXHIBIT JRW-11.**

8 A. Page 5 of JRW-11 provides a summary of the results of the equity risk  
9 premium studies that I have reviewed. These include the results of: (1) the  
10 various studies of the historical risk premium, (2) *ex ante* equity risk premium  
11 studies, (3) equity risk premium surveys of CFOs, Financial Forecasters,  
12 analysts, companies and academics, and (4) the Building Block approaches to  
13 the equity risk premium. There are results reported for over thirty studies, and  
14 the median equity risk premium is 5.06%.

15  
16 **Q. PLEASE HIGHLIGHT THE RESULTS OF THE MORE RECENT**  
17 **RISK PREMIUM STUDIES AND SURVEYS.**

18 A. The studies cited on page 5 of Exhibit JRW-11 include all equity risk  
19 premium studies and surveys I could identify that were published over the past  
20 decade and that provided an equity risk premium estimate. Most of these  
21 studies were published prior to the financial crisis of the past two years. In  
22 addition, some of these studies were published in the early 2000s at the market  
23 peak. It should be noted that many of these studies (as indicated) used data  
24 over long periods of time (as long as fifty years of data) and so they were not  
25 estimating an equity risk premium as of a point in time (e.g., the year 2001).  
26

1 To assess the effect of the earlier studies on the equity risk premium, on page  
2 6 of Exhibit JRW-11, I have reconstructed page 5 of Exhibit JRW-11, but I  
3 have eliminated all studies dated before January 2, 2010. The median for this  
4 subset of studies is 5.01%.

5  
6 **Q. GIVEN THESE RESULTS, WHAT EQUITY RISK PREMIUM ARE**  
7 **YOU USING IN YOUR CAPM?**

8 A. I use the median equity risk premium for the 2010-12 studies and surveys,  
9 which is 5.01%.

10  
11 **Q. IS YOUR *EX ANTE* EQUITY RISK PREMIUM CONSISTENT WITH**  
12 **THE EQUITY RISK PREMIUMS USED BY CFOS?**

13 A. Yes. In the June 2012 CFO survey conducted by *CFO Magazine* and Duke  
14 University, the expected 10-year equity risk premium was 4.5%.

15  
16 **Q. IS YOUR *EX ANTE* EQUITY RISK PREMIUM CONSISTENT WITH**  
17 **THE EQUITY RISK PREMIUMS OF PROFESSIONAL**  
18 **FORECASTERS?**

19 A. Yes. The financial forecasters in the previously referenced Federal Reserve  
20 Bank of Philadelphia survey project both stock and bond returns. As shown  
21 on Panels D and E of page 8 of Exhibit JRW-11, the mean long-term expected  
22 stock and bond returns were 6.80% and 4.0%, respectively. This provides an  
23 *ex ante* equity risk premium of 2.80%.

24



1           **Q.    IS YOUR *EX ANTE* EQUITY RISK PREMIUM CONSISTENT WITH**  
2           **THE EQUITY RISK PREMIUMS OF FINANCIAL ANALYSTS AND**  
3           **COMPANIES?**

4           A.    Yes.  Pablo Fernandez recently published the results of a 2012 survey of  
5           financial analysts and companies.  This survey included over 7,000 responses.  
6           The median equity risk premiums employed by U.S. analysts and companies  
7           were 5.0% and 5.5%, respectively.

8  
9           **Q.    IS YOUR *EX ANTE* EQUITY RISK PREMIUM CONSISTENT WITH**  
10           **THE EQUITY RISK PREMIUMS USED BY THE LEADING**  
11           **CONSULTING FIRMS?**

12          A.    Yes.  McKinsey & Co. is widely recognized as the leading management  
13          consulting firm in the world.  It published a study entitled “The Real Cost of  
14          Equity” in which the McKinsey authors developed an *ex ante* equity risk  
15          premium for the U.S.  In reference to the decline in the equity risk premium,  
16          as well as what is the appropriate equity risk premium to employ for corporate  
17          valuation purposes, the McKinsey authors concluded the following:

18                   We attribute this decline not to equities becoming less  
19                   risky (the inflation-adjusted cost of equity has not  
20                   changed) but to investors demanding higher returns in  
21                   real terms on government bonds after the inflation  
22                   shocks of the late 1970s and early 1980s.  We believe  
23                   that using an equity risk premium of 3.5 to 4 percent in  
24                   the current environment better reflects the true long-  
25                   term opportunity cost of equity capital and hence will  
26                   yield more accurate valuations for companies.<sup>16</sup>

---

<sup>16</sup> Marc H. Goedhart, *et al.*, “The Real Cost of Equity,” *McKinsey on Finance* (Autumn 2002), p. 15.

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

3 A. The results of my CAPM study for the proxy group are provided below:  
4

$$K = (R_f) + B * [E(R_m) - (R_f)]$$

	Risk-Free Rate	Beta	Equity Risk Premium	Equity Cost Rate
Electric Proxy Group	4.00%	0.73	5.01%	7.7%

6 These results are summarized on page 1 of Exhibit JRW-11.  
7  
8

9 **VI. EQUITY COST RATE SUMMARY**

10 Q. PLEASE SUMMARIZE YOUR EQUITY COST RATE STUDY.

11 A. The results for my DCF and CAPM analyses for the proxy group are indicated  
12 below:

	DCF	CAPM
Electric Proxy Group	8.7%	7.7%

13 Q. GIVEN THESE RESULTS, WHAT IS YOUR ESTIMATED EQUITY  
14 COST RATE FOR THE GROUP?

15 A. Given these results, I conclude that the appropriate equity cost rate for the  
16 Electric Proxy Group is in the 7.7% to 8.7% range. However, since I give  
17 greater weight to the DCF model, I am using the upper end of the range as the  
18 equity cost rate. Therefore, I conclude that the appropriate equity cost rate for  
19 the Electric Proxy Group is in the 8.50% to 9.0% range at this time.

1           **Q.     GIVEN THIS RANGE, WHAT IS YOUR RECOMMENDED ROE FOR**  
2           **FPL?**

3           A.     Given this range, I recommend an equity cost rate of 9.0% for FPL using  
4           OPC's recommended capital structure.  If the Commission adopts FPL's  
5           capital structure with a 59.62% common equity ratio, I recommend a ROE of  
6           8.50% for FPL.  Page 2 of Exhibit JRW-1 shows the average yield  
7           differentials between long-term, A and BBB-rated utility bonds.  Given these  
8           differentials, I believe that 50 basis points represents an appropriate return  
9           differential to compensate for the large difference in the common equity ratios  
10          associated with Company's recommended capital structure and OPC's  
11          recommended capital structure.

12          **Q.     PLEASE INDICATE WHY A 9.0% RETURN IS APPROPRIATE FOR**  
13          **FPL AT THIS TIME.**

14          A.     There are several reasons why a 9.0% return on equity is appropriate for the  
15          Company in this case.  First, as shown on in Exhibit JRW-8, the electric utility  
16          industry is one of *Value Line's* lowest risk industries in the U.S. as measured  
17          by beta.  As such, the cost of equity capital for this industry is amongst the  
18          lowest in the U.S. according to the CAPM.  Second, as shown in Exhibit  
19          JRW-3, capital costs for utilities, as indicated by long-term bond yields, have  
20          declined to below their pre-financial crisis levels.  Third, while the financial  
21          markets have recovered significantly in the past year, the economy has not.  
22          The economic times are still viewed as being difficult, with nearly ten percent  
23          unemployment.  As a result, interest rates and inflation are at relatively low  
24          levels, and hence the expected returns on financial assets – from savings

1 accounts to Treasury bills to common stocks – are low. Therefore, in my  
2 opinion, a 9.0% return is appropriate for a regulated electric utility. Finally, in  
3 this economy it seems especially burdensome to consumers to pay higher  
4 utility rates associated with ROEs in excess of returns that investors require.

5  
6  
7 **VII. CRITIQUE OF FPL'S RATE OF RETURN TESTIMONY**

8  
9 **Q. PLEASE SUMMARIZE FPL'S OVERALL RATE OF RETURN**  
10 **RECOMMENDATION.**

11 A. FPL's return on equity recommendation is provided by Dr. William E. Avera.  
12 FPL's rate of return recommendation is summarized on page 1 of Exhibit  
13 JRW-12. The Company's recommended capital structure from investor  
14 sources consists of 2.22% short-term debt, 38.16% long-term debt, and  
15 59.62% common equity.

16  
17 **Q. WHAT ISSUES DO YOU HAVE WITH THE COMPANY'S COST OF**  
18 **CAPITAL POSITION?**

19 A. The primary areas of disagreement in measuring FPL's cost of capital are: (1)  
20 the appropriate capital structure for FPL; (2) the proxy group to estimate an  
21 equity cost rate for FPL; (3) the expected DCF growth rate, and in particular  
22 Dr. Avera's excessive reliance on the projected growth rates of Wall Street  
23 analysts to measure expected DCF growth; (4) the measurement and  
24 magnitude of the equity risk premium used in CAPM and RPM approaches;  
25 (5) the validity of the Expected Earnings equity cost rate approach; and (6) Dr.

1 Avera's adjustments for size and flotation costs. These issues are addressed  
2 below.

3  
4 **A. CAPITAL STRUCTURE**

5  
6 **Q. PLEASE REVIEW THE CAPITAL STRUCTURE ISSUE.**

7 A. FPL has recommended a capital structure that includes a common equity ratio of  
8 59.62%. Such a capital structure includes much more equity and less debt than  
9 the capital structures of other electric utilities and FPL's parent, NextEra. The  
10 average common equity ratios for the Electric Proxy Group and NextEra are  
11 45.01% and 38.92%, respectively. These ratios highlight the fact that proxy  
12 companies and NextEra have a higher degree of financial risk than FPL.

13  
14 **Q. HOW HAS DR. AVERA ATTEMPTED TO DEFEND THE COMPANY'S  
15 PROPOSED EQUITY-HEAVY CAPITAL STRUCTURE?**

16 A. Dr. Avera has made three attempts to justify FPL's requested capital structure:  
17 (1) he has adjusted the capital structure for the Company's purchased power  
18 contracts; (2) he has computed the capital structure ratios for the operating  
19 companies (and not the holding companies) for the companies in his proxy  
20 group; and (3) he has computed the market value capital structures for the  
21 companies in his proxy group.

22  
23 **Q. PLEASE REVIEW THE COMPANY'S RECOMMENDED CAPITAL  
24 STRUCTURE AND IMPUTED DEBT.**

1           A.     To make the Company's recommended capital structure appear more reasonable,  
2                    in Exhibit WEA-14, Dr. Avera has imputed \$949 million in debt and included it  
3                    in his "adjusted capital structure." This adjustment effectively increases FPL's  
4                    debt by \$949 million to account for the Company's Purchased Power  
5                    Agreements ("PPAs"). The \$949 million is computed by multiplying a risk  
6                    factor of 25% to the present value of the Company's capacity contracts. In  
7                    computing credit rating metrics, S&P applies such a risk factor ranging from 0%  
8                    to 100%, which is intended to reflect the risk of recovery of the PPA payments.  
9                    However, S&P does not indicate how the risk factor that ranges from 0% to  
10                   100% is determined. Given a recovery mechanism for PPA payments, the  
11                   financial condition of an electric utility company is not impaired by entering into  
12                   these contracts. Hence, providing incremental revenues through a higher equity  
13                   ratio and a higher overall rate of return is unnecessary and would result in an  
14                   unwarranted revenue benefit to the utility. I have identified several flaws in the  
15                   adjustment.

16

#### 17                   Risk Factor

18                   Given the methodology for imputing debt from PPAs, the risk factor is  
19                   extremely important. FPL has presumed that a risk factor of 25% is appropriate  
20                   for the Company. However, S&P does not indicate how the risk factor that  
21                   ranges from 0% to 100% is determined. Hence, the S&P risk factor for imputing  
22                   debt is not well defined and cannot be assessed in this situation. Given the  
23                   Commission's support for the collection of long-term contractual payments, the  
24                   risk of non-recovery appears to be extremely low (perhaps even zero percent).  
25                   Hence, a risk factor as high as 25% seems out of line. However, given the lack

1 of guidance from S&P, it is impossible to properly assess the risk factor in this  
2 situation.

3 In addition, as opposed to S&P, Moody's appears to recognize some of  
4 the benefits of PPAs and looks at them in a more positive manner. For example,  
5 Moody's states:<sup>17</sup>

6 "If a utility enters into a PPA for the purpose of providing an assured  
7 supply and there is reasonable assurance that regulators will allow the  
8 costs to be recovered in regulated rates, Moody's may view the PPA as  
9 being most akin to an operating cost. In this circumstance, there most  
10 likely will be no imputed adjustment to the obligations of the utility."

11  
12 In other words, under this scenario Moody's would rate the risk factor at 0% and  
13 there would be no imputed debt.

#### 14 15 S&P Adjustments are Not GAAP Accounting

16 Even if debt were imputed by S&P from a PPA (assuming a risk factor greater  
17 than 0%), no changes would be made to the company's generally accepted  
18 accounting principles ("GAAP") financial statements. Hence, investors would  
19 not see the impact of S&P's adjustment. In addition, the Company does not incur  
20 a liability on its GAAP-based financial statements for the PPAs. Furthermore,  
21 given a regulatory-mandated recovery method for the payments, investors  
22 should be indifferent to a utility entering into a PPA.

#### 23 24 From a Regulatory Perspective, PPA Payments are Unlike Debt

25 In a regulatory setting, a utility is given the 'opportunity to earn' its cost of debt  
26 as well as its overall cost of capital through the ratemaking process. Given the  
27 many uncertainties associated with revenues and expenses between rate cases,

---

<sup>17</sup> Moody's Rating Methodology: Global Regulated Electric Utilities, March 2005, page 10.

1 there is no guarantee that the overall cost of debt can be earned. However, with  
2 long-term PPAs, the timely and certain recovery of fixed payments is assured.  
3 That is, PPA costs do not feature the uncertainty associated with the 'opportunity  
4 to earn' as do debt payments. In sum, given S&P's lack of guidance on the risk  
5 factor, the Commission's support for the collection of payments for PPAs, the  
6 notion that these are not GAAP adjustments and are not recorded as liabilities on  
7 the books of the company, and the fact that, from a regulatory perspective, PPA  
8 payments are unlike debt, the PPA adjustment to the Company's capital  
9 structure is inappropriate.

10  
11 **Q. PLEASE DISCUSS DR. AVERA'S ANALYSIS OF THE**  
12 **CAPITALIZATIONS OF THE OPERATING COMPANIES OF HIS**  
13 **PROXY GROUP.**

14 A. In Exhibit WEA-15, Dr. Avera computes the capitalization ratios for the  
15 operating subsidiaries of the companies in his utility group. He claims that this  
16 analysis supports the Company's proposed capital structure with a 59.62%  
17 common equity ratio.

18 The major issue with Dr. Avera's analysis is that the capital structure  
19 ratios that he uses are for the operating subsidiaries and not for the parent  
20 companies. The stocks of the parent companies trade in the markets. Dr. Avera  
21 and I used the data for the parent companies to estimate an equity cost rate for  
22 the Company. The investment and financial risks of the parent companies that  
23 trade in the markets are a function of the overall capitalization of the parent  
24 companies, not the subsidiaries. As such, it is their capitalization ratios, which



1 are indicative of the financial risk they are exposed to, that are relevant when  
2 making capitalization comparisons, not the operating subsidiaries.

3  
4 **Q. DR. AVERA HAS ALSO JUSTIFIED FPL'S PROPOSED CAPITAL**  
5 **STRUCTURE TO THE MARKET VALUE CAPITAL STRUCTURE**  
6 **RATIOS OF HIS UTILITY GROUP. PLEASE COMMENT.**

7 A. In Exhibit WEA-16, Dr. Avera computes the capitalization ratios for the  
8 companies in his utility group using market values and not book values. He uses  
9 this comparison to support the Company's proposed capital structure with a  
10 59.62% common equity ratio.

11 Dr. Avera's analysis using market value capital structures represents an  
12 'apples and oranges' comparison. FPL is setting rates in this proceeding using  
13 its book value capital structure. Dr Avera's comparison to market value capital  
14 structures is simply done to make the Company's equity-heavy capital structure  
15 appear to be more in-line with the capital structures of other electric utilities.

16  
17 **Q. PLEASE SUMMARIZE DR. AVERA'S DEFENSE OF FPL'S**  
18 **PROPOSED CAPITAL STRUCTURE.**

19 A. FPL has proposed a capital structure that is far out of line with the capital  
20 structures of its parent company, NextEra, as well as other electric utilities.  
21 Dr. Avera's defense of the proposed capital structure – by imputing debt  
22 based on PPAs, and by comparing the capital structures of operating  
23 companies of his utility proxy group to the market value capital structures of  
24 his utility proxy group – is erroneous and does not justify the Company's  
25 proposed capital structure.

**B. EQUITY COST RATE****1. Proxy Groups****Q. PLEASE DISCUSS DR. AVERA'S PROXY GROUPS.**

A. Dr. Avera has used two proxy groups to estimate an equity cost rate for FPL. These include: (1) Utility Group - a group of fourteen electric utility companies; and (2) a Non-Utility Group – a group of thirteen non-utility companies.

**Q. PLEASE DISCUSS DR. AVERA'S UTILITY GROUP.**

A. Dr. Avera's utility group includes companies that are listed as combination electric and gas companies by *AUS Utilities Reports* and as electric utility companies by *Value Line*. Summary financial statistics for this group are provided on page 1 of Exhibit JRW-13. These companies receive 69% of revenues from regulated electric operations and 17% of their revenues from regulated gas operations. The average bond rating is A-. As a result, these companies are more combination electric and gas companies as opposed to pure electric companies. In addition, certain companies in the group, such as Integrys, SEMPRA, and Vectren, receive a much higher percent of revenues from regulated gas than electric operations.

**Q. PLEASE DISCUSS THE PROBLEM WITH DR. AVERA'S NON-UTILITY PROXY GROUP.**

A. Dr. Avera has estimated an equity cost rate for FPL using a proxy group of 35 non-utility companies. These companies are listed in Exhibit WEA-6. This group includes such companies as Abbott Labs, AT&T, Coca-Cola, General

1 Mills, Johnson & Johnson, McDonald's, McKesson, PepsiCo, Pfizer, and  
2 WalMart. While many of these companies are large and successful, their lines  
3 of business are vastly different from the electric utility business and they do not  
4 operate in a highly regulated environment. In addition, as discussed below, the  
5 upward bias in the EPS growth rate forecasts of Wall Street analysts is  
6 particularly severe for non-utility companies, thus the DCF equity cost rate  
7 estimates for this group are particularly overstated. As such, the non-utility  
8 group is not an appropriate proxy for FPL, and therefore the equity cost rate  
9 results for this group should be ignored.

## 10 11 **2. DCF Approach**

### 12 **Q. PLEASE SUMMARIZE DR. AVERA'S DCF ESTIMATES.**

13 A. On pages 40-55 of his testimony and in Exhibit Nos. WEA-4 – WEA-8, Dr.  
14 Avera develops an equity cost rate by applying a DCF model to his two proxy  
15 groups. In the traditional DCF approach, the equity cost rate is the sum of the  
16 dividend yield and expected growth. For the DCF growth rate, Dr. Avera uses  
17 four measures of projected EPS growth – the projected EPS growth of Wall  
18 Street analysts as compiled by IBES and Zack's, *Value Line's* projected EPS  
19 projected growth rate, and a measure of sustainable growth as computed by the  
20 sum of internal ("br") and external ("sv") growth.

21 Dr. Avera's DCF results are summarized in Panel B of page 1 of Exhibit  
22 JRW-12. The average of the DCF results is 10.0% for the utility group and  
23 11.95% for the non-utility group.

1           **Q.    PLEASE EXPRESS YOUR CONCERNS WITH DR. AVERA'S DCF**  
2           **STUDY.**

3           A.    I have several issues with Dr. Avera's DCF equity cost rate: (1) the use of the  
4           combination utility and non-utility groups to estimate an equity cost rate for  
5           FPL; (2) the excessive reliance on the EPS growth rate forecasts of Wall Street  
6           analysts and *Value Line* as a DCF growth rate; and (3) the flotation cost  
7           adjustment. The errors in the proxy groups were discussed above. The use of  
8           analysts' EPS growth rate forecasts and flotation costs are addressed below.

