

# DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR FORCE LEGAL OPERATIONS AGENCY

June 29, 2012

USAF Utility Law Field Support Center 139 Barnes Drive Tyndall AFB FL 32403

Ms. Ann Cole, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: Docket No. 120015-EI

Dear Ms Cole,

Enclosed please find an original and 15 copies of the following testimony, for filing in the subject docket on behalf of Federal Executive Agencies:

Michael P. Gorman - DN 04391-12 Robert R. Stephens - DN 04392-12

Please let me know if you have any questions or concerns regarding these documents.

55 G L - 5 - 1 0 23

Sincerely,

SAMUEL T. MILLER, Capt, USAF Staff Attorney

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FPSC-COMMISSION CLERK

## CERTIFICATE OF SERVICE Docket No. 120015-EI

I **HEREBY CERTIFY** that a true copy of FEA's testimony was furnished by electronic mail the 29th day of June, 2012, to the following:

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# **BEFORE THE** FLORIDA PUBLIC SERVICE COMMISSION In Re: Petition for Increase in Rates by Florida Power & Light Docket No. 120015-EI ) Company Direct Testimony and Exhibits of Michael P. Gorman On behalf of **Federal Executive Agencies** ECO-1 ENG-IDM ---COM July 2, 2012 APA ECR GCL RAD SRC ADM OPC BRUBAKER & ASSOCIATES, INC. CLK (+Pep AFD Project 9608 one setting the setting 04391 JUL-2 ≥

FPSC-COMMISSION CLERK

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2	FLORIDA PUBLIC SERVICE COMMISSION
3	<b>_</b>
4	In Re: Petition for Increase in )
5	Company
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04391 JUL-22

FPSC-COMMISSION CLERK

1		BEFORE THE										
2		FLORIDA PUBLIC SERVICE COMMISSION										
3												
4		/ In Re: Petition for Increase in ) Rates by Florida Power & Light ) Docket No. 120015-El										
5		Company )										
6		/										
7		<b>Direct Testimony of Michael P. Gorman</b>										
8	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.										
9	А	Michael P. Gorman. My business address is 16690 Swingley Ridge Road,										
10		Suite 140, Chesterfield, MO 63017.										
11												
12	Q	WHAT IS YOUR OCCUPATION?										
13	А	I am a consultant in the field of public utility regulation and a Managing Principal										
14		of Brubaker & Associates, Inc., energy, economic and regulatory consultants.										
15												
16	Q	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND										
17		EXPERIENCE.										
18	А	This information is included in Appendix A to my testimony.										
19												
20	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?										
21	А	I am appearing in this proceeding on behalf of the Federal Executive Agencies										
22		("FEA").										
23												
24												
25												

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### 1 Q WHAT IS THE SUBJECT OF YOUR DIRECT TESTIMONY?

- A I will recommend a fair return on common equity, and overall rate of return for
  Florida Power and Light Company ("FPL" or "Company").
- 4
- 5

## SUMMARY

#### 6 Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

7 A I recommend the Florida Public Service Commission (the "Commission") award
8 FPL a return on common equity of 9.25%, which is the midpoint of my
9 recommended range of 9.10% to 9.40%, and an overall rate of return of 5.74%.
10 Exhibit MPG-1. I recommend FPL's proposal for a 0.25% return on equity
11 performance adder be rejected.

12 I also recommend adjustments to the Company's proposed capital 13 structure. My proposed adjustments to the capital structure include modifications to the Company's "Pro Rata" adjustments made to reconcile the amount of 14 15 capital with the amount of jurisdictional base-rate rate base. I propose an 16 alternative allocation of Pro Rata adjustments. I propose to allocate deferred taxes based on FPL's total plant investment. In comparison, FPL allocates 17 18 deferred taxes based on total capital. I believe my proposed allocation more 19 accurately allocates deferred tax because predominantly it is tied to plant 20 investment. Hence, my revised allocation of Pro Rata adjustments ensures that 21 customers receive the full benefit of deferred income tax balances as a source of 22 cost-free capital available to support FPL's plant investments.

I also propose adjustments to FPL's estimated embedded debt cost. My
adjustments reflect an update to the market interest rates used to calculate the
embedded debt cost related to bond issues planned for 2012 and 2013. The

effect of this update is to decrease FPL's embedded debt cost from 5.24% down
 to 2.08%.

My recommended return on equity and proposed capital structure will provide FPL with an opportunity to realize cash flow financial coverages and balance sheet strength that conservatively support FPL's current bond rating. Consequently, my recommended return on equity represents fair compensation for FPL's investment risk, and it will preserve the Company's financial integrity and credit standing.

9 I will also respond to FPL witness Dr. William E. Avera's proposed return 10 on equity of 11.25% and explain why the Company's proposal to include an 11 additional 25 basis points efficiency adder should be rejected. For the reasons 12 discussed below, Dr. Avera's recommended return on equity is excessive, and 13 the return on equity performance adder should be rejected.

14

15QPLEASE SUMMARIZE YOUR RECOMMENDATION CONCERNING FPL'S16PROPOSED STEP INCREASE FOR THE CAPE CANAVERAL17MODERNIZATION PROJECT.

18 Α The Company's proposal to remove the Cape Canaveral costs from the 2013 test 19 year to reflect the uncertainty of when it will be placed in-service is reasonable. 20 However, it is not clear to me that the Company has fully removed all costs 21 associated with the Cape Canaveral project. Specifically, the Company does not 22 detail the items included in construction work in progress ("CWIP") that it 23 proposes to include in its test year base-rate rate base. It appears as though 24 some of those CWIP items may include the Cape Canaveral Modernization 25 capital expenditures, prior to the projected in-service date in June 2013.

1 Therefore, I recommend the Commission require FPL to fully disclose the 2 items that are included in CWIP proposed to be included in the test year rate 3 base. To the extent any of the CWIP items include any component of the Cape 4 Canaveral project costs, then the base-rate rate base should be adjusted to 5 remove all Cape Canaveral costs. By including Cape Canaveral components in 6 test year CWIP included in rate base, and also including a full year revenue 7 requirement on the in-service projected investment cost of Cape Canaveral, FPL 8 will be permitted to recover more than 100% of its investment in the Cape 9 Canaveral project. That would not be reasonable and should be corrected.

10

#### Rate of Return Overview 11

#### 12 Q DOES YOUR RECOMMENDED RETURN ON EQUITY REFLECT FPL'S 13 **EXISTING INVESTMENT RISK?**

14 Α Yes. My recommended return on equity reflects fair compensation for FPL's 15 existing investment risk including its regulatory mechanisms used to recover its 16 cost of service. These factors are reflected in FPL's existing bond rating and 17 other risk factors used to select a comparable risk proxy group. If the 18 Commission modified FPL's existing regulatory mechanisms to reduce FPL's investment risk, then any related risk reduction should be considered in 19 20 determining a fair risk-adjusted return on equity for FPL.

21

Q

#### 22 HOW DID YOU ESTIMATE FPL'S CURRENT MARKET COST OF EQUITY?

23 Α I performed analyses using three Discounted Cash Flow ("DCF") models, a Risk 24 Premium ("RP") study, and a Capital Asset Pricing Model ("CAPM"). These 25 analyses used a proxy group of publicly traded companies that have investment

risk similar to FPL. Based on these assessments, I estimate FPL's current
 market cost of equity to be 9.25%.

3

4 Q HOW DOES YOUR RECOMMENDED RETURN ON EQUITY COMPARE TO 5 FPL'S LAST AUTHORIZED RETURN ON EQUITY?

A On March 17, 2010, the Commission issued its final order in FPL's rate case
(Florida Public Service Commission, Docket No. 080677-EI) and approved a
settlement, which included a return on equity of 10.00%.

In awarding a return on equity of 10.00%, the Commission stated that it
took into account FPL's proposed construction program, its need to access
capital markets under reasonable terms, and its capital structure which included
a common equity ratio of total investor capital of 59%, and 56% on a Standard &
Poor's ("S&P") adjusted basis.

14 In FPL's last rate case, the Commission recognized the prevailing 15 economic realities that Florida electric customers face, noting specifically that 16 FPL customers are experiencing economic hardships throughout the state and 17 the need to find an equitable balance between customers and shareholders 18 recognizing the reality of the economic hardships of FPL's customers. (Order at 19 131 and 132, March 17, 2010).

20

21 Q DOES YOUR RETURN ON EQUITY REFLECT THE SAME TYPE OF 22 BALANCING OF INTERESTS AS OUTLINED BY THE COMMISSION IN 23 AWARDING FPL A RETURN ON EQUITY OF 10.00% IN ITS LAST RATE 24 CASE?

25 A Yes. My proposed rate of return considers the ongoing economic hardships for

1		Florida customers, and the diffi	icult financial mar	ets that utilities	, like FPL,
2		continue to operate within. My	recommendation a	lso recognizes a	significant
3		decline in capital market costs si	nce 2010, the time	of FPL's last ra	te decision.
4		All of these factors necessitate a	a balance for a fair	rate of return re	flecting fair
5		compensation in today's marketpl	ace, with the need	to mitigate rate ir	creases on
6		FPL's customers.			
7				r	
8	Q	HAVE CAPITAL MARKET CO	STS DECLINED S	NCE FPL'S L	AST RATE
9		CASE?			
10	А	Yes. The decline of market c	osts of capital sin	ce FPL's last ra	ate case is
11		observable by a comparison of b	ond yields in this ca	ase and those the	at prevailed
12		during FPL's last case. In Table 1	I, I show the change	e in utility bond yi	elds.
13		<b></b>			
14			TABLE 1		
15		<u>Capital C</u>	Costs – FPL Rate C	ases	
16		Description	Current Case <sup>1</sup>	Docket No. <u>080677-El</u>	Yield <u>Change</u>
17		"A" Rated Utility Bond Yields	4.27%	5.81%	1.54%
18		"Baa" Rated Utility Bond Yields	5.01%	6.21%	1.20%
19		13-Week Period Ending	06/15/2012	03/12/2010	
20		Source: <sup>1</sup> Exhibit MPG-15, page 1.			
21			<b></b>		
			ourront market anot	of debt for " $\Delta$ " (b	v S&P) and
22		As shown in the table above, the	current market cost		y our y und
22 23		"Baa" (by Moody's) rated utility bo	ond yields has decre	eased in this case	e relative to
22 23 24		As shown in the table above, the " "Baa" (by Moody's) rated utility bo FPL's last rate case. The currer	ond yields has decre nt "A" rated utility b	eased in this case	e relative to r 150 basis

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- 1 bond yield is 120 basis points lower than during FPL's last rate case.
- 2 Utility bond yields have declined by approximately 120 to 150 basis points
  3 since FPL's last rate case. This decline in utility bond yields suggests that FPL's
  4 cost of capital is lower now than it was in its 2010 rate case.
- 5

# 6 Q IS THERE OTHER EVIDENCE OF THE DECLINE IN MARKET COST OF 7 EQUITY SINCE FPL'S LAST RATE CASE?

8 A Yes. This is evident from FPL's case itself. In FPL's last rate case, Dr. Avera 9 proposed a return on equity in the range of 12.0% to 13.0%<sup>1</sup> in his direct filing. In 10 its current rate case, FPL is proposing a return on equity of 11.25%, excluding 11 the efficiency adder of 25 basis points. Hence, the Company's evidence 12 acknowledges that capital costs have materially decreased since FPL's last rate 13 case.

14

# 15 Electric Utility Industry Market Outlook

## 16 Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

17 A I begin my estimate of a fair return on equity for FPL by reviewing the market's 18 assessment of electric utility industry investment risk, credit standing and stock 19 price performance in general. I used this information to get a sense of the 20 market's perception of the risk characteristics of electric utility investments in 21 general, which is then used to produce a refined estimate of the market's return 22 requirement for assuming investment risk similar to FPL's utility operations.

23

<sup>&</sup>lt;sup>1</sup>Docket No. 080677-EI, Avera Direct at 3. The Company's requested rates were based on a return on equity of 12.5%, which was the midpoint of Dr. Avera's recommended range.

Based on the assessments described below, I find the credit rating outlook of the industry to be strong and supportive of the industry's financial integrity, and electric utilities' stocks have exhibited strong price performance over the last several years.

5 Based on this review of credit outlooks and stock price performance, I 6 conclude that the market has again embraced the electric utility industry as a 7 safe-haven investment, and views utility equity and debt investments as low-risk 8 securities.

9

### 10 Q PLEASE DESCRIBE THE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.

A Electric utilities' credit rating outlook has improved over the recent past and is
 now stable. S&P recently provided an assessment of the credit rating of U.S.
 electric utilities. S&P's commentary included the following:

#### 14 Solid Industry Fundamentals Support Stable Outlook

15 The U.S. electric utility sector performed well through 2011, and 16 found it easier to access the capital markets than did most other 17 corporate issuers.

Investor appetite for electric utility debt remains healthy, and deals have been oversubscribed. Credit fundamentals indicate that most, if not all, electric utilities should continue to have ample access to funding sources and credit. Some firms may issue common stock to partially fund construction spending, which would help to support the capital structure balance. In addition, many utilities are accessing short-term credit markets through

1	commercial paper programs at very low rates. <sup>2</sup>
2	Similarly, Fitch states:
3	Electric Utilities: Stable
4	Fitch's Outlook for the electric utility sector in 2012 remains stable.
5	The sector benefits from low interest rates, modest inflationary
6	pressures, open capital markets, and low natural gas and power
7	prices. Fitch expects these conditions to persist into 2013.
8	The favorable funding environment helps to offset any stress that
9	would otherwise result during an extended period of high
10	projected capital investment. Capex is expected to remain
11	elevated, increasing 5%-6% over 2011 levels. <sup>3</sup>
12	Value Line also continues to characterize utility stock investments as a safe
13	haven:
14	Conclusion
15	With most of 2011 completed, it seems almost certain that electric
16	utility stocks will have outperformed the broader market averages
17	when the year is over. As of mid-December, the Value Line Utility
18	Average is up slightly, while the Value Line GeometricAverage is
19	down about 14%. Electric utility stocks have long been viewed as
20	a safe haven in volatile markets, due in large part to their
21	generous dividend yields. <sup>4</sup>

<sup>&</sup>lt;sup>2</sup>Standard & Poor's RatingsDirect on the Global Credit Portal: "Industry Economic And Ratings Outlook: Continued Ratings Stability Expected For U.S. Regulated Electric Utilities In 2012," January 25, 2012 at 4-5. <sup>3</sup>*FitchRatings*: "2012 Outlook: Utilities, Power, and Gas," December 5, 2011 at 10. <sup>4</sup>*Value Line Investment Survey*, December 23, 2011 at 901.



14 recent state of the economic environment.



<sup>5</sup>EEI Q4 2011 Stock Performance at 1.

1 During 2009 and 2010, the EEI Index underperformed the market, which 2 is not unusual for stocks that are considered "safe havens" during periods of 3 market turbulence.

In 2011, the EEI Index outperformed the market. EEI states the following:

## Commentary

6 The EEI Index produced a positive 20% return during 2011, its 7 strongest annual gain since 2006, outperforming the broad market 8 after two consecutive years of underperformance as stocks 9 rebounded from the lows reached during 2008 financial crisis.

11 The strength of the EEI Index in 2011 is no surprise, highlighting 12 the industry's traditional role as a defensive investment following 13 its reemphasis in recent years of core regulated businesses with 14 slow but predictable earnings growth and steady dividends. In 15 fact, the industry's average dividend yield exceeded 4% during the 16 year, leading that of all other U.S. business sectors.<sup>6</sup>

17

4

5

10

# 18 FPL Investment Risk

# 19 Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT 20 RISK OF FPL.

21 A The market assessment of FPL's investment risk is best described by credit 22 rating analysts' reports. FPL's current corporate credit ratings from S&P and

<sup>6</sup>EEI Q4 2011 Stock Performance at 1 and 4-5.