9  
10          **Q.    PLEASE DISCUSS DR. AVERA'S RELIANCE ON THE PROJECTED**  
11          **GROWTH RATES OF WALL STREET ANALYSTS AND *VALUE***  
12          ***LINE*.**

13          A.    It seems highly unlikely that investors today would rely excessively on the  
14          EPS growth rate forecasts of Wall Street analysts and ignore other growth rate  
15          measures in arriving at expected growth. As I previously indicated, the  
16          appropriate growth rate in the DCF model is the dividend growth rate, not the  
17          earnings growth rate. Hence, consideration must be given to other indicators  
18          of growth, including historic growth prospective dividend growth, internal  
19          growth, as well as projected earnings growth. In addition, a recent study by  
20          Lacina, Lee, and Xu (2011) has shown that analysts' long-term earnings  
21          growth rate forecasts are not more accurate at forecasting future earnings than  
22          naïve random walk forecasts of future earnings.<sup>18</sup> As such, the weight given  
23          to analysts' projected EPS growth rate should be limited. And finally, and

---

<sup>18</sup> M. Lacina, B. Lee and Z. Xu, *Advances in Business and Management Forecasting (Vol. 8)*, Kenneth D. Lawrence, Ronald K. Klimberg (ed.), Emerald Group Publishing Limited, pp.77-101.

1 most significantly, it is well-known that the long-term EPS growth rate  
2 forecasts of Wall Street securities analysts are overly optimistic and upwardly  
3 biased. Hence, using these growth rates as a DCF growth rate produces an  
4 overstated equity cost rate. A recent study by Easton and Sommers (2007)  
5 found that optimism in analysts' growth rate forecasts leads to an upward bias  
6 in estimates of the cost of equity capital of almost 3.0 percentage points.<sup>19</sup>  
7 These issues are addressed in more detail in Appendix B.

8  
9 **Q. PLEASE ALSO DISCUSS DR. AVERA'S SUSTAINABLE GROWTH**  
10 **ANALYSIS.**

11 A. Dr. Avera's sustainable growth rate is computed as the sum of internal ("br")  
12 and external ("sv") growth. For the utility group, his calculations indicate a  
13 median growth rate of 5.6% for the utility proxy group (right-hand column of  
14 page 1 of WEA-5). The primary error with his approach is that these  
15 sustainable growth rate figures are higher than the median *Value Line's*  
16 projected BVPS growth rate, which is only 5.0% for the utility group (see  
17 page 2 of Exhibit JRW-13). This suggests that his methodology is flawed, in  
18 that it produces higher sustainable growth rates (using *Value Line* data) than  
19 the sustainable growth that *Value Line* actually is forecasting.

20  
21 **Q. WHAT ARE YOUR OBSERVATIONS OF THE DCF RESULTS FOR**  
22 **THE NON-UTILITY GROUP?**

23 A. As I indicated above, I do not believe that the non-utility group is an appropriate  
24 group to estimate an equity cost rate for FPL. The primary issue with the DCF

---

<sup>19</sup> Easton, P., & Sommers, G. (2007). Effect of analysts' optimism on estimates of the expected rate of return implied by earnings forecasts. *Journal of Accounting Research*, 45(5), 983–1015.

1 results for this group is that they are much more impacted by the upward bias in  
2 the EPS growth rate forecasts of Wall Street analysts than are the DCF results  
3 for the utility groups. This issue is addressed in Appendix B.

4  
5 **Q. PLEASE SUMMARIZE YOUR ASSESSMENT OF DR. AVERA'S DCF**  
6 **EQUITY RATE STUDY.**

7 A. Dr. Avera's DCF equity cost rates are overstated because he has relied  
8 excessively on the upwardly biased EPS growth rate forecasts of Wall Street  
9 analysts and *Value Line*. In addition, his sustainable growth rate methodology is  
10 flawed, since it produces higher sustainable growth rates (using *Value Line*  
11 data) than the sustainable growth that *Value Line* actually is forecasting. The  
12 issue of flotation costs is addressed below.

13  
14 **3. CAPM Approach**

15 **Q. PLEASE DISCUSS DR. AVERA'S CAPM.**

16 A. On pages 55 to 64 and Exhibit No. WEA-9, Dr. Avera applies the CAPM  
17 method to his utility group. For the group, he calculates a CAPM equity cost  
18 rate using the current long-term Treasury bond yield of 3.0% and a projected  
19 bond yield of 4.3%. A market risk premium is computed for each risk-free rate,  
20 and both are based on an expected stock market return of 13.5%. He uses the  
21 average beta for the utility group of 0.70. He also adds a size premium of 0.81%  
22 to his CAPM equity cost rate. His CAPM equity cost rates using current and  
23 projected bond yields are 11.2% and 11.6%. His results are summarized in  
24 Panel C of page 1 of Exhibit JRW-12.

25

1           **Q.    WHAT ARE THE ERRORS IN DR. AVERA'S CAPM ANALYSIS?**

2           A.    The primary errors with Dr. Avera's CAPM analysis are: (1) the expected  
3           market return used to compute the equity risk premium; and (2) the size  
4           adjustment.

5

6           **Q.    PLEASE REVIEW DR. AVERA'S EQUITY OR MARKET RISK  
7           PREMIUM IN HIS CAPM APPROACH.**

8           A.    The primary problem with Dr. Avera's CAPM analysis is the magnitude of the  
9           market or equity risk premium. Dr. Avera develops an expected market risk  
10          premium by: (1) applying the DCF model to the S&P 500 to get an expected  
11          market return; and (2) subtracting the risk-free rate of interest. Dr. Avera's  
12          estimated market return of 13.5% for the S&P 500 equals the sum of the  
13          dividend yield of 2.6% and expected EPS growth rate of 10.9%. The expected  
14          EPS growth rate is the average of the expected EPS growth rates from IBES.  
15          The primary error in this approach is his expected DCF growth rate. As  
16          previously discussed, the expected EPS growth rates of Wall Street analysts  
17          are upwardly biased. In addition, as explained below, the projected growth  
18          rate is inconsistent with economic and earnings growth in the U.S.

19

20          **Q.    BEYOND YOUR PREVIOUS DISCUSSION OF THE UPWARD BIAS  
21          IN WALL STREET ANALYSTS' AND *VALUE LINE*'S EPS GROWTH  
22          RATE FORECASTS, WHAT OTHER EVIDENCE CAN YOU  
23          PROVIDE THAT THE DR. AVERA'S S&P 500 GROWTH RATE IS  
24          EXCESSIVE?**

25

1           A.    A long-term EPS growth rate of 10.9% is not consistent with historic as well  
 2           as projected economic and earnings growth in the U.S. for several reasons:  
 3           (1) long-term EPS and economic growth, as measured by Gross Domestic  
 4           Product (“GDP”), is about ½ of Dr. Avera’s projected EPS growth rate of  
 5           10.9%; (2) more recent trends in GDP growth, as well as projections of GDP  
 6           growth, suggest slower economic and earnings growth in the future; and (3)  
 7           over time, EPS growth tends to lag behind GDP growth.

8                     The long-term economic, earnings, and dividend growth rate in the  
 9           U.S. has only been in the 5% to 7% range. I performed a study of the growth  
 10          in nominal GDP, S&P 500 stock price appreciation, and S&P 500 EPS and  
 11          DPS growth since 1960. The results are provided on page 1 of Exhibit JRW-  
 12          15, and a summary is given in the table below.

13                           **GDP, S&P 500 Stock Price, EPS, and DPS Growth**  
 14   **1960-Present**

<b>Nominal GDP</b>	<b>6.80%</b>
<b>S&amp;P 500 Stock Price</b>	<b>6.21%</b>
<b>S&amp;P 500 EPS</b>	<b>6.98%</b>
<b>S&amp;P 500 DPS</b>	<b>5.18%</b>
<b>Average</b>	<b>6.29%</b>

15  
 16                     The results are presented graphically on page 2 of Exhibit JRW-15. In  
 17          sum, the historical long-run growth rates for GDP, S&P EPS, and S&P DPS  
 18          are in the 5% to 7% range. By comparison, Dr. Avera’s long-run growth rate  
 19          projection of 10.9% is vastly overstated. These estimates suggest that  
 20          companies in the U.S. would be expected to: (1) increase their growth rate of  
 21          EPS by over 50% in the future, and (2) maintain that growth indefinitely in an  
 22          economy that is expected to grow at about one-half of his projected growth  
 23          rates.



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**Q. DO MORE RECENT DATA SUGGEST THAT THE U.S. ECONOMY GROWTH IS FASTER OR SLOWER THAN THE LONG-TERM DATA?**

A. The more recent trends suggest lower future economic growth than the long-term historic GDP growth. The historic GDP growth rates for 10-, 20-, 30-, 40- and 50- years are presented in Panel A of page 3 of Exhibit JRW-15. These figures clearly suggest that nominal GDP growth in recent decades has slowed and that a figure in the range of 4.0% to 5.0% is more appropriate today for the U.S. economy. These figures indicate that Dr. Avera's long-term growth EPS growth rate of 10.9% is even more inflated.

**Q. WHAT LEVEL OF GDP GROWTH IS FORECASTED BY ECONOMISTS AND VARIOUS GOVERNMENT AGENCIES?**

A. There are several forecasts of annual GDP growth that are available from economists and government agencies. These are listed in Panel B of page 3 of Exhibit JRW-15. The mean 10-year nominal GDP growth forecast (as of February 2012) by economists in the recent *Survey of Professional Forecasters* is 4.9%. The Energy Information Administration (EIA), in its projections used in preparing *Annual Energy Outlook*, forecasts long-term GDP growth of 4.8% for the period 2009-2035. The Congressional Budget Office, in its forecasts for the period 2012 to 2022, projects a nominal GDP growth rate of 4.8%. As such, projections of nominal GDP growth provide additional evidence that Dr. Avera's long-term EPS growth rate of 10.9% is highly overstated.

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**Q. PLEASE HIGHLIGHT THE RECENT RESEARCH ON THE LINK BETWEEN ECONOMIC AND EARNINGS GROWTH AND EQUITY RETURNS.**

A. Brad Cornell of the California Institute of Technology recently published a study on GDP growth, earnings growth, and equity returns. He finds that long-term EPS growth in the U.S. is directly related to GDP growth, with GDP growth providing an upward limit on EPS growth. In addition, he finds that long-term stock returns are determined by long-term earnings growth. He concludes with the following observations:<sup>20</sup>

The long-run performance of equity investments is fundamentally linked to growth in earnings. Earnings growth, in turn, depends on growth in real GDP. This article demonstrates that both theoretical research and empirical research in development economics suggest relatively strict limits on future growth. In particular, real GDP growth in excess of 3 percent in the long run is highly unlikely in the developed world. In light of ongoing dilution in earnings per share, this finding implies that investors should anticipate real returns on U.S. common stocks to average no more than about 4–5 percent in real terms.

Given current inflation in the 3% range, the results imply nominal expected stock market returns in the 7% to 8% range. As such, Dr. Avera's projected earnings growth rates and implied expected stock market returns and equity risk premiums are not indicative of the realities of the U.S. economy and stock market. As such, his CAPM equity cost rates are vastly overstated and should be ignored.

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<sup>20</sup> Bradford Cornell, "Economic Growth and Equity Investing," *Financial Analysts Journal* (January- February, 2010), p. 63.

1           **Q.     PLEASE PROVIDE A SUMMARY ASSESSMENT OF DR. AVERA'S**  
2           **EQUITY RISK PREMIUMS DERIVED FROM EXPECTED MARKET**  
3           **RETURNS.**

4           A.     Dr. Avera's equity risk premium derived from his DCF application to the S&P  
5           500 is inflated due to errors and bias in his study. Investment banks,  
6           consulting firms, and CFOs use the equity risk premium concept every day in  
7           making financing, investment, and valuation decisions. On this issue, the  
8           opinions of CFOs and financial forecasters are especially relevant. CFOs deal  
9           with capital markets on an ongoing basis since they must continually assess  
10          and evaluate capital costs for their companies. The June 2012 *CFO Magazine*  
11          – Duke University Survey of approximately 500 CFOs shows an expected  
12          return on the S&P 500 of 6.3% over the next ten years. In addition, the  
13          financial forecasters in the February 2012 Federal Reserve Bank of  
14          Philadelphia survey expect an annual market return of 6.8% over the next ten  
15          years. As such, the appropriate equity cost rate for a public utility should be  
16          in the 8.0% to 9.0% range, and not in the 11.0% range.

17  
18           **4.     Risk Premium Approach**

19          **Q.     PLEASE DISCUSS DR. AVERA'S RISK PREMIUM METHOD (RPM)**  
20          **APPROACH.**

21          A.     At pages 64-67 of his testimony and in Exhibit Nos. WEA-10 and WEA-11,  
22          Dr. Avera estimates equity cost rates ranging from of 9.57% to 10.40% using  
23          the RPM approach. These results are summarized in Panel D of page 1 of  
24          Exhibit JRW-12. Dr. Avera's RPM approach is based on the historical

1 relationship between the yields on Moody's public utility bond yields and  
2 authorized ROEs for electric utilities.

3  
4 **Q. WHAT ARE THE ISSUES WITH DR. AVERA'S RPM APPROACH?**

5  
6 A. This approach overstates the equity cost rate for the Company in two ways.  
7 First, the base yield is in excess of investor return requirements. This is  
8 because the base yield, the rate on "A" rated utility bonds, is subject to credit  
9 risk. With credit risk, the expected return on the bond is below the yield-to-  
10 maturity. Hence, the yield-to-maturity of the bond is above the expected  
11 return. Second, and more importantly, the risk premium is inflated as a  
12 measure of investor's required risk premium since the utilities have been  
13 selling at market-to-book ratios in excess of 1.0 for many years. This  
14 indicates that the authorized rates of return have been greater than the return  
15 that investors require. Therefore, the risk premium produced from the study is  
16 overstated as a measure of investor return requirements and produced an  
17 inflated equity cost rate.

18  
19 **5. Expected Earnings Approach**

20 **Q. PLEASE DISCUSS DR. AVERA'S EXPECTED EARNINGS**  
21 **ANALYSIS.**

22 A. In pages 67-70 of his testimony and Exhibit WEA-12, Dr. Avera estimates an  
23 equity cost rate of 12.00% for the utility group using an approach he calls the  
24 Expected Earnings ("EE") approach. These results are summarized in Panel E  
25 of page 1 of Exhibit JRW-12. His methodology simply involves using the  
26 expected ROE for the companies in the proxy group as estimated by *Value*

1           *Line.* This approach is fundamentally flawed for several reasons. First, these  
2           ROE results include the profits associated with the unregulated operations of  
3           the utility proxy group. More importantly, since Dr. Avera has not evaluated  
4           the market-to-book ratios for these companies, he cannot indicate whether the  
5           past and projected returns on common equity are above or below investors'  
6           requirements. These returns on common equity are excessive if the market-to-  
7           book ratios for these companies are above 1.0.

8  
9           **6.       Size Adjustment and Flotation Costs**

10          **Q.       PLEASE DISCUSS DR. AVERA'S SIZE ADJUSTMENT.**

11          A.       Dr. Avera includes a size adjustment of 0.81% in his CAPM approach for the  
12          size of the companies in the utility group. This adjustment is based on the  
13          historical stock market returns studies as performed by Morningstar (formerly  
14          Ibbotson Associates). There are numerous errors in using historical market  
15          returns to compute risk premiums. These errors provide inflated estimates of  
16          expected risk premiums. Among the errors are survivorship bias (only  
17          successful companies survive – poor companies do not survive) and  
18          unattainable return bias (the Ibbotson procedure presumes monthly portfolio  
19          rebalancing). The net result is that Ibbotson's size premiums are poor  
20          measures for risk adjustment to account for the size of the Company.

21                   In addition, Professor Annie Wong has tested for a size premium in  
22          utilities and concluded that, unlike industrial stocks, utility stocks do not  
23          exhibit a significant size premium.<sup>21</sup> As explained by Professor Wong, there are

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<sup>21</sup> Annie Wong, "Utility Stocks and the Size Effect: An Empirical Analysis," *Journal of the Midwest Finance Association*, pp. 95-101, (1993).

1 several reasons why such a size premium would not be attributable to utilities.  
2 Utilities are regulated closely by state and federal agencies and commissions,  
3 and hence, their financial performance is monitored on an ongoing basis by both  
4 the state and federal governments. In addition, public utilities must gain  
5 approval from government entities for common financial transactions such as the  
6 sale of securities. Furthermore, unlike their industrial counterparts, accounting  
7 standards and reporting are fairly standardized for public utilities. Finally, a  
8 utility's earnings are predetermined to a certain degree through the ratemaking  
9 process in which performance is reviewed by state commissions and other  
10 interested parties. Overall, in terms of regulation, government oversight,  
11 performance review, accounting standards, and information disclosure, utilities  
12 are much different than industrials, which could account for the lack of a size  
13 premium.

14  
15 **Q. PLEASE DISCUSS RECENT RESEARCH ON THE SIZE PREMIUM**  
16 **IN ESTIMATING THE EQUITY COST RATE.**

17 A. As noted, there are errors in using historical market returns to compute risk  
18 premiums. With respect to the small firm premium, Richard Roll (1983) found  
19 that one-half of the historic return premiums for small companies disappear  
20 once biases are eliminated and historic returns are properly computed. The  
21 error arises from the assumption of monthly portfolio rebalancing and the  
22 serial correlation in historic small firm returns.<sup>22</sup>

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

1           In a more recent paper, Ching-Chih Lu (2009) estimated the size  
2           premium over the long run. Lu acknowledges that many studies have  
3           demonstrated that smaller companies have historically earned higher stock  
4           market returns. However, Lu highlights that these studies rebalance the size  
5           portfolios on an annual basis. This means that at the end of each year the  
6           stocks are sorted based on size, split into deciles, and the returns are computed  
7           over the next year for each stock decile. This annual rebalancing creates the  
8           problem. Using a size premium in estimating a CAPM equity cost rate  
9           requires that a firm carry the extra size premium in its discount factor for an  
10          extended period of time, not just for one year, which is the presumption with  
11          annual rebalancing. Through an analysis of small firm stock returns for longer  
12          time periods (and without annual rebalancing), Lu finds that the size premium  
13          disappears within two years. Lu's conclusion with respect to the size  
14          premium is:<sup>23</sup>

15                           However, an analysis of the evolution of the size premium  
16                           will show that it is inappropriate to attach a fixed amount of  
17                           premium to the cost of equity of a firm simply because of its  
18                           current market capitalization. For a small stock portfolio  
19                           which does not rebalance since the day it was constructed, its  
20                           annual return and the size premium are all declining over  
21                           years instead of staying at a relatively stable level. This  
22                           confirms that a small firm should not be expected to have a  
23                           higher size premium going forward sheerly because it is small  
24                           now.  
25

26           **Q. PLEASE DISCUSS DR. AVERA'S ADJUSTMENT FOR FLOTATION**  
27           **COSTS.**

28           A. Dr. Avera claims that an upward adjustment to the equity cost rate is  
29           warranted for flotation costs. This adjustment factor is erroneous for several

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<sup>23</sup> Ching-Chih Lu, "The Size Premium in the Long Run," 2009 Working Paper, SSRN abstract no. 1368705.

1 reasons. First, FPL has not identified any actual flotation costs for itself.  
2 Therefore, FPL is requesting annual revenues in the form of a higher return on  
3 equity for flotation costs that have not been identified. Second, it is  
4 commonly argued that a flotation cost adjustment (such as that used by FPL)  
5 is necessary to prevent the dilution of the existing shareholders. In this case, a  
6 flotation cost adjustment is justified by reference to bonds and the manner in  
7 which issuance costs are recovered by including the amortization of bond  
8 flotation costs in annual financing costs. However, this is incorrect for several  
9 reasons:

10 (1) If an equity flotation cost adjustment is similar to a debt flotation cost  
11 adjustment, the fact that the market-to-book ratios for utility companies are  
12 over 1.5X actually suggests that there should be a flotation cost reduction (and  
13 not increase) to the equity cost rate. This is because when (a) a bond is issued  
14 at a price in excess of face or book value, and (b) the difference between  
15 market price and the book value is greater than the flotation or issuance costs,  
16 the cost of that debt is lower than the coupon rate of the debt. The amount by  
17 which market values of utility companies are in excess of book values is much  
18 greater than flotation costs. Hence, if common stock flotation costs were  
19 exactly like bond flotation costs, and one was making an explicit flotation cost  
20 adjustment to the cost of common equity, the adjustment would be downward.

21 (2) If a flotation cost adjustment is needed to prevent dilution of existing  
22 stockholders' investment, then the reduction of the book value of stockholder  
23 investment associated with flotation costs can occur only when a company's  
24 stock is selling at a market price at/or below its book value. As noted above,  
25 utility companies are selling at market prices well in excess of book value.



1 Hence, when new shares are sold, existing shareholders realize an increase in  
2 the book value per share of their investment, not a decrease.