1 Moody's are "A-" and "A2," respectively. FPL's current senior secured bond 2 ratings from S&P and Moody's are "Aa3" and "A," respectively.<sup>7</sup> 3 Specifically, S&P states the following: 4 Rationale 5 Standard & Poor's Ratings Services' bases its ratings on Florida 6 Power & Light Co. (FP&L) on the consolidated credit profile of its 7 parent, diversified energy holding company NextEra Energy Inc. 8 The credit fundamentals on its regulated utility side have been among the strongest in the U.S., due primarily to low regulatory 9 10 risk and an attractive service territory with healthy economic 11 growth and a sound business environment. 12 13 Standard & Poor's Ratings Services' ratings on all NextEra entities reflect the strength of the regulated cash flows from integrated 14 electric utility FP&L, and the diverse and substantial cash-15 generation capabilities of its unregulated operations at subsidiary 16 NextEra Energy Resources (NER). 17 18 19 We characterize FP&L's business risk profile as "excellent," NextEra's business risk profile as "strong," and the consolidated 20 financial risk profile as "intermediate" under our criteria.8 21 22 23

 <sup>&</sup>lt;sup>7</sup>FPL's response to OPC's 3rd Set of Interrogatories, No. 67, Attachment No. 1.
 <sup>8</sup>Standard & Poor's RatingsDirect on the Global Credit Portal: "Florida Power & Light Co.," April 24, 2012 at 2 and 3, emphasis added.

1	Similarly, Moody's states:
2	Summary Rating Rationale
3	FPL's ratings are supported by the stability of the utility's regulated
4	cash flows, the geographically diverse and relatively constructive
5	regulatory environments in which it operates, the diversification of
6	its generation portfolio, and solid credit metrics.
7	* * *
8	SUMMARY RATING RATIONALE
9	FPL's ratings reflect the stabilization of the political and regulatory
10	environment for investor owned utilities in Florida; the company's
11	strong financial performance, robust cash flow coverage ratios,
12	and relatively low leverage; good cost recovery mechanisms in
13	place; and a large, mainly residential service territory. This service
14	territory has been under significant economic pressure over the
15	last few years, with the company experiencing stagnant residential
16	sales growth in some years, although there have been recent
17	indications that economic conditions are improving. The
18	company's capital expenditure program is large, particularly over
19	the next two years as it adds new gas fired generation and
20	increases capacity at its nuclear plants.
21	* * *
22	Rating Outlook
23	The stable rating outlook reflects the regulatory clarity provided by
24	its two year rate settlement and Moody's view that the political and
25	regulatory environment for investor owned utilities in Florida will

1not deteriorate further and may improve once the newly2constituted FPSC begins to establish a track record. It also3reflects the generally strong cost recovery provisions that are in4place in the state and our expectation that FPL's financial5performance measures and cash flow coverage metrics will6remain strong for its rating.9

Fitch states:

7

8

#### Key Rating Drivers

9 Return to Stable Outlook: Ratings of Florida Power & Light 10 (FPL) were affirmed, and the Rating Outlook was changed to Stable from Negative in May 2011. The new Outlook reflects a 11 12 more orderly political and regulatory environment for FPL in 13 Florida after a period of political strife and commission turnover. 14 Four of the five current Florida Public Service Commission (FPSC) commissioners were appointed by new Florida Governor Rick 15 Scott, and confirmed by the state's Senate in 2011. 16

17Rate Stipulation Boosts Cash Flow: In a contentious general18rate case decided in March 17, 2010, FPL received an19unfavorable rate decision and challenged some elements.20Thereafter, the FPSC approved a settlement agreement (Rate21Stipulation) on Dec. 14, 2010, that resolved contested issues from22the March 17, 2010, rate order. It allowed FPL to collect revenues23for investments in the West County 3 (WC3) power plant via fuel

<sup>9</sup>*Moody's Investors Service Credit Opinion*: "Florida Power & Light Company," April 11, 2011, provided by FPL in response to Staff's 1st PODs (1-22)/Staff's POD No. 5.

savings, contributing to FPL's income and cash flow starting in
 June 2011.

Base Rate Freeze: Numerous fuel and environmental rate
adjustments are allowed. FPL can recover investment in nuclear
plant capacity upgrades without a base rate case. Recovery of
other new utility capital spending in 2011-2013 is subject to FPL's
next base rate case, which FPL will likely file in 2012 for effect in
January 2013.

9 Weak Florida Economy: FPL's south Florida service territory still
10 has above average unemployment and a weak housing market.
11 However, employment statistics have modestly improved. FPL's
12 inactive accounts and low usage accounts are gradually waning.

High Utility Capex: FPL is committed to invest over \$3 billion in
each of 2011 and 2012, or more than 3x annual depreciation, on
projects to reduce reliance on oil, modernize natural gas-fired
generation, improve the transmission and distribution systems,
and upgrade customer meters.

18 **Strong Individual Credit Metrics:** Due to low individual debt 19 leverage, FPL's credit metrics well exceed the guidelines for the 20 'A' rating category and compare favorably with the statistics of 'A' 21 IDR peer utilities.<sup>10</sup>

- 22 23
- 24

<sup>10</sup>*FitchRatings Corporates*: "Florida Power & Light Co.," September 7, 2011, provided by FPL in response to Staff's 1st PODs (1-22)/Staff's POD No. 7.

1		FPL's Proposed Ca	apital Structure										
2	Q	WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO											
3		DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS											
4	IN THIS PROCEEDING?												
5	А	FPL's December 2013 forecasted regulatory capital structure, as supported by											
6		FPL witness Mr. Moray P. Dewhurst, is shown below in Table 2.											
7		· ·											
8		r	TABLE 2										
9		FPL' <u>Cap</u> it	FPL's Proposed Capital Structure										
10			Regulatory	Investors'									
11		Description	Capital <u>Structure</u> (1)	Capital <u>Structure</u> (2)									
12		Long-Term Debt	29 47%	38 16%									
13		Customer Deposits	2.03%										
4.4		Common Equity	46.03%	59.62%									
14		Short-Term Debt	1.71%	2.22%									
15		Deferred Income Tax	20.75%										
		Investment Tax Credit	0.00%										
16		Total Capital Structure	100.00%	100.00%									
17		Source: MFR Schedule D-1a.											
18													
19													
20	Q	IS FPL'S PROPOSED CAPITAL STRU	JCTURE REASONAL	3LE?									
21	Α	No. FPL's proposal capital structure ha	as an excessive amou	unt of common equity	Y								
22		relative to investor capital, and the C	company's proposed	allocation of its Pro	2								
23		Rata adjustments unjustifiably decrease	e the amount of defe	rred taxes supporting	3								
24		the rate base in base rates.											
25													

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# 1 Q WHY DO YOU BELIEVE THAT FPL'S PROPOSED CAPITAL STRUCTURE 2 CONTAINS AN EXCESSIVE COMMON EQUITY RATIO?

A FPL's proposed capital structure includes a common equity ratio of 59.62% as a percentage of its total investor capital.<sup>11</sup> This common equity ratio is far in excess of the common equity ratio necessary to support FPL's current bond rating, it is unreasonable in comparison to the proxy group FPL witness Dr. Avera and I used to estimate a return on equity for FPL, and is materially out of line generally with electric utility industry capital structures used to set rates.

For credit rating purposes, FPL's common equity ratio of 59% translates 9 10 to an S&P adjusted ratio of 56.3% (Exhibit WEA-14). This ratio is far higher than the 40% to 50% common equity ratio or 60% to 40% long-term debt ratio that will 11 12 support an investment grade bond rating for a utility with an "Excellent" business 13 profile score (FPL's rating) and an "Intermediate" to "Aggressive" financial profile 14 generally consistent with industry averages. For example, in a 2010 report, S&P 15 stated that the median utility industry average adjusted debt ratio was 57.3%. 16 This implies a common equity ratio of approximately 42.7%. FPL's adjusted debt 17 ratio of 43.7% is substantially beneath this industry average. I would note also 18 that the utilities included in that industry median typically have bond ratings ranging from "BBB" all the way up to "AA."<sup>12</sup> 19

The common equity ratio of 59% is also significantly higher than the proxy group average common equity ratio of 48.4% used by FPL witness Dr. Avera and me to measure FPL's fair return on common equity in this proceeding. FPL's "Excellent" business profile score from S&P, and its financial risk that is lower

<sup>&</sup>lt;sup>11</sup>Common equity, long-term debt and short-term debt.