3 (3) Flotation costs consist primarily of the underwriting spread or fee and not  
4 out-of-pocket expenses. On a per share basis, the underwriting spread is the  
5 difference between the price the investment banker receives from investors  
6 and the price the investment banker pays to the company. Hence, these are  
7 not expenses that must be recovered through the regulatory process.  
8 Furthermore, the underwriting spread is known to the investors who are  
9 buying the new issue of stock, who are well aware of the difference between  
10 the price they are paying to buy the stock and the price that the Company is  
11 receiving. The offering price which they pay is what matters when investors  
12 decide to buy a stock based on its expected return and risk prospects.  
13 Therefore, the company is not entitled to an adjustment to the allowed return  
14 to account for those costs.

15 (4) Lastly, flotation costs, in the form of the underwriting spread, are a form  
16 of a transaction cost in the market. They represent the difference between the  
17 price paid by investors and the amount received by the issuing company.  
18 Whereas the Company believes that it should be compensated for these  
19 transaction costs, they have not accounted for other market transaction costs in  
20 determining a cost of equity for the Company. Most notably, brokerage fees  
21 that investors pay when they buy shares in the open market are another market  
22 transaction cost. Brokerage fees increase the effective stock price paid by  
23 investors to buy shares. If the Company had included these brokerage fees or  
24 transaction costs in their DCF analysis, the higher effective stock prices paid  
25 for stocks would lead to lower dividend yields and equity cost rates. This

1 would result in a downward adjustment to their DCF equity cost rate.

2

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4 A. Yes.

1 **BY MR. McGLOTHLIN:**

2 Q Dr. Woolridge, would you please summarize your  
3 testimony for the Commissioners.

4 A Okay. Good morning. My testimony focuses on  
5 the appropriate return on equity, or ROE, for Florida  
6 Power & Light. Interest rates constitute the primary  
7 driver of capital costs and the cost of equity capital.  
8 As I show in my testimony, interest rates in recent  
9 months have dropped to lows not seen since the 1950s,  
10 and have fallen about 200 basis points since the  
11 company's last rate case.

12 My ROE recommendation for FPL is tied to the  
13 capital structure adopted by the Commission in this  
14 case. If the Commission adopts FPL's capital structure  
15 with a 59.62% common equity ratio, in my opinion the  
16 appropriate ROE for FPL is 8.50%. If the Commission  
17 adopts OPC's proposed capital structure with a 50%  
18 common equity ratio, I recommend a 9% ROE for FPL.

19 In contrast to my recommendation, FPL witness  
20 Dr. Avera has proposed a common equity cost rate of  
21 11.25%. He also defends FPL's recommended capital  
22 structure.

23 There's several issues regarding the  
24 estimation of ROE in this case. One issue is the choice  
25 of an appropriate proxy group. I have used a proxy

1 group of 34 electric utility companies that receive a  
2 majority of their revenues from regulated electric  
3 utility operations. Dr. Avera employs a proxy group of  
4 14 electric utility companies.

5 I show that Dr. Avera's proxy group of 14 is  
6 riskier than FPL, has a lower common equity ratio, more  
7 financial risk than FPL, and that some of the companies  
8 in the group have a low percentage of regulated electric  
9 revenues. Dr. Avera also employs the equity cost rate  
10 results for an inappropriate proxy group of risk year  
11 non-utility companies.

12 Our respective applications of the DCF model  
13 are another area of contention. The primary issue in  
14 the DCF model is the DCF growth rate. To estimate a DCF  
15 growth rate I have reviewed Value Line's long-term  
16 projections for earnings, dividends and book value per  
17 share, sustainable growth, as well as the projected  
18 long-term EPS growth rates of Wall Street analysts.

19 Whereas I reviewed a variety of growth rate  
20 indicators, Dr. Avera has relied exclusively on the  
21 projected growth rates of Wall Street analysts and Value  
22 Line. I demonstrate that this approach is erroneous.

23 One recent study that I review in my testimony  
24 shows that Wall Street analysts' long-term EPS growth  
25 rate forecasts are no more accurate at forecasting

1 future earnings than naive random walk forecasts.  
2 Hence, these forecasts provide poor guidance regarding  
3 future earnings growth.

4 More significantly, I also provide detailed  
5 evidence that the long-term EPS growth rate forecast of  
6 Wall Street analysts are overly optimistic and,  
7 according to another recent study, lead to DCF equity  
8 cost rate estimates that are upwardly biased by  
9 300 basis points.

10 Now turning to the CAPM approach. The CAPM  
11 approach requires an estimate of the risk free rate,  
12 beta, and market risk premium. The primary issue is a  
13 measurement of the market risk premium. I derive a  
14 market risk premium of 5.01% by reviewing the results of  
15 over 30 studies by academic scholars, investment banks,  
16 and consulting firms, and surveys of analysts,  
17 economists, companies, and corporate CFOs.

18 In his CAPM approach, Dr. Avera develops a  
19 market risk premium of 10.5% by presuming that the stock  
20 market will return 13.5% a year and that the companies  
21 in the S&P 500 will see annual earnings per share growth  
22 rates of 10.9% forever. Dr. Avera's annual earnings  
23 growth rate assumption is highly unrealistic.

24 I show in my testimony that earnings growth  
25 rates over time are limited to the growth in gross

1 domestic product and that the U.S. economy is projected  
2 to grow at a rate of 5%, not 10%. You only find GDP  
3 growth rates of 10% in places like China and India, not  
4 in the United States.

5 Dr. Avera and I also address aspects of  
6 capital structure. I highlight the huge difference  
7 between FPL's requested common equity ratio of 59.6% and  
8 NextEra's common equity ratio of 38.2%. I also note  
9 that the relevant capital structure for measuring  
10 financial risk and an equity cost rate is that of  
11 NextEra and not FPL.

12 Dr. Avera tends to defend FPL's high common  
13 equity ratio, citing S&P's methodology of treating a  
14 portion of PPA capacity payments as the equivalent of  
15 debt. I point out that, given the company's ability to  
16 recover the PPA capacity payments in rates on a timely  
17 basis, there is no need to create fictional debt to make  
18 FPL's capital structure look more reasonable.

19 That concludes my summary.

20 **MR. McGLOTHLIN:** Dr. Woolridge is available  
21 for cross-examination.

22 **CHAIRMAN BRISÉ:** Okay. Mr. Lavia?

23 **MR. LAVIA:** No questions, Mr. Chairman.

24 **CHAIRMAN BRISÉ:** Mr. Saporito?

25 **MR. SAPORITO:** No questions, Mr. Chairman.

1                   **CHAIRMAN BRISÉ:** Mr. Wiseman?

2                   **MR. WISEMAN:** No questions.

3                   **CHAIRMAN BRISÉ:** Mr. Moyle?

4                   **MR. MOYLE:** I have just, just a couple, if I  
5 could.

6                   **CHAIRMAN BRISÉ:** Sure.

7                                   **CROSS EXAMINATION**

8                   **BY MR. MOYLE:**

9                    **Q**     If I could refer you to your chart, Exhibit  
10 JRW-4.

11                   **A**     Yes.

12                   **Q**     Page 101. And did you prepare this chart?

13                   **A**     Yes.

14                   **Q**     And what is it designed to show?

15                   **A**     It's just a summary of financial statistics  
16 for the, the, for the electric utilities in my proxy  
17 group.

18                   **Q**     Okay. And I was looking at the companies that  
19 are involved in Florida or have Florida operations.  
20 That would be NextEra Energy; is that right?

21                   **A**     Yes.

22                   **Q**     And then the Southern Company a little further  
23 down?

24                   **A**     Yes.

25                   **Q**     And do you know the operating entity that the

1 Southern Company has in Florida?

2 A In Florida, Gulf Power.

3 Q Okay. And so on that ROE for Southern, you  
4 did an average for the Southern Company as compared to  
5 Gulf, is that right, the 14.2?

6 A I'm sorry. Oh, that, yeah, that's their, that  
7 was the most, the reported ROE for the most recent 12  
8 months for, as reported in *AUS Utility Reports*.

9 Q For the holding company?

10 A Yes.

11 Q Okay. And then right below that is Tampa  
12 Electric?

13 A Yes.

14 Q And that's similarly a holding company report?

15 A Yes.

16 Q All right. And, and Progress Energy, you're  
17 aware Progress Energy is a big utility in Florida;  
18 correct?

19 A Yes.

20 Q And they're not in your proxy group?

21 A No. They're not in there obviously because of  
22 the acquisition by Duke, and Duke is not in there  
23 because one of the screens is to elim -- not, not  
24 include companies who are involved in the process of an  
25 acquisition.



1           Q     Okay.  So, so it's less relevant because of  
2 the pending acquisition?

3           A     Yes.  And obviously it can have impact on, on  
4 share prices.

5           Q     Okay.  All right.  And then there's been a lot  
6 of discussion about ROE and what's the right number and  
7 the ranges and different things.  Are you aware that  
8 earlier this year the Commission approved an order for  
9 Progress that had a 10.5 ROE and a 10.7 if they got back  
10 in the nuclear business?

11          A     I am aware of that, yes.

12          **MR. MOYLE:**  Okay.  That's all I have.  Thank  
13 you.

14          **CHAIRMAN BRISÉ:**  FEA?

15          **CAPTAIN MILLER:**  No questions, Mr. Chairman.

16          **CHAIRMAN BRISÉ:**  Okay.  FPL.

17          **MR. GUYTON:**  Thank you.

18                               **CROSS EXAMINATION**

19          **BY MR. GUYTON:**

20           Q     Dr. Woolridge, my name is Charlie Guyton.  We  
21 met over-the-phone.  Welcome to Tallahassee.

22           A     Thank you.

23           Q     On your errata sheet that you made reference  
24 to when you took the stand, you show some six changes to  
25 your testimony and another four to your exhibits;

1 correct?

2 **A** Yes.

3 **Q** And then at your deposition and then again  
4 this morning, you've testified that you're not aware of  
5 any other corrections that are necessary for your  
6 testimony.

7 **A** Nothing I believe that's material to the  
8 results, no.

9 **Q** Okay. So you're aware of other mistakes, you  
10 just haven't brought them to the attention of the  
11 Commission?

12 **A** Nothing that -- I'm not aware of any. I, I,  
13 but I don't believe there are any that are material to  
14 the, to the results of my testimony.

15 **Q** Would you turn to page 10, please, at line 17  
16 there -- I'm sorry. You refer to Panel A on page 1 of  
17 JRW-3 as showing A, triple B plus, and triple B rated  
18 public utility bonds; correct?

19 **A** Yes.

20 **Q** Panel A actually shows the ten-year yields on  
21 Treasury bills, does it not?

22 **A** I'm sorry. I'm looking for it.

23 **Q** It's one of those posters behind you.

24 **A** Yeah. That, that, that should refer to a page  
25 2, not page 1.

1 Q At page 11, line 12, you say that page 2 of  
2 JRW-3 shows the performance of the Dow Jones Utility  
3 Index. It doesn't show that, does it?

4 A That's page 3.

5 Q At page 18 of your testimony, at lines 5, 6,  
6 and 18, you use the word "risk"; correct?

7 A I'm sorry. Could you please repeat that?

8 Q Certainly. At page 18 of your testimony, at  
9 lines 5, 6, and 18, you use the word "risk."

10 A Yes.

11 Q And that should have the modifier "financial"  
12 in front of it, should it not?

13 A Well, risk incorporates, incorporates  
14 financial risk.

15 Q But here you're -- this, this passage is  
16 speaking of financial risk, is it not?

17 A And, again, it's risk in general, and one  
18 element of risk is financial risk.

19 Q Would you turn to page 51, please. At lines  
20 21 and 22 you spoke of the unemployment rate being  
21 nearly 10%. When you filed your testimony, the national  
22 unemployment rate was 8.2% and the Florida unemployment  
23 rate was 8.6%; correct?

24 A Probably about that, yes.

25 Q On page 58, you, line 23, you mentioned

1 Dr. Avera's 35 non-utility companies. Did you mean to  
2 say 13 instead of 35?

3 A I'm not sure. That may be 13. I think it is.

4 Q At page 59, lines 1 and 2, you state that  
5 Dr. Avera's non-utility proxy group includes Johnson &  
6 Johnson, McDonald's, McKesson and Pfizer. Actually none  
7 of those companies are in Dr. Avera's low risk  
8 non-utility proxy group, are they?

9 A I don't -- I don't have a copy of his  
10 testimony with me, but I'll agree to that, subject to  
11 check.

12 Q All right.

13 A And, again, it really doesn't have an impact  
14 on the results.

15 Q Would you turn to your Exhibit JRW-10, page 3.

16 A Yes.

17 Q Would you look at the entry for Pinnacle West  
18 Capital Corp. under the column entitled past five years  
19 earnings.

20 A Yes.

21 Q You show a value of .01.015. Is that a  
22 correct entry?

23 A I believe that's .015. It doesn't change the  
24 overall averages at all.

25 Q Would you turn to your JRW-13, page 2 of 2,

1 please. Now on this exhibit you're comparing  
2 Dr. Avera's br+sv growth rate derivation with Value  
3 Line's projected BVPS growth right; correct?

4 **A** Yes.

5 **Q** Now there are 14 utilities in Dr. Avera's  
6 utility proxy group, aren't there?

7 **A** 13 or 14. 14, yes.

8 **Q** And how many utilities do you show in  
9 Dr. Avera's proxy group on your Exhibit JRW-13, page 2  
10 of 2?

11 **A** 13.

12 **Q** So you left one of the companies out?

13 **A** Yeah. I think the one company is not covered.  
14 I forget which company it is, but one company wasn't  
15 covered by the source I was using, so I didn't include  
16 them.

17 **Q** And that would be ITC Holdings Corp.?

18 **A** Yes.

19 **MR. GUYTON:** Now, Mr. Chairman, we're going to  
20 hand out an exhibit that's already been admitted.  
21 It's -- we're going to just hand it out for reference  
22 for ease of the Commission. It's Dr. Avera's proxy  
23 group.

24 **BY MR. GUYTON:**

25 **Q** I've handed out an exhibit entitled WEA-4,

1 page 2 of 3. Do you recognize that as Dr. Avera's proxy  
2 group?

3 A Yes.

4 Q And this is the exhibit on which he shows the  
5 derivation of the br+sv growth rate?

6 A Yes.

7 Q Okay. And if you would --

8 A No, no. He doesn't show the derivation of it  
9 here.

10 Q All right. He shows the br+sv growth rate,  
11 not the derivation.

12 A It's not the derivation.

13 Q All right. If you would compare your JRW-13,  
14 page 2 of 2, with Dr. Avera's Exhibit WEA-4, you left  
15 out ITC Holdings Corp.; correct?

16 A Yes.

17 Q But you didn't leave out ITC Holding Corp.'s  
18 growth rate of 13.8%, did you?

19 A No. That's correct.

20 Q And indeed, if you follow down for every entry  
21 beyond 13A on your JRW-3, every one of those growth  
22 rates are wrong, are they not?

23 A Yeah, that's correct. They are off because  
24 of, of that omission. And, again, I would say this has  
25 nothing to do with the results of my study.

1           Q     So if all those entries are off, are your mean  
2 and your median at the bottom off as well?

3           A     They are. They are. And I could recalculate  
4 that. And I still suspect Dr. Avera's -- well, I'm not  
5 sure. I don't know. I haven't done the calculation.

6                     But, again, this is one very minor point in  
7 terms of my rebuttal to Dr. Avera's methodology that he  
8 uses.

9           Q     Would you agree with me that there's still  
10 some other errors or inaccuracies in your testimony?

11          A     There could be. Again, nothing you've  
12 mentioned is of substance to the result, to my testimony  
13 at all.

14          Q     While we're on JWR, JRW-13, the footnote at  
15 the bottom indicates data source, Atmos exhibit. Who's  
16 Atmos?

17          A     You know, that -- Atmos is a gas company. I  
18 don't know how that, that, that element got in there.

19          Q     Should that be FPL?

20          A     That should be FPL.

21          Q     Okay. Now you testify that you rely more, or  
22 primarily on your DCF analysis rather than your CAPM  
23 analysis; correct?

24          A     Yes.

25          Q     Let's look at that if you would. Would you

1 turn to page 29 of your testimony. And there at the top  
2 of the page at lines 3 through 6, you show what's  
3 commonly known as the DCF formula.

4 A Yes.

5 Q And in that formula K is the cost of equity;  
6 correct?

7 A Yes.

8 Q And to solve for K there are two elements, the  
9 dividend yield and the growth rate; correct?

10 A Yes.

11 Q And the dividend yield is shown in your  
12 formula here as D sub 1 over P; correct?

13 A Yes.

14 Q And the D sub 1 is the expected dividend over  
15 the coming year; correct?

16 A Yes.

17 Q And D sub 1 is not the current dividend. The  
18 current dividend would be D sub 0?

19 A Yes.

20 Q Now, in your dividend yield calculation, you  
21 did not grow the current dividend of D sub 0 by the  
22 growth rate, did you?

23 A No.

24 Q Instead, you grew D sub 0 by half the growth  
25 rate to get the dividend yield that you used in your



1 calculations.

2           **A**     Yes.  And I explain that in my testimony as to  
3 why, because companies increase their dividends at  
4 different times during the year and, therefore, to  
5 account for that, you know, some, some companies may  
6 increase their dividend the next quarter, others in two  
7 quarters, one in, another in three quarters.  So to  
8 account for that, you use the -- I mean, it's common.  
9 As a matter of fact, FERC adjusts the dividend by  
10 one-half the growth rate.

11           **Q**     Now, if you had used the current dividend  
12 times the full growth rate rather than the current  
13 dividend times half the growth rate, your resulting  
14 dividend yield would have been higher; correct?

15           **A**     It would have been about 10 basis points  
16 higher.  I might mention that when Dr. Avera testifies  
17 at FERC, he uses the one-half growth rate because that's  
18 the convention that FERC uses.

19           **Q**     Now, Value Line provides a value for the  
20 expected dividend in the coming year, does it not?

21           **A**     They do.  It's an annual dividend.  They  
22 provide an annual estimate of what they expect the  
23 dividend to be in the next year.

24           **Q**     And one could use that Value Line dividend for  
25 the expected growth rate, could they not, or for the

1 expected dividend?

2           **A**     Only if they, they provide a quarterly  
3 dividend. They don't provide a quarterly dividend.  
4 They provide an annual dividend. So I would say I would  
5 agree to that if they provided a quarterly dividend.

6           **Q**     And you would agree with the use of such an  
7 approach as an alternative, would you not?

8           **A**     If they provide a quarterly dividend, not the  
9 annual dividend, I would agree.

10          **Q**     Now, you testified in your direct and just a  
11 few moments ago that the FERC has a method of  
12 calculating the dividend yield; correct?

13          **A**     Yes.

14          **Q**     And indeed, FERC has its own DCF methodology,  
15 does it not?

16          **A**     They do.

17          **Q**     Now, you followed the FERC methodology for  
18 dividend yield, but you didn't follow the entire FERC  
19 methodology in your testimony, did you?

20          **A**     No. No, I did not. I, I have problems with  
21 some of the elements of the FERC model, and, and when  
22 I've testified on those issues at FERC, I've expressed  
23 my opinions about the problems with the FERC model.

24          **Q**     So FERC in their DCF model relies exclusively  
25 on earnings growth in its DCF methodology, does it not?

1           **A**     They do.  And in my, in my testimony I've  
2 highlighted the scientific research on the upward bias  
3 of those growth rates.

4           **Q**     So in this particular case you didn't follow  
5 the FERC methodology and use only earnings growth rate?

6           **A**     No, I did not, no.  And I, I think I discuss  
7 that extensively in my testimony why I did not.

8           **Q**     But if you had, your resulting DCF estimate  
9 would have been higher, would it not?

10          **A**     It would have been 20 basis points higher.

11          **Q**     Now, you --

12          **A**     So that's, I would say that's not a lot.

13          **Q**     FERC doesn't employ historic growth rates in  
14 its DCF model; is that correct?

15          **A**     No.  And, and if you look at my results and  
16 the weighting I give them, I think if you, if I use  
17 strictly analyst growth rates, I would increase my -- by  
18 20 or 25 basis points.  It would be rather small.

19          **Q**     So you -- this is another instance where your  
20 use of historic growth rates is inconsistent with or  
21 different from the FERC methodology.

22          **A**     I have not used -- I've presented historic  
23 growth rates.  I haven't used them.  I present them  
24 because obviously investors are -- you know, most of the  
25 data investors get is historic data, and one of the

1 reasons is the forecasts are so bad. I, I show results  
2 in my testimony that show that analysts' forecasts of --  
3 you can, you can do a better job forecasting earnings  
4 for companies by using last year's earnings number as  
5 opposed for using analysts' growth rate forecasts.  
6 That's a naive random walk approach. And so there's a  
7 reason for that, and I think I've discussed that  
8 extensively in my testimony.