<sup>&</sup>lt;sup>12</sup>Standard & Poor's Global Credit Portal RatingsDirect Credit Stats: Multi Utilities U.S. – August 24, 2011.

than that of the proxy group, suggest that FPL is not managing its capital
 structure to minimize its cost of capital consistent with its peer utility companies.

FPL's 59% common equity ratio is also excessive in comparison to the capital structure typically awarded by regulatory commissions for electric utilities. On an industry average basis, over the last five years, electric utilities' authorized returns on equity have generally been awarded in combination with capital structures composed of common equity of around 48%. By virtually all measures, FPL's current cost of capital is substantially overstated.

9

#### 10

## 11 A UTILITY?

Q

12 A Yes. A utility managing its capital structure is important to balance its obligations 13 to minimize its cost of capital, while at the same time support its financial integrity 14 and access to capital. This balance requires a utility to manage its capital 15 structure to maintain a reasonable balance of common equity and debt such that 16 cost of capital is minimized and its credit rating is preserved.

IS CAPITAL STRUCTURE MANAGEMENT AN IMPORTANT OBJECTIVE FOR

17 A capital structure too heavily weighted with common equity will 18 unnecessarily increase its overall cost of capital, because common equity is the 19 most expensive form of capital. For example, an authorized return on equity of 9.0%, adjusted for income tax has a revenue requirement cost of 14.5%.<sup>13</sup> 20 Conversely, current debt interest rates are around 4.5%, and the interest 21 22 expense is tax deductible. Therefore, the revenue requirement cost of debt 23 capital is 4.5%. As such, common equity capital is approximately three times more expensive than debt capital. Conversely, a capital structure too heavily 24

> $^{13}9.0\%$  \* (1) (1 – Tax Rate) (assuming a 38% composite tax rate)

- weighted with debt will result in an increase in its financial risk and likely drive up
   its overall cost of capital.
- 3

# 4 Q WHY DO YOU BELIEVE THAT FPL'S PROPOSED CAPITAL STRUCTURE 5 MISALLOCATES DEFERRED TAXES?

A FPL proposes to allocate the Pro Rata adjustments in proportion to its capital
component weights of total capital. This in effect spreads deferred taxes on the
basis of total capital. This is inappropriate because deferred taxes should be
allocated on rate base, or plant in-service – not total capital.

ARE YOU PROPOSING ANY ADJUSTMENTS TO THE ALLOCATION OF THE

10

## 11

12

Q

# PRO RATA ADJUSTMENTS?

13 А Yes. Pro Rata adjustments essentially synchronize the capital structure used to develop the overall rate of return with the amount of retail rate base supporting 14 15 base rates. As a means of properly gauging the amount of total deferred taxes that should be recognized in supporting base-rate rate base, I propose to allocate 16 17 deferred taxes to the base-rate rate base using an allocator of base-rate plant in-service to total FPL plant in-service. I used plant in-service as a proxy for rate 18 19 base since total rate base data is not available and deferred tax balance is 20 largely created by depreciation timing differences (tax versus book) on plant 21 in-service.

22 My modified allocation of Pro Rata adjustments is developed on my 23 Exhibit MPG-1, page 2. As shown on this exhibit, I developed a base rate 24 allocator from the percentage of retail plant in-service (included in base rates) as 25 a percentage of total plant in-service. I propose to allocate 86.36% of total

deferred taxes to rate base recovered in the FPL base rates. The remaining
 amount of Pro Rata adjustments would then be spread equitably across all
 investor capital components: common equity, long-term debt and short-term
 debt, and customer deposits.

5

# 6 Q ARE YOU PROPOSING ANY ADJUSTMENTS TO MODIFY FPL'S EXCESSIVE 7 COMMON EQUITY RATIO?

8 A No, although an adjustment would be appropriate. The Commission already 9 addressed FPL's excessive common equity ratio in its last rate case (Order at 10 pages 114-119). Therefore, I simply will reflect the excessive cost of its capital 11 structure and the fact that FPL has below industry average and lower financial 12 risk than the proxy group in my development of a fair return on equity for FPL in 13 this proceeding.

14

## 15 Q WHAT IS YOUR PROPOSED CAPITAL STRUCTURE IN THIS PROCEEDING?

16 A My proposed capital structure is shown below in Table 3.

17 TABLE 3 18 **Proposed Capital Structure** 19 Percent of **Total Capital** Description 20 Long-Term Debt 29.16% 21 Customer Deposits 2.41% 22 Common Equity 44.08% Short-Term Debt 1.64% 23 Deferred Income Tax 22.70% 0.00% Investment Tax Credit 24 100.00% Total Capital Structure 25 Source: Exhibit MPG-1, page 1.

# 1 Embedded Cost of Debt

.

.

2	Q	DID FPL INCLUDE PROJECTED NEW BOND ISSUANCE IN ITS EMBEDDED
3		COST OF DEBT ESTIMATE?
4	А	Yes. Company witness Dewhurst develops FPL's proposed cost of debt of
5		5.24% on Schedule D-4a. He includes the following projected debt issuances:
6		• 4.85% \$400 million 30-year debt with issuance, April 2012;
7		<ul> <li>5.05% \$250 million 30-year debt with issuance, December 2012; and</li> </ul>
8		• 5.09% \$750 million 30-year debt with issuance, February 2013.
9		
10	Q	IS FPL'S PROJECTED PRICING FOR THESE BOND ISSUES REASONABLE?
11	А	No. The Company's debt prospectus (May 15, 2012) states that FPL issued a
12		30-year \$600 million bond at a 4.05% coupon rate. FPL's rate case projected
13		interest rates for new bond issuances are much higher than this actual recent
14		bond interest rate.
15		
16	Q	ARE YOU PROPOSING TO ADJUST FPL'S EMBEDDED DEBT COST
17		ESTIMATE?
18	Α	Yes. I repriced the Company's projected debt issuance in April 2012 to reflect
19		the actual issuance amount and coupon rate for all projected bond issuance. My
20		adjusted debt cost is developed on my Exhibit MPG-2. As shown on my Exhibit
21		MPG-2, I propose to reduce FPL's estimated embedded cost of long-term debt to
22		5.08% from 5.24%.
23		
24		
25		

### 1 Q DO YOU HAVE ANY ADDITIONAL COMMENTS RELATED TO FPL COSTS 2 **OF CAPITAL?** 3 Α Yes. FPL incorrectly calculated the cost of the investment tax credit ("ITC") 4 included in its regulatory capital structure. The Company did not include the 5 short-term debt in the cost of ITC. I recommend setting the ITC cost at the 6 weighted average cost of all investor capital, including short-term debt. 7 8 WILL YOUR PROPOSED CAPITAL STRUCTURE SUPPORT FPL'S Q 9 FINANCIAL INTEGRITY AND CREDIT RATING? 10 А Yes. As I will discuss later in my testimony, my proposed capital structure is consistent with FPL's current credit rating and will support FPL's financial 11 12 integrity. 13 **Return on Equity** 14 Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON 15 16 EQUITY." 17 Α A utility's cost of common equity is the return investors require on an investment 18 in the utility. Investors expect to achieve their return requirement from receiving 19 dividends and stock price appreciation. 20 21 Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED 22 UTILITY'S COST OF COMMON EQUITY. 23 Α In general, determining a fair cost of common equity for a regulated utility has 24 been framed by two hallmark decisions of the U.S. Supreme Court: Bluefield 25 Water Works & Improvement Co. v. Public Serv. Commission of West Virginia,

262 U.S. 679 (1923) and Federal Power Commission v. Hope Natural Gas Co.,
 320 U.S. 591 (1944).

These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards provide that the authorized return should: (1) be sufficient to maintain financial integrity; (2) attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk.

9

10 Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE 11 COST OF COMMON EQUITY FOR FPL.

12 A I have used several models based on financial theory to estimate FPL's cost of
13 common equity. These models are: (1) a constant growth Discounted Cash
14 Flow ("DCF") model using analyst growth data; (2) a sustainable growth DCF
15 model; (3) a multi-stage growth DCF model; (4) an RP model; and (5) a CAPM. I
16 have applied these models to a group of publicly traded utilities that I have
17 determined share investment risk similar to FPL's.

18

19QHOW DID YOU SELECT A UTILITY PROXY GROUP SIMILAR IN20INVESTMENT RISK TO FPL TO ESTIMATE ITS CURRENT MARKET COST21OF EQUITY?

A I relied on the same utility proxy group used by FPL witness Dr. Avera to
 estimate FPL's return on equity, except I excluded ITC Holdings Inc. I excluded
 ITC Holdings because it is involved in merger and acquisition ("M&A") related
 activities. It is appropriate to exclude companies in M&A activity because the

1 market price may not reflect the earnings outlook of the individual company, but 2 may be impacted by the expectation of mergers or acquisitions which could 3 enhance future earnings outside of the security analysts' outlooks for the 4 company. I would note, that it is standard to exclude companies involved in M&A 5 activity, and even Dr. Avera claims to have excluded these companies. 6 However, for some reason he did not exclude ITC Holdings Inc. which should 7 have been excluded under his own proxy group selection criteria. (Avera Direct 8 at 33-34).

9

# 10 Q HOW DOES THE PROXY GROUP INVESTMENT RISK COMPARE TO FPL'S 11 INVESTMENT RISK?

12 A The proxy group is shown on Exhibit MPG-3. This proxy group has an average 13 credit rating from S&P of "A-," which is identical to S&P's credit rating for FPL. 14 The proxy group's credit rating from Moody's is "A2," which is also identical to 15 FPL's credit rating from Moody's of "A2." The proxy group has comparable 16 investment risk to FPL.

17 The proxy group has an average common equity ratio of 45.6% (including 18 short-term debt) from *AUS Utility Reports* ("AUS") and 48.4% (excluding short-19 term debt) from *Value Line* in 2011. The proxy group's common equity ratio is 20 lower than FPL's proposed common equity ratio, which suggests it has greater 21 financial risk than FPL.

I also compared FPL's business risk to the business risk of the proxy
group based on S&P's ranking methodology. FPL has an S&P business risk
profile of "Excellent," which is identical to the S&P business risk profile of the

- proxy group. The S&P business risk profile score indicates that FPL's business
   risk is comparable to that of the proxy group.<sup>14</sup>
- Based on these proxy group selection criteria, I believe that my proxy
  group reasonably approximates the investment risk of FPL, albeit the group has
  greater financial risk than FPL.
- 6

# 7 Discounted Cash Flow Model

8 Q PLEASE DESCRIBE THE DCF MODEL.

9 A The DCF model posits that a stock price is valued by summing the present value
10 of expected future cash flows discounted at the investor's required rate of return
11 or cost of capital. This model is expressed mathematically as follows:

12	P <sub>0</sub> =	D <sub>1</sub>	÷	D <sub>2</sub>		D.	where	(Equation 1)
13	i	(1+K) <sup>1</sup>	(	1+K) <sup>2</sup>	•	(1+K) <sup>∞</sup>		

- 14 P<sub>0</sub> = Current stock price
- 15 D = Dividends in periods  $1 \infty$
- 16 K = Investor's required return

17 This model can be rearranged in order to estimate the discount rate or 18 investor-required return, "K." If it is reasonable to assume that earnings and 19 dividends will grow at a constant rate, then Equation 1 can be rearranged as 20 follows:

21

<sup>&</sup>lt;sup>14</sup>S&P ranks the business risk of a utility company as part of its corporate credit rating review. S&P considers total investment risk in assigning bond ratings to issuers, including utility companies. In analyzing total investment risk, S&P considers both the business risk and the financial risk of a corporate entity, including a utility company. S&P's business risk profile score is based on a six-notch credit rating starting with "Vulnerable" (highest risk) to "Excellent" (lowest risk). The business risk of most utility companies falls within the lowest risk category, "Excellent," or the category one notch lower (more risk), "Strong." *Standard & Poor's:* "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1		$K = D_1/P_0 + G $ (Equation 2)	
2		K = Investor's required return	
3		D <sub>1</sub> = Dividend in first year	
4		P <sub>0</sub> = Current stock price	
5		G = Expected constant dividend growth rate	
6		Equation 2 is referred to as the annual "constant growth" DCF model.	
7			
8	Q	PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DO	CF
9		MODEL.	
10	Α	As shown in Equation 2 above, the DCF model requires a current stock price	ce,
11		expected dividend, and expected growth rate in dividends.	
12			
13	Q	WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTAI	NT
14		GROWTH DCF MODEL?	
15	Α	I relied on the average of the weekly high and low stock prices of the utilities	in
16		the proxy group over a 13-week period ended June 15, 2012. An average sto	ck
17		price is less susceptible to market price variations than a spot price. Therefo	re,
18		an average stock price is less susceptible to aberrant market price movemen	ts,
19		which may not be reflective of the stock's long-term value.	
20		A 13-week average stock price reflects a period that is still short enou	gh
21		to contain data that reasonably reflect current market expectations, but the peri	od
22		is not so short as to be susceptible to market price variations that may not refle	ect
23		the stock's long-term value. In my judgment, a 13-week average stock price is	s a
24		reasonable balance between the need to reflect current market expectations a	nd
25		the need to capture sufficient data to smooth out aberrant market movements.	

BRUBAKER & ASSOCIATES, INC.

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# 1 Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF 2 MODEL?

3 A I used the most recently paid quarterly dividend, as reported in *The Value Line* 4 *Investment Survey.*<sup>15</sup> This dividend was annualized (multiplied by 4) and 5 adjusted for next year's growth to produce the D<sub>1</sub> factor for use in Equation 2 6 above.

7

# 8 Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT 9 GROWTH DCF MODEL?

10 A There are several methods that can be used to estimate the expected growth in 11 dividends. However, regardless of the method, for purposes of determining the 12 market-required return on common equity, one must attempt to estimate 13 investors' consensus about what the dividend or earnings growth rate will be, and 14 not what an individual investor or analyst may use to make individual investment 15 decisions.

As predictors of future returns, security analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data.<sup>16</sup> That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence observable stock prices than growth rates derived only from historical data.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional security analysts' earnings growth estimates as a proxy for investor consensus dividend growth rate expectations. I used the average of

<sup>15</sup>The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

<sup>&</sup>lt;sup>16</sup>See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

analysts' growth rate estimates from three sources: Zacks, SNL Financial, and
 Reuters. All such projections were available on June 17, 2012, and all were
 reported online.

Each consensus growth rate projection is based on a survey of security analysts. The consensus estimate is a simple arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. It is problematic as to whether any particular analyst's forecast is more representative of general market expectations. Therefore, a simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations.

- 11
- 12 Q WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT 13 GROWTH DCF MODEL?
- A The growth rates I used in my DCF analysis are shown in Exhibit MPG-4. The
  average growth rate for my proxy group is 5.04%.
- 16

## 17 Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?

- A As shown in Exhibit MPG-5, the average and median constant growth DCF
   returns for my proxy group are 9.29% and 9.20%, respectively.
- 20

21 Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT 22 GROWTH DCF ANALYSIS?

A Yes. The three- to five-year growth rates are slightly higher but still in line with
 the long-term sustainable growth rate. Therefore, I believe my constant growth
 DCF analysis using analysts' three- to five-year growth rates reflects reasonable

growth outlooks and the DCF results are also reasonable. Nevertheless, I
 consider other DCF methodologies in order to enhance the information available
 to accurately estimate FPL's current market return on common equity.

4

## 5 Sustainable Growth DCF

# Q PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.

A A sustainable growth rate is based on the percentage of the utility's earnings that is retained and reinvested in utility plant and equipment, plus the growth realized by selling additional shares at market prices above book value. Earnings grow when plant funded by reinvested earnings is put into service, and the utility is allowed to earn its authorized return on such additional rate base investment. The reinvested earnings and above book value accretion increase the earnings base (rate base), and support sustainable long-term growth.