9 Q The FERC methodology, when it uses the Value  
10 Line dividend, it adjusts Value Line's reported ROE to  
11 adjust for the year-end to average equity; correct?

12 A They do an adjustment to ROE to reflect that  
13 the Value Line number is based on end-of-year equity.

14 Q Okay. And you didn't follow that adjustment  
15 in this case either, did you?

16 A I did not use that number at all.

17 Q Okay. Now, FERC's methodology also adds the  
18 common stock growth rate term SV in the sustainable  
19 growth rate, does it not?

20 A Yes.

21 Q And you didn't do that in this case, did you?

22 A Well, I did. I did, because SV includes the,  
23 the additional, the additional growth tied to future  
24 sales of equity. And I used Value Line's projected book  
25 value per share growth rate, which should include the SV

1 factor, so I would disagree with that. No, I did  
2 include it.

3 Q Now, under the FERC methodology, FERC doesn't  
4 use any DCF estimate that's not at least 100 basis  
5 points above the bond yield for the rating of the  
6 company being analyzed, does it?

7 A That's right. They have an upper and lower  
8 bond, bond. And so right now, if we were -- you know,  
9 currently A rated utility bonds are about 4%, so they  
10 would eliminate things that are greater than -- that  
11 weren't at least, a DCF equity cost rate which is not at  
12 least 5%.

13 Q Now, FERC also removes outliers in its DCF  
14 analysis, does it not?

15 A They do. I think that process is evolving  
16 though, as it has over the years.

17 Q But you didn't remove any outliers in your DCF  
18 analysis here, did you?

19 A No. In my testimony at FERC I've explained  
20 why I haven't. I used the median numbers to mitigate  
21 the impact of outliers. I don't think it's correct to  
22 throw out data just because you feel it's not correct.  
23 And in my testimony I explain why I use the median as a  
24 measure of central tendency, and it mitigates the impact  
25 of extremely high or low observations.

1           So I just think you should include all data.  
2           You shouldn't arbitrarily eliminate some low numbers or  
3           some high numbers. Using the median mitigates the  
4           impact of outliers.

5           **Q**     So is it fair to say that you've used the FERC  
6           DCF methodology on dividend yield, it would have the  
7           effect of reducing your estimated ROE, but you didn't  
8           use the FERC DCF methodology in any other fashion where  
9           it would have had the effect of increasing your ROE  
10          estimate?

11          **A**     No. That's -- well, I would say that the  
12          questions -- I've always used one-half the growth rate.  
13          And the reason I use one-half the growth rate is why I  
14          explain in my testimony. So I've always used that  
15          approach. It so happens FERC also uses the approach.  
16          But it's because of, of the way companies change their  
17          dividends at different times during the year.

18                 The impact, if you use a full year's growth  
19          versus half a year's growth, it's 10 basis points. That  
20          would be the impact of using that, that particular,  
21          using a full year's growth versus half a year's growth  
22          as your dividend adjustment factor.

23          **Q**     When you testify in front of FERC, do you  
24          employ the FERC methodology more closely than you did in  
25          front of this Commission?

1           **A**     Oh, I do in a sense, but it's -- and Dr. Avera  
2 does the same thing. You're allowed to give, give your  
3 opinions about what the issues are. And I go back to  
4 the fact that the scientific evidence about using  
5 analyst growth rate forecasts is pretty clear. And  
6 Dr. Avera hasn't recognized that, but the academic  
7 community certainly has.

8                     And so you're allowed to -- you have to  
9 provide the results in the FERC format, but you also are  
10 able to provide it in a, provide your assessment of the  
11 FERC methodology. And that, that's what I've done.

12           **Q**     Now, you're currently testifying in a case  
13 before FERC that involves the Attorney General of  
14 Massachusetts, are you not?

15           **A**     Yes. It's been -- I don't know. It's been  
16 going on for like two years I think, maybe a year.

17           **Q**     And in that case the complaint was filed with  
18 a copy of your testimony attached to it; correct?

19           **A**     Yes.

20           **Q**     Okay. And in that testimony you didn't follow  
21 the FERC methodology completely, did you?

22           **A**     Well, there's, the FERC methodologies --

23           **MR. GUYTON:** I'm sorry. I'm sorry. Could I  
24 get a yes or no and then an explanation?

25           **CHAIRMAN BRISÉ:** Yeah. I think that's, that's

1 fair. We've been using that process, a yes or no, and  
2 then a brief explanation.

3 **THE WITNESS:** No, in the sense that the FERC  
4 methodology evolves over time. And what they eliminate,  
5 they eliminate outliers on top and outliers on bottom,  
6 and that rule changes over time. And there's also  
7 latitude about what constitutes a proxy group, and, and  
8 what, what growth rates to use. I mean, there's  
9 different measures of growth rates.

10 So the question asked, did I use the exact  
11 FERC methodology? Well, no one knows what the exact  
12 methodology is. There's kind of a standard format and a  
13 standard procedure. But whether company XYZ is in and  
14 company ABC is out is not specified.

15 And so I would say whatever the FERC  
16 methodology is, it evolves over time.

17 **BY MR. GUYTON:**

18 **Q** Now, FERC Commissioner Moeller read your  
19 testimony and concluded that your testimony didn't  
20 follow the FERC methodology; correct?

21 **A** Well --

22 **Q** I'm sorry. Yes or no, and then explain.

23 **A** Yes -- no, I'm not, I'm not aware of that. I  
24 know the case is ongoing and we haven't seen the end of  
25 it yet. So I don't know what -- whether one



1 Commissioner said this or that. I just know that the  
2 case isn't over yet. It goes on for a long time.

3 Q And that case is Martha Coakley, Massachusetts  
4 Attorney General, versus Bangor Hydro-Electric Company?

5 A Yes. And I've seen staff testimony on that,  
6 and their numbers are much closer to mine -- than, than  
7 Dr. Avera's.

8 Q Now, we've been talking about dividend yield.  
9 Let's talk a little bit about growth rate. You, you say  
10 that that's the major area of disagreement in the  
11 application of a DCF; correct?

12 A Yes.

13 Q And at page 4 of your testimony you state --  
14 I'll let you get there. You state, Dr. Avera relies  
15 exclusively on the earnings per share EPS growth  
16 forecast of Wall Street analysts and Value Line for his  
17 DCF growth rate; correct?

18 A Yes.

19 Q Now, you could accurately restate that  
20 sentence to read, Dr. Avera, Mr. Gorman, and Mr. Baudino  
21 rely exclusively on the earnings per share growth rate  
22 forecasts of Wall Street analysts and Value Line for  
23 their DCF growth rates, could you not?

24 A Yeah. I mean, again, I've looked at their  
25 testimonies. I haven't provided rebuttal to them. I

1 mean, again, I'll go back and repeat myself. There is a  
2 reason for this. And in fact, in this case, the Wall  
3 Street analysts -- if I relied exclusively on Wall  
4 Street analysts' growth rates, my DCF, my equity cost  
5 rate estimate would be another 25 basis points. The  
6 reason is is the scientific evidence says these things  
7 are overly optimistic, upwardly biased, and so they're  
8 going to provide an upwardly biased measure of the DCF  
9 equity cost rate.

10 Q So you're the odd man out when it comes to the  
11 use of historic growth?

12 A I have not used historic data. I've  
13 demonstrated -- I've shown what the historic numbers  
14 were. I did not use it.

15 Q Now, you've repeated in your testimony a  
16 number of times that you think there's an upward bias to  
17 analyst growth rates. But you've testified here this  
18 morning that, even though you present historic growth  
19 rates, you don't rely on them; correct?

20 A No. I mean, I looked at the numbers. I  
21 looked at different measures, sustainable growth,  
22 projected growth and earnings per share, dividends, book  
23 value. I present a number of growth rates. I have  
24 shown what the growth rate figures are. If I included  
25 the growth rate figures for historic growth, it would be

1 like 3%.

2 The fact is historically these companies have  
3 grown at a low rate. And the reason you look at  
4 historic numbers is if you look at a Value Line page or  
5 you go to Yahoo! or any of these, most of the numbers  
6 they give you are historic growth rate numbers. The  
7 reason investors -- I mean, investors are presented with  
8 a lot of historic numbers and a few projected numbers.

9 Q But let's make it clear. Even though they see  
10 those historic growth rates, you've testified here this  
11 morning that you have not used historic growth rates in  
12 your DCF analysis.

13 A I haven't. I've used the projected growth  
14 rates. In fact --

15 Q Okay. So you've used projected growth rates  
16 just like everybody else, the same projected growth  
17 rates that you think are biased?

18 A Oh, I know they're biased.

19 Q Okay.

20 A If you look at, if you look at page 6 of  
21 Exhibit JRW-10, you look at the numbers --

22 Q Would you look back at JRW --

23 A I, I'm -- can I finish my answer?

24 Q I'm sorry. By all means. I thought you had  
25 finished.

1           **A**     No.  If you look at -- I used a growth rate,  
2     and I explained this in testimony, of 4.25%, and if you  
3     look at the historic numbers, they're only 3.3%, you'll  
4     get the average of the sustainable and projected  
5     numbers.  That's 4.3%.  Analyst growth rates are 4.5%.  
6     And so, I mean, if I had used strictly on analyst growth  
7     rates, it would be another 25 basis points.

8                     So it's not really a huge item in this  
9     particular case.  But if you look at the research on  
10    them, you know that, that analysts aren't very good at  
11    forecasting earnings growth rates.  I think they're an  
12    element, they're an input, but you have to recognize  
13    their, their overoptimism.

14           **Q**     But you nonetheless rely on them in your  
15    analysis.

16           **A**     It's one element.  I don't rely exclusively on  
17    it like Dr. Avera does.  But I'm very, as you can tell  
18    from my testimony, I do a lot of work in this area and  
19    I'm very aware of, of, of the tendency of analysts to be  
20    very overly optimistic.

21                     For example, Dr. Avera has used a 10% growth  
22    rate --

23           **MR. GUYTON:**  I'm sorry.  Could, could we ask  
24    that the witness --

25           **CHAIRMAN BRISÉ:**  Yeah, I think it's fair.

1 Question posed, answer yes or no. There's been latitude  
2 to provide a short explanation. The explanation needs  
3 to be directly associated to the question.

4 **THE WITNESS:** Okay. Sorry, Mr. Chairman.

5 **CHAIRMAN BRISÉ:** Thank you.

6 **BY MR. GUYTON:**

7 **Q** And I think you pointed this out in an earlier  
8 answer, but the historic growth rates that you show on  
9 your JRW-10, page 3, are a full 100 basis points lower  
10 than the projected growth rates you show on JRW-10,  
11 page 4?

12 **A** Yes. But I think, again, investors see these,  
13 I mean, investors see --

14 **Q** I'm sorry. I just asked --

15 **A** -- far many, far more --

16 **Q** I just asked, a simple yes or no answer.

17 **MR. McGLOTHLIN:** Excuse me. He was in the  
18 middle of an answer, Mr. Chairman.

19 **CHAIRMAN BRISÉ:** Understood.

20 If you could finish your statement, I mean,  
21 finish your, your, your response. But, please, keep it  
22 to the question that is posed.

23 **THE WITNESS:** My response is yes, and the  
24 majority of the numbers investors see are these historic  
25 numbers.

1 BY MR. GUYTON:

2 Q Okay. Now, if you'd look at your JRW-10, page  
3 3, there are a significant number of companies in your  
4 proxy group that had negative growth rates; correct?

5 A Yes.

6 Q Would a rational investor use a negative  
7 growth rate to determine his opportunity cost of  
8 capital?

9 A Yes.

10 Q Under current and near term conditions, would  
11 a rational investor use a negative growth rate to  
12 determine his or her opportunity cost of capital in FPL?

13 A Yes. It is one element. Over time, about 35  
14 or -- 35% of growth rates are negative. That's part of  
15 the distribution. That's what investors see. You don't  
16 just look at the top end of the distribution to figure  
17 out what your growth rate is. That would be great. You  
18 know, you forget the negatives. Everything is positive.

19 Negative growth is one element that we see.  
20 30 to 40% every year companies have negative earnings  
21 growth rates.

22 Q Dr. Woolridge, what are flotation costs?

23 A Those are the costs of issuing equity.

24 Q So when NextEra Energy issues stock and uses  
25 the proceeds to invest its equity in FPL, it incurs

1 flotation costs?

2 A Yes.

3 Q And you acknowledge that flotation costs are  
4 real and that they're a cost of service; correct?

5 A Yes.

6 Q Did you communicate to the other OPC  
7 witnesses, Schultz and Ramas, that you believe flotation  
8 costs are a legitimate cost of service that should be  
9 recovered as an operating expense?

10 A I do not believe I did. I mean, I, it was in  
11 my testimony. I, I -- but, yes, I believe, if the  
12 out-of-pocket costs, if they're incurred in a given  
13 year, should be, should be recognized as, as an  
14 operating cost.

15 Q But you didn't communicate that to the other  
16 OPC witnesses?

17 A I, I did not.

18 Q Why not?

19 A I'm not, I'm not sure why. I mean, I assume  
20 that if they were operating (phonetic) the flotation  
21 costs, that issue would have been -- I mean, Dr. Avera  
22 did not -- I mean, I guess the big reason is Dr. Avera  
23 didn't identify any flotation costs for FPL, so I didn't  
24 think there were any.

25 Q Your understanding is that Dr. Avera didn't

1 recommend a flotation cost adjustment to his cost of  
2 equity estimate?

3 A Oh, he, he included an adjustment, but he did  
4 not identify any flotation costs in his testimony.

5 Q Okay. Does, to your knowledge, does FPL  
6 reflect flotation costs as an operating expense in its  
7 filing?

8 A I do not know. I mean, again, I would assume  
9 if they did that Dr. Avera would have highlighted it.

10 Q Okay. To your knowledge, has the Florida  
11 Public Service Commission ever recognized flotation cost  
12 recovery in its cost of equity determinations?

13 A I believe they have, but I'm not certain on  
14 that.

15 Q So you believe they had, but you didn't  
16 include a flotation cost adjustment in your  
17 recommendation?

18 A No. And I explain why in my testimony.

19 Q FERC also includes flotation costs in its ROE  
20 determinations, does it not?

21 A They do. It's when companies incur them, as  
22 I, as I understand it. And again, that methodology  
23 tends to evolve over time.

24 Q Would you turn to page 68 of your testimony,  
25 please, sir. In specifically lines 12 and 13 you note



1 that utilities have been selling at market-to-book  
2 ratios in excess of 1.0 for many years. Did I read that  
3 correctly?

4 A Yes.

5 Q How many years have utilities been selling at  
6 a market-to-book ratio in excess of 1?

7 A I don't know the exact number. I would say 15  
8 to 20 years.

9 Q And then, according to your next sentence at  
10 lines 14 and 15, you say that utility stock selling at  
11 market-to-book ratios greater than 1 is due to  
12 authorized rates of return having been set greater than  
13 the required return?

14 A Yes.

15 Q So for the last 15 to 20 years utility  
16 market-to-book ratios have been greater to 1 -- greater  
17 than 1 because this Commission and other commissions  
18 around the country have been setting authorized returns  
19 on equity that's greater than the cost of equity of  
20 utilities?

21 A I believe as a general notion I agree with  
22 that. I think, for example, you look at today, the  
23 current authorized return on equity for electric utility  
24 in the last quarter was 9.92%. I think if you look at  
25 the direction of interest rates and you look at the

1 lessened volatility in the markets and you look at the  
2 performance of utility stocks, I think it's somewhat  
3 below 9.92%. But I think it's, traditionally utility  
4 commissions have, have set the authorized returns above  
5 the required rate of return.

6 Q Okay. In developing your proxy group, you  
7 attempted to identify companies that were of comparable  
8 risk to FPL; correct?

9 A As a general notion, yes.

10 Q And you did that because you didn't have a  
11 stock price for FPL to run a DCF analysis, so you had to  
12 develop a comparable risk group.

13 A No. You develop a comparable risk group in  
14 terms of valuation studies and in terms of cost of  
15 capital studies, more to get a broad, a number of firms  
16 to -- because there's going to be estimation error in  
17 things that you do, so you use a proxy group. And even  
18 if FPL traded, you would still use, often use a proxy  
19 group as a way of estimating cost of capital.

20 Q But it's important in establishing the proxy  
21 group that the companies be of comparable or similar  
22 risk.

23 A It is comparable risk, yes. Correct.

24 Q Okay. Now, you would agree with me, would you  
25 not, that investors look at and consider authorized

1 returns on equity when they're considering whether to  
2 invest in an electric utility?

3 A I think it's one element that they look at.  
4 They look at other ratemaking elements. They look at  
5 the service territory. They look at other issues, but  
6 that's one issue.

7 Q Now, you relied on *AUS Utility Reports* for  
8 data in developing your testimony; correct?

9 A Yes.

10 Q And so you consider the information reported  
11 in *AUS Utility Reports* to be reliable?

12 A I -- yes.

13 Q Would you turn to your Exhibit JRW-4, please.  
14 Now, in that exhibit you show financial data for your  
15 proxy group; correct?

16 A Yes.

17 Q And that financial data is taken from the  
18 June 2012 *AUS Utility Report*?

19 A Yes.

20 Q And if you'd had the July report available to  
21 you, you would, you would have used the July report;  
22 correct?

23 A If I had time to incorporate that, yes.

24 Q Now, the *AUS Utility Report* that you relied  
25 upon also reports utilities' allowed returns on equity

1 in addition to the data you show on your JW, JRW-4;  
2 correct?

3 **A** Yes, they do.

4 **MR. GUYTON:** Mr. Chairman, we're going to pass  
5 out an exhibit that we would ask that this be identified  
6 as the next in order.

7 **CHAIRMAN BRISÉ:** Sure. The next exhibit  
8 number is 570.

9 (Exhibit 570 marked for identification.)

10 Are there any objections to this?

11 **MR. MOYLE:** I don't think so. I'd like to  
12 hear it authenticated by the witness.

13 **MR. McGLOTHLIN:** I'll just reserve for a  
14 moment until we see where this goes.

15 **CHAIRMAN BRISÉ:** Okay. You may proceed.

16 **BY MR. GUYTON:**

17 **Q** All right. Dr. Woolridge, you've been handed  
18 what's been identified as Exhibit 570. Does that  
19 exhibit reflect all of your proxy group companies?

20 **A** I believe so.

21 **Q** And I'm going to represent to you that the  
22 authorized return on equity shown on 570 is the  
23 authorized return on equity that is reported in the  
24 July 2012 *AUS Utility Report*. I have that report here  
25 if you want to confirm that yourself, but I'm going to

1 ask you to accept that subject to check.

2 A I will.

3 MR. MOYLE: I'd like to see it, if I could.

4 MR. GUYTON: Okay. Sure.

5 MR. McGLOTHLIN: I would like to have that  
6 document available to the witness for his perusal.

7 MR. GUYTON: May we approach?

8 CHAIRMAN BRISÉ: Sure.

9 MR. GUYTON: Mr. Chairman, I'm ready to  
10 proceed. I just want to make sure counsel has had time  
11 to --

12 MR. McGLOTHLIN: Have you had a chance to  
13 review the document, Dr. Woolridge?

14 THE WITNESS: Yeah. I haven't compared all  
15 the numbers, but, yes, I'm aware of the, the  
16 publication.

17 BY MR. GUYTON:

18 Q So 570 shows the authorized return on equity  
19 for your proxy group as you understand it; correct?

20 A Yes. I believe that's contained on, it would  
21 be on two different pages in here. It would be the --  
22 on page 10 for combination electric, gas companies, and  
23 on page 6 for the straight electric companies.

24 Q And the range of the authorized return on  
25 equity for the companies that you deem comparable to FPL

1 are from 8.75% to 11.46%; correct?

2 **A** Yes. And there's a reason for that.

3 **Q** And the average for those companies, the  
4 average authorized return on equity is 10.41%; correct?

5 **A** I'll take that, subject to check. Again, many  
6 of these authorized returns are very stale. For  
7 example, you take PG&E, 11.35%, that's a 2007 decision.

8 **Q** And that authorized --

9 **A** And the others --

10 **MR. MCGLOTHLIN:** Excuse me.

11 **THE WITNESS:** And many of the others represent  
12 obviously averages from different, say, for Southern  
13 Company for different jurisdictions they have it's an  
14 average. They may include some riders and some  
15 incentive numbers as well.