The internal growth methodology is tied to the percentage of earnings retained in the company and not paid out as dividends. The earnings retention ratio is 1 minus the dividend payout ratio. As the payout ratio declines, the earnings retention ratio increases. An increased earnings retention ratio will fuel stronger growth because the business funds more investments with retained earnings. The payout ratios of the proxy group are shown on my Exhibit MPG-6.

The data used to estimate the long-term sustainable growth rate is based on the Company's current market to book ratio and on *Value Line's* three- to fiveyear projections of earnings, dividends, earned returns on book equity, and stock issuances.

25

- 1 As shown in Exhibit MPG-7, page 1, the average sustainable growth rate 2 for the proxy group using this internal growth rate model is 5.47%. 3 4 WHAT STOCK PRICE AND DIVIDENDS DID YOU USE IN YOUR Q 5 SUSTAINABLE LONG-TERM GROWTH DCF STUDY? 6 А I used the same stock prices and dividends growth in my sustainable growth 7 DCF model as I used in my constant growth DCF model discussed above. 8 9 Q WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM 10 **GROWTH RATES?** 11 A DCF estimate based on these sustainable growth rates is developed in Exhibit А 12 MPG-8. As shown there, a sustainable growth DCF analysis produces proxy 13 group average and median DCF results of 9.73% and 10.10%, respectively. 14 15 Multi-Stage Growth DCF Model HAVE YOU CONDUCTED ANY OTHER DCF STUDIES? 16 Q 17 А Yes. My first constant growth DCF is based on consensus analysts' growth rate 18 projections, so it is a reasonable reflection of rational investment expectations 19 over the next three to five years. The limitation on the constant growth DCF
- 20 model is that it cannot reflect a rational expectation that a period of high/low 21 short-term growth can be followed by a change in growth to a rate that is more 22 reflective of long-term sustainable growth. Hence, I performed a multi-stage 23 growth DCF analysis to reflect this outlook of changing growth expectations.
- 24
- 25

# 1 Q WHEN DO YOU BELIEVE SHORT-TERM GROWTH RATES CHANGE OVER 2 TIME?

3 Α Short-term growth rates, or the three- to five-year growth rates projected by the 4 analysts, change when utility earnings change over time. Utility companies 5 typically go through cycles in making investments in their systems. When utility 6 companies are making large investments, their rate base grows rapidly, which 7 accelerates their earnings growth during a major construction period. Once a 8 major construction cycle is completed or levels off, growth in the utility rate base 9 slows, and its earnings slow from an abnormally high short-term growth rate to a 10 lower sustainable growth rate.

11 As major construction cycles extend over longer periods of time, even 12 with an accelerated construction program, the growth rate of the utility will slow 13 simply because it is adding to a larger rate base, and the utility has limited 14 human and capital resources to continue to expand its construction program. 15 Hence, the three- to five-year growth rate projection should be used as a 16 long-term sustainable growth rate but not without making a reasonable informed 17 judgment to determine whether it considers the current market environment in 18 the industry.

19

# 20 Q WHY CAN'T A UTILITY'S ELEVATED SHORT-TERM GROWTH RATE 21 OUTLOOKS BE SUSTAINED EVEN IF ITS CAPITAL PROGRAM CONTINUES 22 OVER AN INDEFINITE PERIOD OF TIME?

A Because the growth rate will slow over time, even if the utility's capital program
 remains at an elevated level. This is illustrated in Table 4 below. Consider a
 hypothetical company with a beginning plant-in-service of \$1 million and an

elevated capital expenditure program of \$100,000 (10% of total capital). Capital
 expenditures stay elevated but also grow at the rate of inflation of 2% over the
 next 10 years. This Company has depreciation expense based on a rate of
 gross plant of 3.0%.

5 In this example, the first year, the capital expenditures less depreciation 6 expense will grow plant-in-service from \$1 million up to \$1,070,000 - a 7% plant 7 growth. In this example, earnings in the year would begin at an assumed 10% 8 rate of return on investment, or \$103,500. This represents a 10% return on 9 average plant investment for the year. Now assume that the capital improvement 10 program continues, and plant-in-service increases from the initial \$1 million up to \$1,139,900 by the end of year 2. In this second year, earnings would increase to 11 12 \$110,495, a 6.8% growth in earnings relative to year 1. Each year, the 13 embedded plant-in-service increases by capital improvements less depreciation 14 expense. As a result, the growth in earnings slows because a percent change in 15 plant-in-service starts to slow as the beginning of the year plant-in-service 16 number increases. That is, the denominator in the growth equation increases with a relatively flat but elevated level of capital improvements resulting in a 17 18 decreasing growth in earnings. With this continued level of elevated capital 19 improvement offset by depreciation expense, the growth rate of earnings starts at 20 around 6.8% in the beginning of the growth period, declines to around 5.3% after 21 five years of growth, and further declines to around 4.2% after 10 years of elevated capital investment spending. Hence, while the company maintains an 22 23 elevated level of capital spending throughout the forecast period, the earnings 24 growth rate nevertheless declines from 6.8% at the beginning of the spending period, down to 4.2% after 10 years of elevated capital spending. Again, this 25
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			-	TABLE 4				
			Annual	Growth Ou	<u>tlook</u>			
Year	Beginning of Year Plant-in- <u>Service</u> (1)	Capital Improvement (2)	Deprec. <u>Expense</u> (3)	End of Year Plant-in- <u>Şervice</u> (4)	Avg Year <u>Plant</u> (5)	<u>ROE</u> (6)	Earnings (7)	Annua Earning Growt <u>Rate</u> (8)
0	\$1,000,000	\$100,000	\$30,000	\$1,070,000	\$1,035,000	10.0%	\$103,500	0.00/
2	\$1,070,000	\$102,000 \$104.040	\$34,100	\$1,139,900	\$1,104,950	10.0%	\$117,495	6.3%
3	\$1,209,743	\$106,121	\$36,292	\$1,279,572	\$1,244,657	10.0%	\$124,466	5.9%
4	\$1,279,572	\$108,243	\$38,387	\$1,349,428	\$1,314,500	10.0%	\$131,450	5.6%
5	\$1,349,428	\$110,408	\$40,483	\$1,419,353	\$1,384,390	10.0%	\$138,439	5.3%
6	\$1,419,353	\$112,616	\$42,581	\$1,489,388	\$1,454,371	10.0%	\$145,437	5.1%
7	\$1,489,388	\$114,869	\$44,682	\$1,559,575	\$1,524,482	10.0%	\$152,448	4.8%
8	\$1,559,575	\$117,166	\$45,787	\$1,629,954	\$1,594,765	10.0%	\$159,476	4.6%
9 10	\$1,029,954	\$121 899	\$40,099 \$51.017	\$1,700,505	\$1,005,259	10.0%	\$173 601	4.47
Not Col Col Col Col Col	es: umn 2: Escala umn 3: Depr F umn 4 = Colur umn 5 = (Colur umn 7 = Colur umn 8 = Colur	tion Rate 2.00%. Rate 3.00%. Inn 1 plus Column Inn 1 + Column 4 Inn 5 * Column 6. Inn 7 N + Column	2 less Colur )/2. 7 N-1 (N is t	mn 3. he Year) less <sup>-</sup>	1.			

occurs because the denominator in the growth equation increases as plant

investment is made and plant-in-service increases. As a result, elevated capital

24 makes this quite clear. In his book New Regulatory Finance, Dr. Morin states the

25 following:

1

2

1 Dividends need not be, and probably are not, constant from period 2 to period. Moreover, there are circumstances where the standard 3 DCF model cannot be used to assess investor return 4 requirements. For example, if a utility company is in the process 5 of altering its dividend payout policy and dividends are not 6 expected to grow at the same rate as earnings during the 7 transition period, the standard DCF model is inapplicable. This is 8 because the expected growth in stock price has to be different 9 from that of dividends, earnings, and book value if the market 10 price is to converge toward book value.

11 \* \* \*

A Non-Constant Growth DCF model is appropriate whenever the growth rate is expected to change, and the only way to produce a change in the forecast payout ratio is by introducing an intermediate growth rate that is different from the long-term growth rate, as in the previous example.<sup>17</sup>

17

#### 18 Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

19 A The multi-stage growth DCF model reflects the possibility of non-constant growth 20 for a company over time. The multi-stage growth DCF model reflects three 21 growth periods: (1) a short-term growth period, which consists of the first five 22 years; (2) a transition period, which consists of the next five years (6 through 10); 23 and (3) a long-term growth period, starting in year 11 through perpetuity.

<sup>&</sup>lt;sup>17</sup>New Regulatory Finance, Roger A. Morin, PhD, 2006 Public Utilities Reports, Inc., Vienna, Virginia, pp. 264 and 267.

1 For the short-term growth period, I relied on the consensus analysts' 2 growth projections described above in relationship to my constant growth DCF 3 model. For the transition period, the growth rates were reduced or increased by 4 an equal factor, which reflects the difference between the analysts' growth rates 5 and the United States Gross Domestic Product ("U.S. GDP") growth rate. For 6 the long-term growth period, I assumed each company's growth would converge 7 to the maximum sustainable growth rate for a utility company as proxied by the 8 consensus analysts' projected growth for the U.S. GDP of 4.9%.

9

10 Q WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR 11 THE MAXIMUM SUSTAINABLE GROWTH RATE FOR A UTILITY?

12 Α Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of 13 the overall economy. Utilities' earnings/dividend growth is created by increased 14 utility investment or rate base. Such investment, in turn, is driven by service area 15 economic growth and demand for utility service. In other words, utilities invest in 16 plant to meet sales demand growth, and sales growth, in turn, is tied to economic growth in their service areas. The Energy Information Administration ("EIA") has 17 observed that utility sales growth is less than U.S. GDP growth, as shown in 18 Exhibit MPG-9. Utility sales growth has lagged behind GDP growth for more 19 20 than a decade. As a result, nominal GDP growth is a very conservative, albeit 21 overstated, proxy for electric utility sales growth, rate base growth, and earnings 22 Therefore, GDP growth is a conservative proxy for the highest growth. 23 sustainable long-term growth rate of a utility.

- 24
- 25

Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER 1 2 THE LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT A RATE GREATER THAN THE GROWTH OF THE U.S. GDP? 3 4 А Yes. This concept is supported in both published analyst literature and academic 5 work. Specifically, in a textbook entitled "Fundamentals of Financial 6 Management," published by Eugene Brigham and Joel F. Houston, the authors 7 state as follows: 8 The constant growth model is most appropriate for mature companies with a stable history of growth and stable future 9 10 expectations. Expected growth rates vary somewhat among 11 companies, but dividends for mature firms are often expected to 12 grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation).<sup>18</sup> 13 14 15 Q HOW DID YOU DETERMINE THE CONSENSUS REASONABLE. 16 SUSTAINABLE LONG-TERM GROWTH RATE? 17 I relied on the consensus analysts' projections of long-term GDP growth. The А

18 Blue Chip Financial Forecasts publishes consensus economists' GDP growth 19 projections twice a year. Based on its latest issue, the consensus economists' 20 published GDP growth rate outlook is 5.1% to 4.7% over the next 10 years.<sup>19</sup>

21Therefore, I propose to use the consensus economists' projected 5- and2210-year average GDP consensus growth rate of 4.9%, as published by *Blue Chip*23*Financial Forecasts,* as an estimate of long-term sustainable growth. *Blue Chip* 

<sup>18</sup>"Fundamentals of Financial Management," Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298. <sup>19</sup>Blue Chip Financial Forecasts, June 1, 2012 at 14.

*Financial Forecasts'* projections provide real GDP growth projections of 2.8% and 2.5%, and GDP inflation of 2.2% and 2.1%<sup>20</sup> over the 5-year and 10-year 3 projection periods, respectively. This consensus GDP growth forecast 4 represents the most likely views of market participants because it is based on 5 published consensus economist projections.

6

# 7 Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP 8 GROWTH?

9 A Yes. The U.S. EIA in its Annual Energy Outlook projects the real GDP out until
10 2035. In its 2011 Annual Report, the EIA projects real GDP through 2035 to be
11 in the range of 2.1% to 3.2%, with a midpoint or reference case of 2.7%.<sup>21</sup>

Also, the Congressional Budget Office ("CBO") makes long-term economic projections. The CBO is projecting real GDP growth of 3.3% to 2.4% during the next five and 10 years, respectively, with GDP price inflation of 1.9% to 2.0%.<sup>22</sup> The CBO's real GDP projections are higher than the consensus but its GDP inflation is lower than the consensus economists.

17 The real GDP and nominal GDP growth projections made by the U.S. EIA 18 and those made by the CBO support the use of the consensus analyst 5-year 19 and 10-year projected GDP growth outlooks as a reasonable market assessment 20 of long-term prospective GDP growth.

- 21
- 22
- 23

<sup>20</sup>GDP growth is the product of real and inflation GDP growth.

<sup>21</sup>DOE/EIA Annual Energy Outlook 2011 With Projections to 2035, April 2011 at 58. <sup>22</sup>CBO: The Budget and Economic Outlook: Fiscal Years 2012 to 2022, January 2012.

1 Q WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN 2 YOUR MULTI-STAGE GROWTH DCF ANALYSIS?

- A I relied on the same 13-week stock price and the most recent quarterly dividend payment data discussed above. For stage one growth, I used the consensus analysts' growth rate projections discussed above in my constant growth DCF model. The transition period begins in year 6 and ends in year 10. For the long-term sustainable growth rate starting in year 11, I used 4.9%, the average of the consensus economists' 5-year and 10-year projected nominal GDP growth rates.
- 10

11 Q WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF 12 MODEL?

- A As shown in Exhibit MPG-10, the average and median DCF returns on equity for
  my proxy group are 9.18% and 9.19%, respectively.
- 15

#### 16 Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

17 A The results from my DCF analyses are summarized in Table 5 below:

18		
19	TABLE 5	
20		
21	Description	<b>Estimates</b>
22	Constant Growth DCF Model (Analysts' Growth) Constant Growth DCF Model (Sustainable Growth)	9.29% 9.73%
23	Multi-Stage Growth DCF Model Average	<u>9.18%</u> <b>9.40%</b>
24		
25		

#### 1 Risk Premium Model

#### 2 Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

3 А This model is based on the principle that investors require a higher return to 4 assume greater risk. Common equity investments have greater risk than bonds 5 because bonds have more security of payment in bankruptcy proceedings than 6 common equity and the coupon payments on bonds represent contractual 7 In contrast, companies are not required to pay dividends or obligations. 8 guarantee returns on common equity investments. Therefore, common equity 9 securities are considered to be more risky than bond securities.

10 This risk premium model is based on two estimates of an equity risk 11 premium. First, I estimated the difference between the required return on utility 12 common equity investments and U.S. Treasury bonds. The difference between 13 the required return on common equity and the Treasury bond yield is the risk 14 premium. I estimated the risk premium on an annual basis for each year over the 15 period 1986 through 2011. The common equity required returns were based on regulatory commission-authorized returns for electric utility companies. 16 17 Authorized returns are typically based on expert witnesses' estimates of the 18 contemporary investor-required return.

The second equity risk premium estimate is based on the difference between regulatory commission-authorized returns on common equity and contemporary "A" rated utility bond yields. I selected the period 1986 through 2011 because public utility stocks consistently traded at a premium to book value during that period. This is illustrated in Exhibit MPG-11, which shows that the market to book ratio since 1986 for the electric utility industry was consistently above 1.0. Over this period, regulatory authorized returns were sufficient to

support market prices that at least exceeded book value. This is an indication
that regulatory authorized returns on common equity supported a utility's ability to
issue additional common stock without diluting existing shares. It further
demonstrates that utilities were able to access equity markets without a
detrimental impact on current shareholders.