16 The definition of what they call authorized  
17 ROE is provided in, in, on page, on page 30 of that  
18 document.

19 **BY MR. GUYTON:**

20 **Q** Okay. Now, as to your point that some of  
21 these may be stale, they are the current authorized  
22 return on equity in that the Commission has not adjusted  
23 its finding from whenever it was originally made;  
24 correct?

25 **A** Well, no. I mean, I think if we want to say

1 what is the relevant comparable, I would say what is the  
2 relevant comparable, I would say these were the  
3 authorized returns at the time of the rate cases that  
4 established this. I would say these are not the  
5 relative comparable to the current authorized returns  
6 for electric utilities.

7 Q But in each of those jurisdictions the  
8 Commission has not gone back and adjusted the cost of  
9 equity, has it?

10 A Well, no. Usually it's because they haven't  
11 had a rate case, and so therefore they haven't come in  
12 and, and gone through the regulatory process and  
13 established a new return on equity. I mean, I just  
14 mentioned the second quarter of 2012, the average ROE  
15 for an electric utility was 9.92%.

16 Q All right.

17 A And I would --

18 Q Most, most utilities are --

19 MR. McGLOTHLIN: Excuse me. This is becoming  
20 a problem. Mr. Guyton continues to interrupt the  
21 answer.

22 MR. GUYTON: I couldn't agree more. It is  
23 becoming a problem because I'm getting an answer that's  
24 not responsive to the question.

25 MR. McGLOTHLIN: Well, I disagree. You

1 haven't even heard the answer.

2 **CHAIRMAN BRISÉ:** Okay. I'm going to remind  
3 everyone that, as we've stated before and we've tried to  
4 keep this practice going on so far, if there's a  
5 question and it can be answered with a yes or no, there  
6 is an opportunity to provide a short explanation that is  
7 directly related to the question.

8 **BY MR. GUYTON:**

9 **Q** Now, you also mentioned the authorized return  
10 might be an average?

11 **A** Yes.

12 **Q** And you refer to the Southern Company. The  
13 highest authorized return within the Southern Company is  
14 13.75, is it not?

15 **A** I do not know.

16 **Q** Okay. Well, your cost of equity range  
17 analysis was from 7.7 to 8.7%; correct?

18 **A** Yes.

19 **Q** So if I understand correctly, your cost of  
20 equity analysis range is some 171 to 271 basis points  
21 below the average cost of equity determined for your  
22 comparable risk proxy group; correct?

23 **A** Yes, I'd say that. And I would say there's --  
24 the reason is is because these are very stale and they  
25 don't reflect the historic low interest rates and low



1 market volatility we see today.

2 Q Dr. Woolridge, when were you last responsible  
3 for managing the financial integrity of a company like  
4 Florida Power & Light Company?

5 A Oh, I wasn't.

6 Q When were you last responsible for a company  
7 like FPL issuing debt?

8 A I wasn't.

9 Q When were you last responsible for arranging a  
10 line of credit for an electric utility like FPL?

11 A Oh, I wasn't.

12 Q When were you last responsible for the  
13 issuance of common stock by an electric utility like  
14 NextEra Energy?

15 A I have not been.

16 Q When were you last responsible for having to  
17 go to the capital markets to secure financing for  
18 successive Category 3 hurricanes in the same season?

19 A I have not.

20 Q Have you ever served as a chief financial  
21 officer of an electric utility such as FPL?

22 A No.

23 Q Have you ever been asked to serve in such a  
24 capacity?

25 A No. I've dealt with CFOs of utilities. But,

1 no, I've never served as one or asked to be served as  
2 one.

3 **MR. GUYTON:** That's all we have.

4 Dr. Woolridge, thank you.

5 **CHAIRMAN BRISÉ:** Staff.

6 **MS. KLANCKE:** At this time, in lieu of staff's  
7 questions, staff would like to move into the record  
8 Exhibit Number 115 containing the deposition transcript  
9 of this witness, as amended in conjunction with his  
10 errata sheet. This has been passed out to the parties  
11 and to Commissioners. It is staff's understanding that  
12 there were no objections, but we would like to give them  
13 an opportunity to object if they have any objections.

14 **CHAIRMAN BRISÉ:** Are there any objections to  
15 Exhibit 115?

16 **MR. McGLOTHLIN:** None.

17 **MR. GUYTON:** No objection.

18 **CHAIRMAN BRISÉ:** Okay.

19 **MS. KLANCKE:** Staff has no further questions.

20 **CHAIRMAN BRISÉ:** Okay. Thank you.

21 Commissioners?

22 All right. Mr. McGlothlin, redirect.

23 **REDIRECT EXAMINATION**

24 **BY MR. McGLOTHLIN:**

25 Q Dr. Woolridge, Mr. Guyton referred you to the

1 range of 7.7 to 8.7% that you describe in your  
2 testimony. What does the lower part of that range  
3 represent?

4 **A** Well, the lower part represents the CAPM  
5 results. Obviously interest rates are low, historic low  
6 numbers. You have to go back to the '50s. And that's  
7 why they, I think the CAPM results are low. I've used  
8 data which includes the most recent survey of CFOs about  
9 what the appropriate market risk premium is, and it's  
10 about 5%. So I think it reflects a low number. It  
11 reflects really the low interest rates in today's  
12 market.

13 **Q** And what does the 8.7% represent?

14 **A** It represents the DCF results. It's my  
15 experience, you go around the country, most commissions  
16 pay primary attention to DCF results. A lot of  
17 witnesses present other things, but the DCF results in  
18 most jurisdictions are the primary factors, primary  
19 numbers that the commissions look at.

20 **Q** Now, the 7.7 to 8 point percent -- 8.7% is not  
21 what you have recommended as the ROE for FPL in this  
22 case, is it?

23 **A** No.

24 **Q** What have you recommended?

25 **A** I've recommended 8.5 to 9. I took the 8.7 as

1 being a midpoint between 8.5 and 9%, and then my  
2 recommendation was based on the appropriate capital  
3 structure that the Commission deems.

4 Q So as between the CAPM approach and the DCF  
5 approach, which did you focus on for purposes of your  
6 recommendation?

7 A The DCF approach.

8 Q With respect to what has been marked as 570,  
9 Mr. Guyton referred you to the authorized ROEs for the  
10 companies in your proxy group. And in responding to  
11 him, you said that some of the ROEs were stale. Would  
12 you elaborate on what you meant by the term stale?

13 A Just they're old. I mean, like I say, they  
14 reflect ROEs from five years ago, some of them.

15 Q And why is that significant?

16 A It's because interest rates are far below  
17 where they were today, and interest rate is the primary  
18 driver of equity cost rates.

19 Q Is there any information on 570 that would  
20 inform the reader with respect to the capital structures  
21 of these companies?

22 A No.

23 Q Would that be a relevant consideration?

24 A Well, I think it is. I mean, for example,  
25 there's, you know, in reporting authorized returns, RRA,

1 which is the source used by Dr. Avera, also reports the  
2 common equity ratio.

3 Q And what is the significance of the common  
4 equity ratio to the authorized ROE that's reported here?

5 A Well, it's an indicator of the financial risk  
6 that, that's borne by the utility.

7 Q If you know, how does the financial risk of  
8 the companies in this group compare to the financial  
9 risk of FP&L?

10 A Well --

11 MR. GUYTON: Objection. This goes beyond the  
12 scope of this exhibit.

13 MR. McGLOTHLIN: Well, that's the point. This  
14 exhibit has selective information on it. Mr. Guyton  
15 wants you to think that the authorized ROEs are relevant  
16 for purposes of comparing to FPL's request. But if the  
17 information on this exhibit is insufficient to give you  
18 some insight as to whether they're comparable or not,  
19 then that's something we can establish through redirect.

20 CHAIRMAN BRISÉ: Okay. I'll allow it.

21 THE WITNESS: I'm sorry. The question again.

22 BY MR. McGLOTHLIN:

23 Q If you know, are you in a position to compare  
24 the equity ratios of some of the companies in your proxy  
25 group with the equity ratio that FPL proposes of 59.62%?

1           **A**     Well, I provide that in JRW-4.  It's about  
2     45%.

3           **Q**     And what would an equity ratio of 45% imply  
4     with respect to the authorized return on equity as  
5     compared to FPL's situation?

6           **A**     Well, FPL at 59% is, I mean, from my  
7     observation, is extremely high.  It would constitute a  
8     capitalization that had much less financial risk,  
9     especially if you look at NextEra, which is at 38%.

10          **Q**     Would a, would an equity ratio of 45% imply a  
11     higher or lower return on equity relative to the 59% of  
12     FP&L?

13           **MR. GUYTON:**  Objection.  This goes well beyond  
14     the exhibit and is just a restatement of direct  
15     examination.  Ms. Helton correctly pointed out that  
16     that's improper redirect.

17           **MR. McGLOTHLIN:**  I'm simply following through  
18     with the same point that we discussed earlier, which is  
19     that the information on this exhibit is insufficient to  
20     inform the reader of the variables that weigh on whether  
21     this reported ROE is comparable to FPL's or not, and  
22     that is my last question on the line.

23           **CHAIRMAN BRISÉ:**  Mary Anne?

24           **MS. HELTON:**  Well, I agree with Mr. Guyton  
25     that if it's bringing out what's in the direct

1 testimony, that that's not appropriate. The direct  
2 testimony that's been prefiled speaks for itself. If,  
3 if Mr. McGlothlin could ask his question one more time.

4 **BY MR. McGLOTHLIN:**

5 Q The final question in that line was this.  
6 Dr. Woolridge, you've stated that the average equity  
7 ratio of your proxy group, which is the same group of  
8 companies on Exhibit 570, is 45%. And we've established  
9 also that FPL had requested approval of the 59.62%  
10 equity ratio. Does the 45% average equity ratio in your  
11 proxy group imply a higher or lower ROE relative to the  
12 equity ratio that FPL requests?

13 **MR. GUYTON:** It, it goes well beyond. I mean,  
14 this is supposed to be a group of comparable risks, and  
15 now we're talking about one element of risk to the  
16 exclusion of all others. It's entirely inappropriate.  
17 It goes well beyond the scope of the exhibit that we've  
18 inquired about.

19 **MS. HELTON:** I think I agree with Mr. Guyton.

20 **CHAIRMAN BRISÉ:** Okay. So if you can move on,  
21 Mr. McGlothlin.

22 **MR. McGLOTHLIN:** All right. I will.

23 **BY MR. McGLOTHLIN:**

24 Q In one of your responses you said that recent  
25 reports on authorized ROEs was 9.92%. Do you recall

1 that?

2 A Yes.

3 Q For what time frame was that information  
4 provided?

5 A The second quarter of 2012.

6 Q Those -- I'm sorry. Does that mean that the  
7 decisions were made in the second quarter of 2012?

8 A Yes.

9 Q If the decisions were made in the second  
10 quarter of 2012, what vintage data would that have been  
11 relying on?

12 A Generally that was probably data that was in  
13 2011. It was probably data that was -- you know, most  
14 decisions, there's three or four months or so between  
15 when the hearings close and the record is closed and the  
16 decision is made. That's my experience. It may be  
17 different other places. But this, so it's probably --  
18 that's one issue I think I brought up. This is really  
19 stale data. It doesn't reflect the lower interest rates  
20 and market volatility that we have today.

21 Q Okay. So if the 9.92% average ROEs were based  
22 upon data from 2011, what has happened to interest rates  
23 since 2011?

24 A Well, they've declined by about 75 basis  
25 points.



1           Q     In one of your answers you also referred to  
2     lessened volatility in the stock market.  What did you  
3     mean by that?

4           A     Well, the VIX, the V-I-X, is the primary  
5     measure of, of volatility in the market.  It's called  
6     the fear gauge.  Last fall it was up in the range in  
7     October of 30 to 35.  Today it's like 12 or 13.  The  
8     average historically has been about 20.  So last fall  
9     market volatility was much higher, there were more  
10    concerns.  Today market volatility is very low.  You  
11    don't see a lot of the spikes in stock prices on a  
12    day-to-day basis.

13          Q     Why is a measurement of market volatility  
14    relevant to consideration of the appropriate ROE for a  
15    company?

16          A     Well, there's an indication that when the  
17    markets are more volatile, investors are scared and they  
18    require higher rates of return.

19          Q     Mr. Guyton asked you whether in your view the  
20    use of negative growth rates is a rational thing to do,  
21    and you answered yes.  Why do you say it's rational?

22          A     Well, I explained that, you know, negative  
23    growth rates occur all the time.  It's part of the  
24    distribution that investors see, and they have to build  
25    those negatives into their overall distribution to get

1 an expected growth rate.

2 Q Would it in your view be appropriate to  
3 exclude negative growth rates?

4 A No.

5 MR. GUYTON: Objection. Goes beyond the scope  
6 of the cross. Didn't ask him about that.

7 MR. McGLOTHLIN: I'll withdraw that question.

8 CHAIRMAN BRISÉ: Thank you.

9 BY MR. McGLOTHLIN:

10 Q Dr. Woolridge, you supplied so many exhibits  
11 it's taking me a moment to find the next one.

12 In response to questions from Mr. Guyton and  
13 also during the -- you said that the, Dr. Avera relied  
14 exclusively on a projection of Wall Street analysts. Do  
15 you recall that statement?

16 A Yes.

17 Q Specifically which metric or measurement was,  
18 did you have in mind when you said you relied  
19 exclusively on, on Wall Street projections?

20 A Well, he used the projected earnings per share  
21 growth rates of, produced by a source he calls IBIS.

22 Q Now, in response to questions, you said that  
23 you also used projected data, did you not?

24 A Yes.

25 Q Did you limit yourself to earnings per share?

1           **A**    No.

2           **Q**    Please turn to JRW-10.

3           **A**    Yes.

4           **Q**    And looking, for instance, in the first  
5 left-hand block, what does EPS stand for?

6           **A**    Earnings per share. Which page?

7           **Q**    I'm looking at page 6 of 6.

8           **A**    Okay. Earnings per share.

9           **Q**    What is DPS?

10          **A**    Dividends per share.

11          **Q**    What is --

12                   **MR. GUYTON:** Objection. I didn't ask about  
13 this exhibit.

14                   **MR. McGLOTHLIN:** Yes, but you asserted through  
15 questions that Dr. Woolridge essentially did the same  
16 thing that Dr. Avera did by using projected data. And,  
17 I mean, I'm entitled to demonstrate that his use of  
18 projected data extended far beyond anything that  
19 Dr. Avera used.

20                   **CHAIRMAN BRISÉ:** I think I'll allow that.

21 **BY MR. McGLOTHLIN:**

22           **Q**    What is DPS?

23           **A**    Dividends per share.

24           **Q**    What is BVPS?

25           **A**    Book value per share.

1           Q     And there's also a middle block there called  
2 sustainable growth, retention rate. What is that?

3           A     It's the expected return on equity times the  
4 earnings retention rate.

5           Q     What use did you make of those metrics or  
6 measurements?

7           A     Well, I'm trying to get an idea of what  
8 investors would expect, the expected growth rate. And  
9 according to the DCF model, they should all grow in a  
10 similar fashion.

11          Q     Did Dr. Avera use any of these other than EPS?

12          A     No. No.

13          Q     Is it fair to say that you and Dr. Avera used  
14 the same projected data?

15          A     No.

16          Q     You said in response to a question that you  
17 have evidence that demonstrates that the analyst  
18 projections of earnings per share is upwardly biased.  
19 Do you remember that statement?

20          A     Yes.

21          Q     There's a chart behind you that is an  
22 enlargement of one of your exhibits. Does it relate to  
23 that statement?

24          A     Yes, it does.

25          Q     Would you explain what that shows?

1           **A**     This is actually --

2           **MR. GUYTON:**  Objection.  Once again, goes  
3 beyond the scope of the cross.  Didn't ask about that  
4 chart.

5           **MR. McGLOTHLIN:**  He didn't ask about the chart  
6 but he asked about the witness's assertion that Wall  
7 Street analysts' projections of earnings per share are  
8 upwardly biased.  That was one of the themes of the  
9 cross-examination.  This is, this is directly related to  
10 it.

11           **MR. GUYTON:**  And he agreed and I moved on.

12           **CHAIRMAN BRISÉ:**  I think I'll agree with, with  
13 FPL on this one.

14 **BY MR. McGLOTHLIN:**

15           **Q**     Mr. Guyton asked you several questions about  
16 the DCF analysis that you submitted to the FERC.

17           **A**     Yes.

18           **Q**     When you submitted your analysis to this  
19 Commission, were you attempting to apply the FERC  
20 methodology or your own methodology?

21           **A**     No.  My, my own.

22           **Q**     In response to several items to which  
23 Mr. Guyton referred, including the inclusion of Johnson  
24 & Johnson and other companies in that particular  
25 exhibit, your response was that in your view the items

1 he pointed out were, would not make a material  
2 difference to your conclusion. Would you explain why  
3 that is your view?

4 **A** No. It has really no impact on the discussion  
5 that -- the non-utility group in my opinion is, is  
6 inappropriate, and I explain that in my testimony.

7 **MR. McGLOTHLIN:** Those are all of my  
8 questions.

9 **CHAIRMAN BRISÉ:** Thank you.

10 Now we will deal with exhibits.

11 Mr. McGlothlin.

12 **MR. McGLOTHLIN:** OPC moves 236 through 253 as  
13 identified in the Comprehensive Exhibit List.

14 **CHAIRMAN BRISÉ:** Okay. If you'd repeat those  
15 numbers for me again.

16 **MR. McGLOTHLIN:** 236 through 253, inclusive.

17 **CHAIRMAN BRISÉ:** Okay. 236 to 253.

18 Are there any objections? Seeing none, we  
19 will move those into the record. Okay.

20 (Exhibits 236 through 253 admitted into the  
21 record.)

22 **MS. KLANCKE:** Staff would like to move in  
23 Exhibit 115.

24 **CHAIRMAN BRISÉ:** Okay. 115, we will move that  
25 into the record.

1           **MS. KLANCKE:** Amended to include the errata.

2           **CHAIRMAN BRISÉ:** Including the errata.

3           (Exhibit 115 admitted into the record.)

4           **MR. GUYTON:** FPL moves 570.

5           **CHAIRMAN BRISÉ:** Okay. FPL moves 570.

6           Any objections to 570?

7           **MR. McGLOTHLIN:** No objection.

8           **CHAIRMAN BRISÉ:** No objections? So we will  
9 move 570 into the record. All right.

10           (Exhibit 570 admitted into the record.)

11           **MR. MOYLE:** Can we also move -- mark as 571  
12 the document that had the underlying data and put that  
13 in as well, so we have the original source of the  
14 information?

15           **CHAIRMAN BRISÉ:** Who's moving that in?

16           **MR. MOYLE:** I'd like to.

17           **CHAIRMAN BRISÉ:** As your exhibit?

18           **MR. MOYLE:** Sure.

19           **CHAIRMAN BRISÉ:** FPL?

20           **MR. GUYTON:** I'm at your pleasure, Mr.  
21 Chairman. It is the source document that I used for  
22 570. I, I got out of, out of it what we needed, and I  
23 think that's the only information that we crossed this  
24 witness about, but --

25           **MR. SAPORITO:** Mr. Chairman, if I may make a

1 comment. I agree that the document should be moved in  
2 the record because the witness testified to more than  
3 just the one page that was handed out by FP&L, and I  
4 would also request a copy of the entire document myself.  
5 Thank you.

6 **CHAIRMAN BRISÉ:** All right. So for ease we'll  
7 go ahead and move in 571, and that is the document which  
8 includes -- so can we do this? Can we substitute 570  
9 and include the full document rather than using 570?

10 **MR. GUYTON:** I would prefer not, because I'd  
11 like to be able to point to 570 without the seven or  
12 eight pages of attachments.

13 **CHAIRMAN BRISÉ:** Okay. Understood.

14 **MR. GUYTON:** I'll be happy to distribute 571  
15 though.

16 **CHAIRMAN BRISÉ:** All right. So then 571 will  
17 be --

18 **MR. MOYLE:** It's entitled *AUS Utility Reports*,  
19 July 2012.

20 **CHAIRMAN BRISÉ:** Okay. *AUS Utility Reports*,  
21 2012.

22 All right. Seeing no objections, we will move  
23 571 into the record.

24 (Exhibit 571 marked for identification and  
25 admitted into the record.)



1 Any other exhibits for this witness?

2 All right. Seeing none, Mr. McGlothlin.

3 **MR. McGLOTHLIN:** OPC calls Kevin O'Donnell.

4 We would like to have a couple of minutes to change the  
5 easel exhibits.

6 **CHAIRMAN BRISÉ:** Okay. We have -- I guess  
7 we'll take five minutes.

8 (Recess taken.)

9 I think that's five minutes and then some, so  
10 if everyone could find their places so that we can  
11 continue.

12 Mr. McGlothlin.

13 **MR. McGLOTHLIN:** The Office of Public Counsel  
14 calls as its next witness Kevin O'Donnell. Mr.  
15 O'Donnell has been sworn this morning.

16 Whereupon,

17 **KEVIN O'DONNELL**

18 was called as a witness on behalf of the Citizens of the  
19 State of Florida and, having been duly sworn, testified  
20 as follows:

21 **DIRECT EXAMINATION**

22 **BY MR. McGLOTHLIN:**

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

24 **A** Kevin O'Donnell. I'm President of Nova Energy  
25 Consultants, 1350 Southeast Maynard Road, Suite 101,

1 Cary, North Carolina.

2 Q Mr. O'Donnell, on behalf of the Office of  
3 Public Counsel, did you prepare and submit prefiled  
4 testimony in this case?

5 A Yes, I did.

6 Q Do you have that document before you?

7 A Yes, I do.

8 Q Do you have any changes or corrections to make  
9 to your prefiled testimony?

10 A No, I do not.

11 Q Do you adopt the questions and answers  
12 contained in the prefiled testimony document as your  
13 testimony here today?

14 A Yes.

15 **MR. McGLOTHLIN:** I request that the prefiled  
16 testimony be inserted into the record at this point as  
17 though read.

18 **CHAIRMAN BRISÉ:** Okay. At this time we will  
19 insert Mr. O'Donnell's prefiled testimony into the  
20 record as though read, seeing no objections.

21 **BY MR. McGLOTHLIN:**

22 Q Mr. O'Donnell, did you also prepare and attach  
23 to your prefiled testimony an appendix and documents,  
24 exhibits that were identified as KWO-1 through 10?

25 A Yes, I did.

1           Q     Those have been assigned numbers 225 through  
2           235, inclusive.

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**DIRECT TESTIMONY**

**OF**

**Kevin W. O'Donnell, CFA**

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 120015-EI

**Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS FOR THE RECORD.**

A. My name is Kevin W. O'Donnell. I am President of Nova Energy Consultants, Inc. My business address is 1350 Maynard Rd., Suite 101, Cary, North Carolina 27511.

**Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS PROCEEDING?**

A. I am testifying on behalf of the Florida Office of Public Counsel ("OPC"), which represents the interests of consumers in utility rate proceedings before the Florida Public Service Commission ("FPSC" or "Commission").

**Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND RELEVANT EMPLOYMENT EXPERIENCE.**

1 A. I have a Bachelor of Science in Civil Engineering from North Carolina State  
2 University and a Master of Business Administration from the Florida State  
3 University. I have worked in utility regulation since September 1984, when I  
4 joined the Public Staff of the North Carolina Utilities Commission (NCUC). I left  
5 the NCUC Public Staff in 1991 and have worked continuously in utility  
6 consulting since that time, first with Booth & Associates, Inc. (until 1994), then as  
7 Director of Retail Rates for the North Carolina Electric Membership Corporation  
8 (1994-1995), and since then in my own consulting firm. I have been accepted as  
9 an expert witness on rate of return, cost of capital, capital structure, cost of  
10 service, and other regulatory issues in general rate cases, fuel cost proceedings,  
11 and other proceedings before the North Carolina Utilities Commission, the South  
12 Carolina Public Service Commission (SC PSC), the Virginia State Commerce  
13 Commission (VSCC), the FPSC and the Minnesota Public Utilities Commission  
14 (MN PUC). In 1996, I testified before the U.S. House of Representatives,  
15 Committee on Commerce and Subcommittee on Energy and Power, concerning  
16 competition within the electric utility industry. Additional details regarding my  
17 education and work experience are set forth in Appendix A to my direct  
18 testimony.

19

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

1 A. The purpose of my testimony in this proceeding is to present to the Commission  
2 my findings as to the proper capital structure for Florida Power & Light Company  
3 (“FPL” or “Company”).  
4

5 **Q. HOW DOES YOUR TESTIMONY RELATE TO THE TESTIMONY OF**  
6 **OTHER OPC WITNESSES?**

7 A. Based on the capital structure that I recommend, OPC witness Dr. Randall  
8 Woolridge will develop and quantify the return on equity capital that reflects the  
9 risk of an investment in FPL, including the financial risk associated with my  
10 recommended capital structure. Dr. Woolridge will also quantify the lower return  
11 on equity that should be associated with the much higher equity ratio, and  
12 correspondingly lower financial risk, of FPL that the Commission should approve  
13 in the event the Commission declines to adopt my recommendation and instead  
14 approves the 59.6% equity ratio sought by FPL. OPC witness Dan Lawton will  
15 then evaluate the impact of OPC-recommended capital structure, return on equity,  
16 and all other OPC adjustments on the financial integrity of FPL as measured and  
17 perceived by the investment community.  
18

19 **Q. PLEASE SUMMARIZE YOUR PRIMARY RECOMMENDATION IN**  
20 **THIS CASE.**

21 A. After reviewing the merits of FPL’s proposed capital structure and several  
22 alternatives for rate-setting purposes, I recommend that the Commission employ a

1 capital structure that reflects the imputation of a 50% common equity ratio of  
2 investor-supplied equity and debt capital into the overall capital structure of FPL.

3  
4 **Q. HOW IS YOUR TESTIMONY STRUCTURED?**

5 A. The remainder of my testimony is divided into nine sections as follows:

6 I. Economic and Legal Guidelines for Fair Rate of Return

7 II. Capital Structure

8 III. Summary

9  
10 **I. ECONOMIC AND REGULATORY POLICY**

11 **GUIDELINES FOR A FAIR RATE OF RETURN**

12 **Q. PLEASE BRIEFLY DESCRIBE THE ECONOMIC AND REGULATORY**  
13 **POLICY CONSIDERATIONS YOU HAVE TAKEN INTO ACCOUNT IN**  
14 **DEVELOPING YOUR RECOMMENDATION CONCERNING THE**  
15 **CAPITAL STRUCTURE THAT THE COMMISSION SHOULD EMPLOY**  
16 **FOR RATEMAKING PURPOSES IN THIS PROCEEDING.**

17 A. The theory of utility regulation assumes that public utilities are natural  
18 monopolies. Historically, it was believed or assumed that it was more efficient  
19 for a single firm to provide a particular utility service than multiple firms. Even  
20 though deregulation for the procurement of natural gas and generation of electric  
21 power and energy is spreading, the delivery of these products to end-use  
22 customers will continue to be considered a natural monopoly for the foreseeable

1 future. When it is deemed that a perceived natural monopoly does in fact exist,  
2 regulatory authorities regulate the service areas in which regulated utilities  
3 provide service, e.g. by assigning exclusive franchised territories to public utilities  
4 or by determining territorial boundaries where disputes arise, in order for these  
5 utilities to provide services more efficiently and at the lowest possible cost. In  
6 exchange for the protection of its monopoly service area, the utility is obligated to  
7 provide adequate service at a fair, regulated price.

8  
9 This naturally raises the question - what constitutes a fair price? The generally  
10 accepted answer is that a prudently managed utility should be allowed to charge  
11 prices that allow the utility the opportunity to recover the reasonable and prudent  
12 costs of providing utility service and the opportunity to earn a fair rate of return  
13 on invested capital. This fair rate of return on capital should allow the utility,  
14 under prudent management, to provide adequate service and attract capital to meet  
15 future expansion needs in its service area. Obviously, since public utilities are  
16 capital-intensive businesses, the cost of capital is a crucial issue for utility  
17 companies, their customers, and regulators. If the allowed rate of return is set too  
18 high, then consumers are burdened with excessive costs, current investors receive  
19 a windfall, and the utility has an incentive to overinvest. If the return is set too  
20 low, adequate service is jeopardized because the utility will not be able to raise  
21 new capital on reasonable terms.



1 In the case of Federal Power Commission v. Hope Natural Gas Company, 320  
2 U.S. 591 (1944), the U.S. Supreme Court recognized that utilities compete with  
3 other firms in the market for investor capital. Historically, this case has provided  
4 legal and policy guidance concerning the return which public utilities should be  
5 allowed to earn.

6  
7 In that case, the U.S. Supreme Court specifically stated that:

8 "...the return to the equity owner should be commensurate with  
9 returns on investments in other enterprises having corresponding  
10 risks. That return, moreover, should be sufficient to assure  
11 confidence in the financial integrity of the enterprise so as to  
12 maintain credit and attract capital." (320 U.S. at 603)

13  
14  
15 **Q. HOW DO THE ECONOMIC PRINCIPLES AND COURT**  
16 **PRONOUNCEMENTS THAT YOU HAVE DESCRIBED RELATE TO**  
17 **CAPITAL STRUCTURE?**

18 A. The short answer is that the choice of capital structure affects the risk of the  
19 enterprise, and the appropriate rate of return is a function of that risk.

20  
21 **Q. PLEASE EXPLAIN.**

22 A. Since every equity investor faces a risk-return tradeoff, the issue of risk is an  
23 important element in determining the fair rate of return for a utility. As I will  
24 develop in greater detail below, the risks that a regulated utility faces can be  
25 broadly categorized as financial risk and business risk. Financial risk refers to the  
26 possibility that the utility may not be able to meet its debt obligations. As the

1 amount of debt relative to equity capital increases, the amount of money  
2 necessary to pay the interest on debt increases, and financial risk increases.  
3 Similarly, as the amount of debt relative to equity capital decreases, financial risk  
4 decreases. This is another way of saying that the relative amounts of equity and  
5 debt in the total capital raised by the utility bear directly on the risk perceived by  
6 investors, and thus to the rate of return that is commensurate with that risk. The  
7 task of the utility is to employ prudent and reasonable levels of debt and equity.  
8 The related task of the regulator is to adjust those levels of equity and debt for  
9 ratemaking purposes if adjustments to the utility's actual capital structure are  
10 necessary to prevent customers from paying rates that are unreasonably high.

## 11 12 **II. Capital Structure**

### 13 **Q. MR. O'DONNELL, WHAT IS A CAPITAL STRUCTURE?**

14 A. The term "capital structure" refers to the relative percentages of debt, equity, and  
15 other financial components that are used to finance a company's investments.

16  
17 For purposes of simplicity, there are basically three financing methods. The first  
18 method is to finance an investment with common equity, which essentially  
19 represents ownership in a company and its investments. The portion of common  
20 equity returns, that takes the form of dividends to stockholders, are not tax  
21 deductible which, on a pre-tax basis alone, makes this form of financing about  
22 40% more expensive than debt financing, for which interest is a tax-deductible

1 expense of the company. The second form of corporate financing is preferred  
2 stock, which is normally used to a much smaller degree in capital structures.  
3 Dividend payments associated with preferred stock are not tax deductible.  
4 Corporate debt is the other major form of financing used in the corporate world.  
5 There are two basic types of corporate debt: long-term and short-term. Long-  
6 term debt is generally understood to be debt that matures in a period of more than  
7 one year. Short-term debt lasts one year or less. Both long-term and short-term  
8 debt represent liabilities on the company's books that must be serviced with  
9 payments prior to any common stockholders or preferred stockholders receiving a  
10 return on their investment.

11  
12 **Q. HOW IS A UTILITY'S TOTAL RETURN CALCULATED?**

13 A. A utility's total return is developed by multiplying the component percentages of  
14 its capital structure represented by the percentage ratios of the various forms of  
15 capital financing relative to the total financing on the company's books by the  
16 cost rates associated with each form of capital, and then summing the results over  
17 all of the capital components. When these percentage ratios are applied to various  
18 cost rates, a total after-tax rate of return is developed. Since the utility must pay  
19 dividends associated with common equity and preferred stock with after-tax  
20 funds, the post-tax return is then converted to a pre-tax return by grossing up the  
21 common equity and preferred stock returns for taxes. The final pre-tax return is  
22 then multiplied by the Company's rate base in order to develop the amount of

1 money that customers must pay to the utility for its return on investment and tax  
2 payments associated with that investment.

3

4 **Q. HOW DOES CAPITAL STRUCTURE IMPACT THIS CALCULATION?**

5 A. From the above discussion, it is clear that costs to consumers are greater when the  
6 utility finances a higher proportion of its rate base investment with common  
7 equity and preferred stock versus long-term debt. However, long-term debt,  
8 which is first in line for repayment, is more risky to the utility than is common  
9 equity, due to the fact that debt is a contractual obligation, as opposed to common  
10 equity, which involves no contractual obligations. As a result, regulators and the  
11 utility must balance the needs of consumers, who desire low rates (best attained  
12 through the use of long-term debt), versus the desire of the utility to protect its  
13 stockholders' interests (by minimizing the use of long-term debt).

14

15 **Q. WHAT DOES THE CAPITAL STRUCTURE OF A COMPANY**  
16 **REPRESENT TO INVESTORS?**

17 A. As noted above, any type of debt, long-term or short-term, is more risky than  
18 common equity, because debt holders must be paid prior to equity investors.  
19 Since debt must be repaid in the future along with financing costs, a level of  
20 uncertainty is raised by equity investors because the Company must have enough  
21 future resources to repay the debt in the future. This level of uncertainty is called  
22 financial risk in the investment community. In general, the more debt found in a

1 Company's capital structure, the more financial risk that must be borne by  
2 investors. To bear this extra financial risk, investors will require higher returns to  
3 compensate for the added risk.

4

5 **Q. HAVE YOU REVIEWED THE CAPITAL STRUCTURE REQUESTED BY**  
6 **THE COMPANY IN THIS PROCEEDING?**

7 A. Yes, I have.

8

9 **Q. WHAT CAPITAL STRUCTURE IS FPL SEEKING IN THIS CASE?**

10 A. According to the testimony of FPL witness Moray P. Dewhurst, when focusing  
11 solely on investor-provided sources of capital (debt and equity), the Company is  
12 seeking approval of a capital structure that consists of a 59.6% equity ratio.  
13 However, based on the testimony of FPL witness Kim Ousdahl, the Company has  
14 made several adjustments to its proposed, investor-provided capital structure to  
15 reflect additional sources of capital, such as deferred income taxes and customer  
16 deposits, which the Commission takes into account when quantifying a utility's  
17 revenue requirements. The end result of these adjustments, along with the  
18 requested 11.5% return on equity results in a requested total return of 7.00%. The  
19 Company's investor-supplied capital structure as proposed by Mr. Dewhurst and  
20 the final adjusted capital structure as contained in Ms. Ousdahl's testimony can be  
21 found in Exhibit KWO-1.

1 **Q. HOW DOES THE CAPITAL STRUCTURE IN THIS PROCEEDING**  
2 **IMPACT CUSTOMER BILLS?**

3 **A.** The cost of common equity is higher than the cost of long-term debt, so that a  
4 higher equity percentage will translate into higher costs to FPL's customers with  
5 no corresponding improvements in quality of service. In a pure mathematical  
6 sense, the cost of common equity is more than twice as expensive as the cost of  
7 long-term debt.

8

9 Long-term debt is a financial promise made by a company and is carried as a  
10 liability on the company's books. Common stock is ownership in the company.  
11 Due to the nature of this investment, common stockholders require higher rates of  
12 return to compensate them for the extra risk involved in owning part of the  
13 company, versus having a promissory note from the company.

14

15 Secondly, the tax treatment of common stock is more costly than the tax treatment  
16 of debt. Public corporations, such as NextEra, can write-off interest payments  
17 associated with debt financing. Corporations are not, however, allowed to deduct  
18 common stock dividend payments for tax purposes. All dividend payments must  
19 be made with after-tax funds, which are more expensive than pre-tax funds. Since  
20 the regulatory process allows utilities to recover all expenses, including taxes,  
21 rates must be set so that the utility pays all its taxes and has enough left over to  
22 pay its common stock dividend. If a utility is allowed to use a capital structure for

1           ratemaking purposes that is overweighed in common stock, customers will be  
2           forced to pay the incrementally higher revenue requirement, which includes the  
3           associated income tax burden, thus resulting in unfairly, unreasonably, and  
4           unnecessarily high rates. This situation would violate the fundamental principles  
5           of utility regulation that rates must be fair but only high enough to support the  
6           utility's provision of safe, adequate, and reliable service at a fair price.

7

8   **Q.    FOCUSING AGAIN ON THE INVESTOR-PROVIDED SOURCES OF**  
9   **EQUITY AND DEBT, DO YOU AGREE WITH THE COMPANYS**  
10 **REQUESTED CAPITAL STRUCTURE IN THIS PROCEEDING?**

11  A.    No. First and foremost, FPL's requested capital structure in this proceeding is  
12        simply unreasonable and inconsistent with other comparable electric utilities.  
13        Secondly, the Company's requested capital structure does not reflect the true  
14        risk/return relationship inherent in an investment in FPL. As a result, FPL's  
15        requested cost of capital in this proceeding is inconsistent with common equity  
16        and long-term debt investor expectations.

17

18 **Q.    WHY DO YOU BELIEVE THAT THE COMPANY'S REQUESTED**  
19 **CAPITAL STRUCTURE IN THIS PROCEEDING IS UNREASONABLE?**

20  A.    As stated above, the higher the equity ratio of the utility, the higher the rates that  
21        captive ratepayers must pay in order for the utility to earn its allowed return on  
22        equity. In comparison to other electric utilities, the requested capital structure of  
23        FPL in this case is grossly excessive for ratemaking purposes. In Exhibit KWO-

1 2, I have provided the common equity ratios for 2010 and 2011 for Company  
2 witness William E.Avera's comparable group as compared to FPL in this case.  
3 As can be seen in this exhibit, the average common equity ratio of companies in  
4 Dr. Avera's comparable group is 47.2%, as compared to the FPL-requested  
5 common equity ratio in this proceeding of 59.6%.

6  
7 **Q. HOW DO YOU RESPOND TO A CLAIM THAT COMPARING A**  
8 **SUBSIDIARY COMPANY, SUCH AS FPL, TO WITNESS AVERA'S**  
9 **HOLDING COMPANIES IS NOT A PROPER COMPARISON?**

10 A. The provision of electric power supply service in a monopoly market has very  
11 low business risk. To the extent that witness Avera's comparable group contains  
12 companies that have any business ventures that are more risky than monopoly  
13 electric service companies, the risk of FPL would be lower than the overall risk of  
14 Dr. Avera's comparable group. Hence, if anything, such a comparison would be  
15 over stating FPL's required rate of return.

16  
17 **Q. WHAT IS THE AVERAGE COMMON EQUITY RATIO OF OPC**  
18 **WITNESS WOOLRIDGE'S PROXY GROUP?**

19 A. According to Exhibit JRW-4 of Dr. Woolridge's testimony, the average common  
20 equity ratio of his comparable group of utilities was 45.4% which, again, is far  
21 less than FPL's requested common equity ratio of 59.6%.



1 **Q. DO YOU HAVE ANOTHER REFERENCE POINT WITH WHICH TO**  
2 **COMPARE FPL'S REQUESTED COMMON EQUITY RATIO IN THIS**  
3 **CASE?**

4 A. Yes. Exhibit KWO-3 provides the average common equity ratio for all electric  
5 utilities followed by Value Line. It shows an average common equity ratio of  
6 47.0% which, again, is much lower than FPL's requested 59.6% common equity  
7 ratio in this case.

8

9 **Q. HOW DOES FPL'S REQUESTED CAPITAL STRUCTURE IN THIS**  
10 **CASE COMPARE TO THE CAPITAL STRUCTURE OF ITS PARENT**  
11 **COMPANY, NEXTERA ENERGY?**

12 A. The NextEra consolidated capital structure contains much less common equity  
13 than does FPL's. Exhibit KWO-4 shows the NextEra consolidated capital  
14 structure, which consists of only 39.4% common equity.

15

16 **Q. WHY IS THE COMMON EQUITY RATIO OF NEXTERA ENERGY SO**  
17 **MUCH LESS THAN THE COMMON EQUITY RATIO OF FPL?**

18 A. NextEra Energy has chosen to fund its unregulated operations with a much more  
19 debt-heavy capital structure than its regulated utility, FPL. The capital structure  
20 of NextEra's unregulated activities is shown in Exhibit KWO-5. When FPL is  
21 excluded and only the unregulated entities are measured, the common equity ratio  
22 is only 21.1%.

1

2 A side-by-side comparison of the common equity ratios of NextEra, FPL, and

3 NextEra's unregulated entities can be seen graphically in Exhibit KWO-6.

4

5 **Q. GENERALLY, WHAT IS THE RELATIONSHIP BETWEEN THE**  
6 **RISKINESS OF AN ENTERPRISE AND THE PERCENTAGE OF**  
7 **EQUITY THAT IS APPROPRIATE IN THE CAPITAL STRUCTURE OF**  
8 **THAT ENTERPRISE?**

9 A. Prudent management practices attempt to ameliorate higher business risk with  
10 offsetting, lower financial risk. In other words, a company that is not regulated  
11 and operates in a highly competitive industry will, most likely, attempt to dampen  
12 its business risk with a capital structure that has a comparatively lower amount of  
13 debt, which translates into a higher equity ratio.

14 In the case of NextEra's unregulated subsidiaries, which operate in higher risk  
15 areas than FPL, the Company has reversed this simple logic and given the  
16 unregulated subsidiaries a higher, and not lower, debt ratio. The fact that the  
17 regulated monopoly, FPL, has a 59.6% common equity ratio and NextEra's  
18 unregulated entities have a 21.1% common equity ratio is simply illogical and  
19 defies basic financial wisdom.

1 **Q. WHY DO YOU SAY THAT THE UNREGULATED AFFILIATES ARE**  
2 **MORE RISKY THAN FPL?**

3 A. The unregulated affiliates of NextEra operate in non-regulated businesses such as  
4 nuclear generation, gas generation and wind energy without traditional monopoly  
5 markets. These entities face competition for market share and do not enjoy  
6 automatic cost recovery clauses or the ability to seek additional revenues through  
7 filed rate cases. The earnings of these unregulated affiliates are typically more  
8 volatile than those of regulated utilities.

9

10 **Q. IF THE UNREGULATED SUBSIDIARIES OF NEXTERA ENERGY, INC.**  
11 **ARE RISKIER THAN FPL, WHY ARE THEIR EQUITY/DEBT RATIOS**  
12 **THE INVERSE OF WHAT ONE WOULD EXPECT TO SEE, BASED ON**  
13 **CONSIDERATIONS OF RELATIVE RISK?**

14 A. This reversal of the risk/return relationship would be nonsensical in the normal  
15 business world, but it does make sense in utility regulation, where captive  
16 ratepayers are required to pay revenues to support a set return on equity. The  
17 parent holding company has an incentive to maximize the amount of its equity  
18 investment in the less risky utility, with the knowledge that the returns on that  
19 investment will be relatively safer and more certain. The parent can use dividends  
20 from its equity investment in the utility to fund its unregulated ventures.

1 Q. PLEASE EXPLAIN HOW NEXTERA'S UNREGULATED BUSINESSES  
2 AFFECT THE RETURN ON EQUITY THAT WILL BE GRANTED IN  
3 THIS PROCEEDING?

4 A. There are two primary risks, business risk and financial risk, which investors  
5 consider when making an investment in a publicly traded company. Business risk  
6 reflects the ongoing viability of a particular business or businesses. Financial risk  
7 represents the creditworthiness of the operating entity—i.e., the ability of the  
8 entity to service its debt obligations.

9  
10 In the case of business risk, it is important to note that FPL is a wholly-owned  
11 subsidiary of NextEra Energy. A common stock investor cannot single out FPL  
12 for purchase. Instead, the investor must purchase the stock of NextEra Energy.  
13 When an investor makes that purchase in NextEra, the investor accepts the low  
14 business risk of the utility, FPL, as well as the higher business risks associated  
15 with the Company's unregulated ventures. This conglomerated mix of the low-  
16 risk utility in FPL mixed with the high business risks of the other NextEra  
17 subsidiaries is all reflected in the price of the NextEra stock.

18  
19 In the case of NextEra, it is a well-known fact that the holding company has  
20 multiple unregulated entities, such as clean energy operations, which present  
21 greater business risk than does FPL. These entities operate in competitive  
22 environments without the safety net of captive customers, as is the case with FPL.

1 Hence, the business risk of NextEra is higher than the corresponding business risk  
2 of FPL on a stand-alone basis. This higher business risk is taken into account by  
3 investors when pricing the NextEra stock and, by default, must be taken into  
4 consideration in this case. The Company's rate of return witness, Dr. Avera,  
5 recognizes this link when he uses NextEra as the benchmark around which he  
6 developed his comparable group (Avera, p. 38, l. 7-10).

7  
8 A common stock investment in NextEra also entails financial risk, in that an  
9 investor must accept the fact that bondholders will receive payments that are due  
10 on the outstanding debt before equity investors receive a return. Again, an  
11 investor cannot buy the stock of FPL alone but, instead, must purchase the  
12 common stock of NextEra Energy. When examining the financial risk of NextEra  
13 versus that of FPL, it is critical to note that the equity ratio of the low-risk utility,  
14 FPL, is much higher than NextEra's unregulated operations and the consolidated  
15 company of NextEra Energy.

16  
17 **Q. DO FPL'S LONG TERM DEBT INVESTORS FPL HAVE SIMILAR**  
18 **CONCERNS REGARDING NEXTERA'S UNREGULATED ACTIVITIES?**

19 **A.** Yes. Investors in debt placements recognize the utility holding format and  
20 understand that, if an unregulated affiliate ever gets into financial trouble, it is  
21 very likely that the parent holding company can lean on its regulated utility for  
22 funding to bail out the unregulated subsidiary.

1

2 **Q. HOW DO YOU KNOW THAT DEBT INVESTORS EXPECT THE**  
3 **PARENT HOLDING COMPANY TO GUARANTEE PAYMENT OF**  
4 **UNREGULATED SUBSIDIARIES?**

5 A. The following two statements can be found in the NextEra Energy Capital  
6 Holdings, Inc. prospectus for \$350,000,000 Series C Debentures due June 1,  
7 2014:

8 NEE Capital's corporate parent, NEE, has agreed to absolutely,  
9 irrevocably and unconditionally guarantee the payment of  
10 principal, interest and premium, if any, on the Debentures. The  
11 Debentures and the guarantee are unsecured and unsubordinated  
12 and rank equally with other unsecured and unsubordinated  
13 indebtedness from time to time outstanding of NEE Capital and  
14 NEE, respectively. NEE Capital does not plan to list the  
15 Debentures on any securities exchange. (p. S-1)

16

17 NEE guarantees many of the obligations of its consolidated  
18 subsidiaries, other than FPL, through guarantee agreements with  
19 NEE Capital. NEE Capital, in turn, guarantees many of the  
20 obligations of its consolidated subsidiaries through additional  
21 guarantee agreements. These guarantees may require NEE or NEE  
22 Capital to provide substantial funds to their respective subsidiaries  
23 or their creditors or counterparties at a time when NEE or NEE  
24 Capital is in need of liquidity to meet its own financial  
25 obligations. (p. S-21)

26

27

28 **Q. WHAT IS THE SIGNIFICANCE OF THE PARENT HOLDING**  
29 **COMPANY GUARANTEEING THE DEBT OF UNREGULATED**  
30 **SUBSIDIARIES IN THIS CASE?**

31 A. The credit rating of a utility that is part of a utility holding company with  
32 unregulated affiliates is typically lower than it would be if the utility was a stand-  
33 alone entity with no ties to the more risky unregulated affiliates. Since the credit

1 ratings of utilities that are controlled by utility holding companies are lower than  
2 for utilities that are not part of utility holding companies with more risky  
3 unregulated sister companies, the price (interest rate) of debt investments is also  
4 higher for these utilities. Hence, in this case, the price that investors are paying to  
5 support the debt of FPL is higher than it would be if FPL was truly a stand-alone  
6 entity.

7  
8 **Q. DO YOU HAVE ANY EVIDENCE THAT SUPPORTS YOUR**  
9 **STATEMENT THAT THE HIGHER RISK OF UNREGULATED**  
10 **AFFILIATES CREATES HIGHER INTEREST COSTS FOR**  
11 **REGULATED UTILITIES THAT ARE PART OF A HOLDING**  
12 **COMPANY?**

13 A. Yes. Standard & Poors (S&P) is the pre-eminent bond rating agency in the world.  
14 Two years ago, S&P made the following statement in regard to the credit ratings  
15 of a utility subsidiary and its parent company:

16  
17 Utility subsidiaries' ratings are linked to the consolidated group's  
18 credit quality because of the financial linkage of the parent to the  
19 subsidiary and the likelihood that, in times of stress or bankruptcy,  
20 the parent will consider the utility subsidiary as a resource to be  
21 used. Accordingly, our base-case financial analysis primarily  
22 focuses on the performance, cash flow, and balance sheet of the  
23 consolidated group.

24  
25 Source: Methodology: Differentiating The Issuer Credit Ratings Of A  
26 Regulated Utility Subsidiary And Its Parent, **Standard &**  
27 **Poors**, March 11, 2010  
28  
29

1 **Q. DO YOU BELIEVE THAT FPL'S CREDIT RATING WILL BE**  
2 **NEGATIVELY IMPACTED IF THE COMMISSION DOES NOT GRANT**  
3 **THE COMPANY'S REQUESTED COMMON EQUITY RATIO OF 59.6%?**

4 A. No, I do not.

5

6 First, as we have seen above, S&P looks at the consolidated capital structure  
7 when considering credit ratings. Stockholders consider the consolidated capital  
8 structure as well when considering stock purchases. Hence, the consolidated  
9 capital structure is the primary driver for investments. In addition, while the  
10 market will pay attention to the overall revenue increase granted in this case, the  
11 actual capital structure used for setting the revenue requirement in this regulatory  
12 proceeding will have little bearing on FPL's credit rating. The market is going to  
13 examine the actual capital structures of NextEra and FPL as opposed to how this  
14 Commission handles the matter for purposes of setting the revenue requirement.  
15 If anything, the fact that NextEra's consolidated capital structure consists of a  
16 common equity ratio much lower than FPL's indicates that ratepayers of FPL are  
17 already paying more today in interest costs than they would be if FPL were a  
18 stand-alone company. Hence, it seems only fair that ratepayers should receive  
19 some of the benefit of this lower common equity ratio.

20

21 **Q. DOES FPL PROVIDE NEXTERA ENERGY A SET DIVIDEND**  
22 **PAYMENT EACH YEAR?**



1 A. FPL does pay NextEra a dividend each year, but the amount of that payment  
2 varies from year to year. Exhibit KWO-7 provides a graph of dividend payments  
3 from 1990 through 2011 from FPL to NextEra.

4  
5 As can be seen in this exhibit, the dividend payments from FPL to NextEra have  
6 varied from a net payment of \$410 million from NextEra to FPL to a \$1.1 billion  
7 payment from FPL to NextEra. I believe this chart shows the “linkage” as noted  
8 by S&P above, in that, NextEra can lean on FPL in times of stress to take  
9 whatever dividend payment it needs to maintain the sanctity of FPL’s sister  
10 subsidiaries.

11

12 **Q. DO YOU BELIEVE INVESTORS EXAMINE ONLY THE FPL CAPITAL**  
13 **STRUCTURE WHEN CONSIDERING A STOCK PURCHASE IN FPL?**

14 A. No. Investors cannot buy stock in FPL. Investors can only buy stock in NextEra  
15 Energy if they want any investment at all in FPL. Hence, equity investors  
16 examine the consolidated capital structure of NextEra when considering  
17 investments into NextEra and FPL.

18

19 **Q. GIVEN YOUR DETERMINATION THAT THE 59.6% EQUITY RATIO**  
20 **SOUGHT BY FPL IS TOO HIGH, WHAT ALTERNATIVES TO FPL’S**  
21 **PROPOSAL HAVE YOU CONSIDERED?**

1 A. The capital structure that most accurately reflects investor expectations is the  
2 NextEra consolidated capital structure. The unadjusted equity ratio of the  
3 consolidated capital structure, as stated above, is 39.4%.

4  
5 The advantage of using the consolidated capital structure in this proceeding is that  
6 this capital structure is the one viewed by the market when making investment  
7 decisions on common equity and long-term debt. Hence, the link between the  
8 stock price of NextEra and its capital structure is pure and absolute. The  
9 disadvantage is that the revenue requirement impact in this case would, most  
10 likely, be unexpected to the investment community and to the Company. While I  
11 believe the consolidated capital structure is the most accurate capital structure to  
12 employ in this case, I do recognize the impact that a \$450 million revenue  
13 reduction would have in this case if the consolidated capital structure were to be  
14 employed by the Commission.

15  
16 I also considered using the average equity ratio of Dr. Avera's proxy group of  
17 companies, which is 47.3%, and/or the corresponding composite equity ratio of  
18 Dr. Woolridge's comparable group, which is 45.4%. The advantage of using the  
19 average capital structure of the proxy group of either witness is that capital  
20 structure would be reflective of the manner in which the utility industry broadly  
21 balances the issue of how much leverage to employ.

1 Finally, I considered the appropriateness of a capital structure that consists of 50%  
2 common equity and 50% debt to be used in conjunction with Witness Ousdahl's  
3 capital adjustments. The advantages of this proposed capital structure are that: (1)  
4 the equity ratio is still higher than the majority of other electric utilities within the  
5 industry, (2) the concept of a 50/50 capital structure is easy for the investment  
6 community to understand, and (3) this capital structure is approximately halfway  
7 between the Company's requested capital structure of 59.6% equity and the  
8 capital structure that I believe is the most theoretically accurate structure to use in  
9 this proceeding, which is the consolidated capital structure, to use in this  
10 proceeding. The revenue requirement impact of replacing FPL's requested,  
11 59.6% equity capital structure with a 50/50 capital structure is approximately  
12 \$214 million.

13  
14 **Q. WHICH EQUITY RATIO DO YOU RECOMMEND FOR RATEMAKING**  
15 **PURPOSES IN THIS CASE?**

16 A. I recommend that the Commission find the middle ground between the  
17 Company's requested capital structure, which I believe is unreasonable and an  
18 unnecessary burden on ratepayers, and the consolidated capital structure, which I  
19 believe is the capital structure considered by investors of NextEra Energy and  
20 FPL. To be specific, I recommend that the Commission employ a capital  
21 structure of 50% common equity and 50% debt, combined with the capital

1 adjustments as outlined by FPL witness Ousdahl. My specific recommended  
2 capital structure can be seen in Exhibit KWO-8.

3  
4 I will also accept the cost rates of customer deposits, short-term debt, deferred  
5 income taxes, and investment tax credits as proposed by the Company. I have  
6 included the return on equity recommended by OPC witness Woolridge.

7  
8 **Q. WHAT IS THE OVERALL RATE OF RETURN ON INVESTMENT THAT**  
9 **THE COMMISSION SHOULD APPLY USING YOUR RECOMMENDED**  
10 **CAPITAL STRUCTURE AND THE RECOMMENDED RETURN ON**  
11 **EQUITY FROM DR. WOOLRIDGE?**

12 A. Utilizing the 50% equity ratio that I recommend and the 9% fair and reasonable  
13 return on equity that Dr. Woolridge associates with that capital structure, the  
14 overall rate of return on investment recommended by OPC in this case is 5.56%.  
15 The recommended OPC capital structure and return on equity can be seen in  
16 Exhibit KWO-8. However, in the event the Commission allows the 59.7% equity  
17 ratio sought by FPL, for the reasons developed by Dr. Woolridge, the return on  
18 equity associated with the lower financial risk would be 8.5%, and the resulting  
19 overall return on investment would be 5.62%. This capital structure and  
20 associated 8.5% return on equity can be seen in Exhibit KWO-9.

21 **Q. CAN YOU PROVIDE THE COMMISSION WITH A TABLE SHOWING**  
22 **THE IMPACT TO THE REVENUE REQUIREMENT IN THIS CASE**

1           **THAT RESULTS FROM A CHANGE IN THE CAPITAL STRUCTURE**  
2           **AND ASSOCIATED RETURNS ON EQUITY AS RECOMMENDED BY**  
3           **OPC WITNESS WOOLRIDGE?**

4    A.    Yes. In Exhibit KWO-10, I have provided a table that shows the approximate  
5           impact on the revenue requirement under the following four scenarios:

- 6           • Case I: Company requested capital structure and return on equity;
- 7           • Case II: OPC's recommended capital structure and 9.0% return on equity;
- 8           • Case III: FPL Capital Structure with a 8.5% ROE; and
- 9           • Case IV: 55% Common Equity Ratio and 8.75% ROE

10  
11           **III.    SUMMARY**

12    **Q.    PLEASE SUMMARIZE YOUR TESTIMONY IN THIS PROCEEDING.**

13    A.    The capital structure requested by FPL in this case is unreasonable and is not  
14           reflective of investor expectations. As compared to the comparable group of its  
15           own witness, Dr. Avera, FPL's capital structure has an excessive amount of  
16           common equity. Since common equity is approximately twice as expensive as  
17           long-term debt, a capital structure top-heavy with equity is unnecessarily and  
18           unreasonably expensive to captive ratepayers.

19           The capital structure requested in this case is also not reflective of the capital  
20           costs as seen by market investors. The Company's own rate of return witness  
21           used comparable companies in his rate of return analysis that have much more  
22           conservative (i.e., less equity) capital structures than FPL. The rate of return on

1 common equity granted in this case will be based on market expectations of a  
2 much lower common equity ratio than granted in this case. In addition, the cost  
3 of long-term debt paid by ratepayers today reflect the unregulated activities of  
4 FPL's sister unregulated companies.

5  
6 My recommendation is that the Commission employ a capital structure that  
7 consists of 50% common equity and 50% debt combined with the capital  
8 adjustments as outlined by Company Witness Ousdahl in this proceeding.

9  
10 I believe my recommended capital structure of 50% equity and 50% debt is  
11 appropriate for ratemaking purposes for the following reasons:

- 12 1. a 50/50 capital structure is far higher than the 40% equity ratio that NextEra  
13 Energy, Inc. employs on a consolidated basis;
- 14 2. a capital structure with a 50% equity ratio contains a higher percentage of  
15 equity than either the composite common equity ratio of the companies in  
16 Company Witness Avera's comparable group; OPC Witness Woolridge's  
17 comparable group; and the average electric utility as followed by Value Line;
- 18 3. my recommended capital structure with a 50% common equity ratio is  
19 approximately halfway between the higher cost capital structure as requested  
20 by FPL versus the consolidated capital structure; and
- 21 4. a 50/50 capital structure is fair to stockholders of NextEra as well as FPL's  
22 captive consumers.

1 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

2 **A. Yes, it does.**

1 **BY MR. McGLOTHLIN:**

2 **Q** Have you prepared a summary of your testimony?

3 **A** Yes, I have.

4 **Q** Please summarize your testimony for the  
5 Commissioners.

6 **A** The choice of a company's capital structure,  
7 by which I mean the relative amounts of debt and equity,  
8 affects the risks perceived by equity investors. The  
9 appropriate rate of return on equity is a function of  
10 that risk. The return required by shareholders is  
11 higher than the cost of debt.

12 Accordingly, as the amount of equity in the  
13 capital structure increases, the total capital costs  
14 borne by customers through the rates they pay increase.

15 A company's total risk can be broken down into  
16 business risk, which refers to the ongoing viability of  
17 the enterprise, and financial risk, which refers to the  
18 ability of the company to service its debt obligations.

19 A monopoly utility which has a relatively low  
20 business risk has a responsibility to lever its capital  
21 dollars and lower the capital cost that its customers  
22 must pay by employing an appropriate amount of debt.

23 FPL's proposed 59.62% equity ratio is  
24 unreasonably high. It is far higher than the 47%  
25 average equity ratio of Dr. Avera's proxy group or the



1 45% average equity ratio of Dr. Woolridge's proxy group.

2 FPL's 59.62% is also far higher than the  
3 overall equity ratio of NextEra Energy's consolidated  
4 capital structure, which is only 39%. Interestingly,  
5 NextEra's unregulated enterprises have only a 21% equity  
6 ratio. These companies must compete for market share  
7 and so have higher business risk than FPL, the monopoly  
8 utility.

9 The conventional financial wisdom would  
10 dictate that NextEra establish a high equity ratio for  
11 the unregulated affiliate so as to offset their higher  
12 business risks, as compared to the lower risk FPL. The  
13 21% equity ratio would be illogical if that were  
14 NextEra's objective.

15 NextEra's strategy does make sense from the  
16 standpoint that the parent company has an incentive to  
17 maximize the amount of its equity investment in the  
18 utility, where returns are safer, more certain, get  
19 grossed up for taxes, and use those returns to finance  
20 the riskier enterprises. A parent can also draw on the  
21 utility if and when the riskier affiliates require  
22 financial assistance.

23 An investor in NextEra Energy buys the  
24 conglomerated business and financial risks of all the  
25 subsidiaries, including FPL. Investors and rating

1 agencies assess the overall capital structure of NextEra  
2 Energy. Therefore, NextEra's consolidated capital  
3 structure, which obtains 39% equity, is the primary  
4 driver for investments.

5           These considerations call for the Commission  
6 to impute a more reasonable equity ratio for ratemaking  
7 purposes. I first considered recommending NextEra's  
8 consolidated 39% equity ratio. This has logical appeal  
9 because it is the capital structure that investors  
10 actually assess when considering an investment in  
11 NextEra, FPL's parent, and the only vehicle an investor  
12 has through which to invest in FPL. However, the  
13 revenue impact of substituting 39% for 59.62% in this  
14 case would be too severe.

15           Another alternative would be to substitute the  
16 47% average equity ratio of Dr. Avera's group. This  
17 would align FPL's capital structure with a broad  
18 industry average.

19           However, I recommend a 50% equity ratio. It  
20 is midway between NextEra's consolidated average equity  
21 ratio of 39% and FPL's proposed 59.62%, and it is above  
22 the industry averages employed by FPL's expert,  
23 Dr. Avera. In my opinion, 50% equity is fair to FPL and  
24 to its customers.

25           The impact of substituting 50% for FPL's

1 59.62% equity ratio for ratemaking purposes would be to  
2 reduce FPL's revenue requirement by \$214 million  
3 annually.

4 Dr. Woolridge presents his ROE recommendation  
5 in the alternative: 9% if the Commission adopts my 50%  
6 equity ratio recommendation, and 8.5% if the Commission  
7 approves FPL's 59.62% equity ratio.

8 My Exhibit KWO-10 depicts the impact on FPL's  
9 request in this case for these scenarios, as well as  
10 another that assumes 55% equity ratio and 8.75% ROE. As  
11 you see, in combination, the impact of equity ratio and  
12 ROE very nearly displaced the entire amount of the  
13 increase that FPL wishes to place into effect in  
14 January 2013.

15 **MR. McGLOTHLIN:** Does that complete your  
16 summary?

17 **THE WITNESS:** Yes, it does.

18 **MR. McGLOTHLIN:** The witness is available for  
19 cross-examination.

20 **CHAIRMAN BRISÉ:** Thank you.

21 Mr. Lavia.

22 **MR. LAVIA:** Thank you, Mr. Chairman. The  
23 Florida Retail Federation has no questions.

24 **CHAIRMAN BRISÉ:** Mr. Saporito?

25 **MR. SAPORITO:** No questions, Mr. Chairman.

1                   **CHAIRMAN BRISÉ:** Mr. Wiseman?

2                   **MR. WISEMAN:** No questions, Mr. Chairman.

3                   **CHAIRMAN BRISÉ:** Mr. Moyle?

4                   **MR. MOYLE:** I have just one, one or two.

5                                   **CROSS EXAMINATION**

6                   **BY MR. MOYLE:**

7                   **Q**     In your opening statement you made a comment  
8                   about, about equity being more expensive than debt, and  
9                   that's generally accepted; right?

10                  **A**     Yes, sir.

11                  **Q**     Okay. And is the primary reason that is the  
12                  case is because in the event that a company ran into  
13                  trouble, that the repayment, if you had to liquidate  
14                  assets or, or otherwise do things, that the debt holders  
15                  are able to get paid first before the equity holders; is  
16                  that essentially the reason why?

17                  **A**     That's, that's essentially the reason. But  
18                  there's also the gross-up on taxes. In order to pay a  
19                  dividend, for example, to the shareholder, then the  
20                  company has to pay taxes on that. So you have to gross  
21                  the taxes up.

22                                So you get a higher risk with a return on  
23                                equity, but you also have to gross that up for taxes.  
24                                So on a pretax cost of equity, if you assume a 9% ROE,  
25                                you're probably talking in the neighborhood pretax of

1 about 12.5, 13%, whereas the cost of debt may be 5%. So  
2 it's a combination of a higher risk and also the fact  
3 that you have to gross it up for taxes.

4 Q Okay. And do you have to gross up debt for  
5 taxes as well?

6 A No. That's going to be flowing right through  
7 the bottom line as an operating expense.

8 MR. MOYLE: Thank you. That's all I have.

9 CHAIRMAN BRISÉ: Captain Miller?

10 CAPTAIN MILLER: Thank you, Mr. Chairman. I  
11 have no questions.

12 CHAIRMAN BRISÉ: All right. FPL?

13 CROSS EXAMINATION

14 BY MR. GUYTON:

15 Q Mr. O'Donnell, my name is Charlie Guyton. I  
16 have a few questions for you this morning.

17 A Yes, sir.

18 Q Let's begin with a review of some of your  
19 testimony. Would you turn to page 5, line 19, please.

20 A Yes, sir.

21 Q And would you read that line for the  
22 Commission, please, that sentence, if the return is set.

23 A Yes, sir. If the return is set too low,  
24 adequate service is jeopardized because the utility will  
25 not be able to raise new capital on reasonable terms.

1           Q     Would you explain to the Commission how a  
2 utility not being able to raise capital would affect its  
3 customers.

4           A     If you're not able to raise capital, if you're  
5 not able to raise capital, then in severe emergencies or  
6 in building modes, you're not going to be able to get  
7 capital at reasonable terms. It could hurt the, the  
8 growth of the utility, the construction activities of  
9 the utility. I haven't seen that, to be honest with  
10 you, in my 30 years in business, but it is possible.  
11 I've never seen it though.

12          Q     In your 30 years of experience you've never  
13 seen a utility have an inability to raise capital at  
14 reasonable terms?

15          A     Yes. I have not seen an ability -- a utility  
16 have trouble like that. I'm aware of some rate orders,  
17 some regulatory orders that, for some, I think it was  
18 Entergy back about four or five years ago. But for the  
19 vast majority of times utilities are seen as risk averse  
20 entities, and markets are generally very favorable to  
21 issuing capital to utilities, because they are protected  
22 monopolies for the most part.

23          Q     Is it your testimony that utilities did not  
24 have any difficulty in raising capital in the liquidity  
25 crisis of 2008, 2009?

1           A     I'm not saying they didn't have difficulty,  
2 but I think they would have paid perhaps a little bit  
3 more than they would have otherwise. But they still had  
4 access to the capital markets.

5           Q     You're not aware of any attempted issues by  
6 any utilities that simply couldn't go forward?

7           A     Not that I'm aware of, not with the utilities  
8 that I work with. No, sir.

9           Q     Okay. All right. Would you turn to page 6,  
10 line 8.

11          A     Yes, sir.

12          Q     Now, this is a quote from the United States  
13 Supreme Court, *Hope Natural Gas* case; correct?

14          A     Yes, sir.

15          Q     Would you read that for the Commission?

16          A     Quote, the return to the equity owner should  
17 be commensurate with returns on investments and other  
18 enterprises having corresponding risks. That return,  
19 moreover, should be sufficient to assure confidence in  
20 the financial integrity of the enterprise so as to  
21 maintain credit and attract capital. End quote.

22          Q     Now, when the Court speaks of the return to  
23 the equity investor should be commensurate with returns  
24 of other investment, it speaks of investments in, quote,  
25 other enterprises having corresponding risk; correct?

1           **A**     Yes. I see that.

2           **Q**     The Court doesn't say anything about returns  
3 commensurate with returns on other utilities, does it?

4           **A**     No. But I would counter that I think that's  
5 kind of intuitive in the fact that utilities are a  
6 single industry and you kind of look at one utility  
7 versus another when you're making an investment  
8 decision.

9           **Q**     Uh-huh. And utilities share risk ratings for  
10 their senior securities with other non-utilities, do  
11 they not?

12          **A**     I'm sorry. Can you repeat that?

13          **Q**     Sure. The risk ratings that the rating  
14 agencies give to various entities are not specific to  
15 utilities, are they?

16          **A**     Well, no, I think sometimes --

17               **MR. MOYLE:** I'm going to object to the form.  
18 Excuse me. Could I object to the form of the question?  
19 I think, you know, we've had a lot of testimony about  
20 risk ratings. I'm not sure whether he's talking about  
21 the overall risk rating, a risk rating relative to a  
22 bond or some other aspect. If we could get that  
23 clarified.

24               **MR. GUYTON:** I'll make it easy. I'll just  
25 withdraw the question.



1                   **CHAIRMAN BRISÉ:** Okay.

2                   **BY MR. GUYTON:**

3                   **Q**     Mr. O'Donnell, you've never been responsible  
4                   for managing the financial integrity of a company like  
5                   Florida Power & Light Company, have you?

6                   **A**     A size company that big, no, sir.

7                   **Q**     When was the last time you were responsible  
8                   for arranging a line of credit for an electric utility  
9                   company like FPL?

10                  **A**     For that size utility, never. But I've worked  
11                  with a lot of municipal utilities where we've had to  
12                  issue debt in order to build distribution and  
13                  substations.

14                  **Q**     Does FPL have a line of credit available to  
15                  it?

16                  **A**     I believe so.

17                  **Q**     Who provides that line of credit and what are  
18                  its limits?

19                  **A**     I'm not certain who provides it and what those  
20                  terms are.

21                  **Q**     When was the last time you were responsible  
22                  for the issuance of common stock by an electric utility  
23                  holding company like NextEra Energy?

24                  **A**     I have not.

25                  **Q**     When a company like NextEra Energy publicly

1 issues stocks, does it incur flotation costs?

2 **MR. McGLOTHLIN:** Beyond the scope of his  
3 testimony. Objection.

4 **MR. GUYTON:** I'm just simply trying to test  
5 this witness's financial experience.

6 **MR. McGLOTHLIN:** I believe the time for voir  
7 dire has long gone, come and gone.

8 **MR. GUYTON:** It simply goes to the weight.

9 **CHAIRMAN BRISÉ:** Mary Anne?

10 **MR. McGLOTHLIN:** I would just add, Mr.  
11 Chairman, this witness is offered to discuss capital  
12 structure, and this, this question is unrelated to his  
13 subject matter.

14 **MS. HELTON:** Mr. Chairman, the prehearing  
15 order states that if you're going to conduct voir dire,  
16 which is a method of determining whether someone is an  
17 expert in a particular subject matter or not, that that  
18 should be, you should notify the Commission by the time  
19 of the prehearing conference, or I think actually in  
20 your prehearing statement.

21 That being said, the Commission has  
22 historically allowed questions that go to the witness's  
23 credibility.

24 That being said, it seems to me that  
25 Mr. McGlothlin's point is that Mr. Guyton's questions

1 are outside the scope of what this witness is testifying  
2 to. So if that is the case, then it seems to me that we  
3 are beyond the scope of the testimony.

4 **CHAIRMAN BRISÉ:** Okay.

5 Mr. Guyton, if you could move on to the next  
6 question.

7 **MR. GUYTON:** I will do that.

8 **BY MR. GUYTON:**

9 **Q** Who makes the decision at FPL as to how much  
10 equity it should maintain in its capital structure?

11 **A** That would be presumably a discussion between  
12 FPL and NextEra. NextEra owns FPL, however, so the  
13 ultimate decision I think is going to lie with NextEra.

14 **Q** So you say presumably. Do you know who makes  
15 the decision as to how much equity FPL should maintain  
16 in its capital structure?

17 **A** I don't know the name of the person, but I'm  
18 going to say it has to be someone within NextEra.

19 **Q** Outside of commenting on someone else's  
20 decision in a rate case, have you ever participated in a  
21 discussion with the utility's management as to how much  
22 equity it should maintain in its capital structure?

23 **A** Well --

24 **Q** I'm sorry.

25 **A** I'm trying to answer yes or no on that one.

1 Q Thank you.

2 A I'm honestly trying to go back into my memory  
3 here, because as you noticed, I did work for the North  
4 Carolina Utilities Commission for several years, and I  
5 believe at some point in that time when I was a  
6 regulator we did have discussions like that with some of  
7 the Carolina utilities, but I can't remember the  
8 specific details, and it was outside of a rate case. It  
9 was general discussions with both gas and electric  
10 utilities.

11 Q Am I correct in assuming that you have no  
12 personal knowledge of how the capital structure at FPL  
13 was developed?

14 A No, I don't think that's appropriate. I mean,  
15 I did go back and look at what was done in the past rate  
16 case, and I have seen the capital structures since that  
17 particular time.

18 Q I understand that. But you testified earlier  
19 that that decision was made at NextEra Energy, not at  
20 the Commission. Have you had a conversation with  
21 anybody at NextEra Energy or FPL as to how they  
22 developed their capital structure for FPL?

23 A No, sir.

24 Q Now, this Commission has previously used FPL's  
25 actual capital structure for ratemaking purposes, has it

1 not?

2 **A** Yes.

3 **Q** And in the last case, the one that happened  
4 right before FPL's ratings were downgraded by S&P's and  
5 Moody's, the Commission used FPL's projected capital  
6 structure consistent with its actual capital structure,  
7 didn't it?

8 **A** That, that is correct. They used a 59.62%, I  
9 think, that the company offered up in the last rate  
10 case.

11 **Q** And in doing so, the Commission rejected  
12 recommendations by several witnesses to use a different  
13 capital structure that assumed more debt and less  
14 equity; correct?

15 **A** I don't know the answer to that. I wasn't  
16 part of that rate case.

17 **Q** Now, you said you went back and reviewed the  
18 order. The Commission noted in its order in that case  
19 that, quote, FPL's position of financial strength has  
20 served it and its customers by holding down the  
21 company's cost of capital, end quote, did it not?

22 **A** If you're representing that to me, I'll accept  
23 it.

24 **Q** Let's look at some of the values that you put  
25 into your debt imputation. Would you turn to your

1 exhibit KWO-1, please.

2 A Yes, sir.

3 Q Now, that shows FPL's requested capital  
4 structure; correct?

5 A Yes.

6 Q And that's the capital structure that FPL  
7 projects for the test year; correct?

8 A That's my understanding, yes, sir.

9 Q And would you agree with me that that's FPL's  
10 best estimate of what its actual capital structure will  
11 look like in 2013?

12 A If you represent that to me, I'll accept it.

13 Q All right. Now, that shows a capital  
14 structure of total debt of 32.5%; correct? I think I  
15 calculated that wrong.

16 A I think so. 29.47 and 1.71.

17 Q So 31%.

18 A Roughly.

19 Q Okay.

20 A Or 31.28, I think.

21 Q And the capital structure has an equity ratio  
22 of 46%?

23 A Correct. For regulatory purposes.

24 Q Now, would you turn to your Exhibit KWO-8,  
25 please. Now, this is your capital structure that you

1 propose in this case; correct?

2 A Yes.

3 Q And in the first column, in column A, you have  
4 FPL's proposed capital structure, and then through the  
5 remainder of the columns you showed your adjustments to  
6 it; correct?

7 A Correct.

8 Q So you substitute \$1,562,005,000 of equity  
9 that FPL anticipates will be invested in FPL in 2013,  
10 with \$1,562,005,000 of debt; correct?

11 A I wouldn't exactly call it substituted. I  
12 make some adjustments, but I see your point.

13 Q So am I correct in saying that this is  
14 essentially a \$3 billion swing? You remove \$1.5 billion  
15 of equity and you impute \$1.5 billion of debt?

16 A Yes, sir. I'll agree that that's about the  
17 magnitude of it, but I think that what we're talking  
18 about here is for regulatory purposes.

19 Q So for regulatory purposes you asked the  
20 Commission to pretend that \$1.56 billion of capital that  
21 would earn a return of 9 to 11.5% be replaced with  
22 1.56 billion of debt that would earn either 5.26 or  
23 2.11%?

24 **MR. McGLOTHLIN:** Objection. Misstates,  
25 mischaracterizes testimony. Mr. O'Donnell has never

1 used the word "pretend."

2 **MR. GUYTON:** I'll restate.

3 **CHAIRMAN BRISÉ:** Please do.

4 **BY MR. GUYTON:**

5 **Q** You propose for regulatory purposes that the  
6 Commission substitute \$1.56 billion of capital that  
7 would earn a return of 9 to 11.5% with \$1.56 billion of  
8 debt that would earn either 5.26 or 2.11%; correct?

9 **A** That is correct. And I'd like a chance to  
10 explain that. The reason that I made that adjustment is  
11 because the requested equity ratio in this case is very,  
12 very high. As I stated in my deposition, and I think I  
13 may have stated in my testimony, I've been doing this  
14 work for 30 years, and outside of the equity ratio that  
15 was granted in the last rate case, I haven't seen  
16 anything of this magnitude in any of the other rate  
17 cases I've been involved in.

18 And also, as was seen from the Standard &  
19 Poor's exhibit, the rating agencies look at consolidated  
20 companies when they are rating the credit ratings for  
21 the various utilities. And when we look at that, it  
22 seems to me like ratepayers are being asked to pay for a  
23 59.6% equity ratio, but they're not getting any of the  
24 benefits associated with the potentially lower cost  
25 interest. And, therefore, in order to be fair to



1 ratepayers as well as to be fair to FPL, yes, sir, I did  
2 make these adjustments because I felt like it was a fair  
3 and equitable thing to do.

4 Q Would you turn to page 21 of your testimony,  
5 lines 9 through 14, please.

6 I'm sorry. Before we go there, let me go back  
7 to that last answer.

8 It's your testimony that it's fair to equity  
9 investors that anticipated a return on their investment  
10 of 9 to 11.5% to instead be given the opportunity to  
11 earn a return of 5.2 to as low as 2.11%? Yes or no?

12 A Yes. Because I think it is also grossly  
13 unfair to be asking ratepayers in the State of Florida  
14 to be paying what I believe are higher interest costs  
15 because of the consolidated equity ratio being only 39%,  
16 but yet you're here before this Commission asking  
17 ratepayers to pay 59%.

18 So, yes, if you want to deem it like that,  
19 then I think it's only fair to both parties that we meet  
20 some middle ground. As I said in my testimony, we could  
21 have gone with the 39% equity ratio, because that is the  
22 most theoretically accurate --

23 MR. GUYTON: I'm sorry. We, we have a runner  
24 here, Mr. Chair.

25 CHAIRMAN BRISÉ: Yeah. I think that that's

1 beyond the question that was posed.

2 **THE WITNESS:** Okay.

3 **BY MR. GUYTON:**

4 **Q** If you'd turn back now to page 21, lines 9  
5 through 14. Do you have that?

6 **A** Yes, sir.

7 **Q** And is it your testimony that rating agencies  
8 and investors will not notice or care about a  
9 \$1.56 billion substitution in FPL's regulatory capital  
10 structure because they pay attention to actual capital  
11 structures and not regulatory capital structures?

12 **A** No, sir. As I pointed out in my deposition, I  
13 think that credit -- or analysts and investors will  
14 review the Commission order, and I think that they will  
15 see that adjustment. However, as was seen throughout  
16 the credit rating reports that have been part of this  
17 record heretofore, credit agencies are very well aware  
18 of the high equity ratio. And I do not believe that  
19 reducing that down to what is more common in the  
20 industry will shock them by any means.

21 **Q** Well, let's test your assertion a little bit.

22 **MR. GUYTON:** Mr. Chairman, we're going to hand  
23 out three exhibits at the same time for, for purposes of  
24 being efficient.

25 **CHAIRMAN BRISÉ:** Sure. We're looking at 572,

1 573, and 574.

2 **MR. GUYTON:** And just for housekeeping, I'd  
3 ask that the first one, which should be on the top,  
4 which is a Value Line assessment for FPL Group dated  
5 February 26th, 2010, be identified as 572.

6 **CHAIRMAN BRISÉ:** Okay.

7 **MR. GUYTON:** And that the Standard & Poor's  
8 Global Credit Portal dated March 11, 2010, be identified  
9 as 573.

10 **CHAIRMAN BRISÉ:** Okay.

11 **MR. GUYTON:** And that the third exhibit, the  
12 Moody's Investor Service rating, rating action dated  
13 April 9, 2010, consisting of four pages, be identified  
14 as Exhibit 574.

15 **CHAIRMAN BRISÉ:** All right. Any objections?

16 (Exhibits 572, 573, and 574 marked for  
17 identification.)

18 (Transcript continues in sequence in Volume  
19 19.)

1 STATE OF FLORIDA )  
2 : CERTIFICATE OF REPORTER  
3 COUNTY OF LEON )

4 I, LINDA BOLES, RPR, CRR, Official Commission  
5 Reporter, do hereby certify that the foregoing  
6 proceeding was heard at the time and place herein  
7 stated.

8 IT IS FURTHER CERTIFIED that I  
9 stenographically reported the said proceedings; that the  
10 same has been transcribed under my direct supervision;  
11 and that this transcript constitutes a true  
12 transcription of my notes of said proceedings.

13 I FURTHER CERTIFY that I am not a relative,  
14 employee, attorney or counsel of any of the parties, nor  
15 am I a relative or employee of any of the parties'  
16 attorneys or counsel connected with the action, nor am I  
17 financially interested in the action.

18 DATED THIS 29<sup>th</sup> day of August,  
19 2012.

20 Linda Boles  
21 LINDA BOLES, RPR, CRR  
22 FPSC Official Commission Reporter  
23 (850) 413-6734  
24  
25