6 Based on this analysis, as shown in Exhibit MPG-12, the average 7 indicated equity risk premium over U.S. Treasury bond yields has been 5.23%. 8 Of the 26 observations, 20 indicated risk premiums fall in the range of 4.41% to 9 6.13%. Since the risk premium can vary depending upon market conditions and 10 changing investor risk perceptions, I believe using an estimated range of risk 11 premiums provides the best method to measure the current return on common 12 equity using this methodology.

As shown in Exhibit MPG-13, the average indicated equity risk premium over contemporary Moody's utility bond yields was 3.81% over the period 1986 through 2011. The indicated equity risk premium estimates based on this analysis primarily fall in the range of 3.03% to 4.62% over this time period.

17

18QDO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES ARE19BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW20ACCURATE RESULTS CONCERNING CONTEMPORARY MARKET21CONDITIONS?

A No. Contemporary market conditions can change dramatically during the period
 that rates determined in this proceeding will be in effect. A relatively long period
 of time where stock valuations reflect premiums to book value is an indication
 that the authorized returns on equity and the corresponding equity risk premiums

were supportive of investors' return expectations and provided utilities access to
the equity markets under reasonable terms and conditions. Further, this time
period is long enough to smooth abnormal market movement that might distort
equity risk premiums. While market conditions and risk premiums do vary over
time, this historical time period is a reasonable period to estimate contemporary
risk premiums.

7 The time period I use in this risk premium study is a generally accepted 8 period to develop a risk premium study using "expectational" data. Conversely, 9 studies have recommended that use of "actual achieved return data" should be 10 based on very long historical time periods. The studies find that achieved returns 11 over short time periods may not reflect investors' expected returns due to 12 unexpected and abnormal stock price performance. However, these short-term 13 abnormal actual returns would be smoothed over time and the achieved actual 14 returns over long time periods would approximate investors' expected returns. 15 Therefore, it is reasonable to assume that averages of annual achieved returns 16 over long time periods will generally converge on the investors' expected returns.

My risk premium study is based on expectational data, not actual returns,
and, thus, need not encompass very long time periods.

19

# 20QBASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED21TO ESTIMATE FPL'S COST OF COMMON EQUITY IN THIS PROCEEDING?

22 A The equity risk premium should reflect the relative market perception of risk in 23 the utility industry today. I have gauged investor perceptions in utility risk today 24 in Exhibit MPG-14. On that exhibit, I show the yield spread between utility bonds 25 and Treasury bonds over the last 32 years. As shown in this exhibit, the 2008

utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility
bonds are 2.25% and 2.97%, respectively. The utility bond yield spreads over
Treasury bonds for "A" and "Baa" rated utility bonds for 2009 are 1.97% and
2.99%, respectively. In 2010, these spreads declined to 1.21% and 1.71%,
respectively. In 2011, they declined further to 1.13% and 1.65%, respectively.
These utility bond yield spreads over Treasury bond yields are now lower than
the 32-year average spreads of 1.58% and 1.98%, respectively.

A current 13-week average "A" rated utility bond yield of 4.27%, when compared to the current Treasury bond yield of 3.00% as shown in Exhibit MPG-15, page 1 implies a yield spread of around 1.27%. This current utility bond yield spread is lower than the 32-year average spread for "A" utility bonds of 1.58%. The current spread for the "Baa" utility yields of 2.01% is slightly higher, albeit comparable to the 32-year average spread of 1.98%.

14 These utility bond yield spreads are clear evidence that the market 15 considers the utility industry to be a relatively low risk investment and 16 demonstrates that utilities continue to have strong access to capital.

17

## 18 Q HOW DID YOU ESTIMATE FPL'S COST OF COMMON EQUITY WITH THIS 19 RISK PREMIUM MODEL?

A I added a projected long-term Treasury bond yield to my estimated equity risk
 premium over Treasury yields. The 13-week average 30-year Treasury bond
 yield, ending June 15, 2012 was 3.00%, as shown in Exhibit MPG-15, page 1.
 *Blue Chip Financial Forecasts* projects the 30-year Treasury bond yield to be
 3.70%, and a 10-year Treasury bond yield to be 2.70%.<sup>23</sup> Using the projected

<sup>23</sup>Blue Chip Financial Forecasts, June 1, 2012 at 2.

1 30-year bond yield of 3.70%, and a Treasury bond risk premium of 4.41% to 2 6.13%, as developed above, produces an estimated common equity return in the 3 range of 8.11% (3.70% + 4.41%) to 9.83% (3.70% + 6.13%). I recommend an 4 equity risk premium of 9.26%, rounded to 9.30%. This estimate is based on 5 giving two-thirds weight to my high-end risk premium estimate of 9.83%, and 6 one-third weight to my low-end risk premium estimate of 8.11%. I believe this 7 weighting is appropriate given the large yield spreads between Treasury bond 8 and utility bond yields.

9 I next added my equity risk premium over utility bond yields to a current 10 13-week average yield on "A" rated utility bonds for the period ending June 15, 11 2012 of 4.27%. Adding the utility equity risk premium of 3.03% to 4.62%, as 12 developed above, to an "A" rated bond yield of 4.27%, produces a cost of equity in the range of 7.30% (4.27% + 3.03%) to 8.89% (4.27% + 4.62%). Again, 13 14 recognizing the large Treasury bond yield to utility bond yield spreads, I 15 recommend a risk premium of 8.89%, rounded to 8.90%, based on this risk 16 premium study.

17 My risk premium analyses produce a return estimate in the range of 18 8.90% to 9.30%, with a midpoint estimate of 9.10%.

19

#### 20 Capital Asset Pricing Model ("CAPM")

#### 21 Q PLEASE DESCRIBE THE CAPM.

22 A The CAPM method of analysis is based upon the theory that the market-required 23 rate of return for a security is equal to the risk-free rate, plus a risk premium 24 associated with the specific security. This relationship between risk and return 25 can be expressed mathematically as follows:

1  $R_i = R_f + B_i \times (R_m - R_f)$  where: 2  $R_i$  = Required return for stock i 3  $R_f = Risk-free rate$ 4  $R_m$  = Expected return for the market portfolio 5  $B_i$  = Beta - Measure of the risk for stock 6 The stock-specific risk term in the above equation is beta. Beta 7 represents the investment risk that cannot be diversified away when the security 8 is held in a diversified portfolio. When stocks are held in a diversified portfolio, 9 firm-specific risks can be eliminated by balancing the portfolio with securities that 10 react in the opposite direction to firm-specific risk factors (e.g., business cycle, 11 competition, product mix, and production limitations). 12 The risks that cannot be eliminated when held in a diversified portfolio are 13 non-diversifiable risks. Non-diversifiable risks are related to the market in 14 general and are referred to as systematic risks. Risks that can be eliminated by 15 diversification are regarded as non-systematic risks. In a broad sense, 16 systematic risks are market risks, and non-systematic risks are business risks. 17 The CAPM theory suggests that the market will not compensate investors for 18 assuming risks that can be diversified away. Therefore, the only risk that 19 investors will be compensated for are systematic or non-diversifiable risks. The 20 beta is a measure of the systematic or non-diversifiable risks.

21

#### 22 Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

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

25

# 1 Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE 2 RATE?

- A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury
   bond yield is 3.70%.<sup>24</sup> The current 30-year Treasury bond yield is 3.00%. I used
   *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 3.70%
   for my CAPM analysis.
- 7

# 8 Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN 9 ESTIMATE OF THE RISK-FREE RATE?

А Treasury securities are backed by the full faith and credit of the United States 10 11 government, so long-term Treasury bonds are considered to have negligible 12 credit risk. Also, long-term Treasury bonds have an investment horizon similar to 13 that of common stock. As a result, investor-anticipated long-run inflation 14 expectations are reflected in both common-stock required returns and long-term 15 bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and 16 real risk-free rate) included in a long-term bond yield is a reasonable estimate of 17 the nominal risk-free rate included in common stock returns.

Treasury bond yields, however, do include risk premiums related to unanticipated future inflation and interest rates. A Treasury bond yield is not a risk-free rate. Risk premiums related to unanticipated inflation and interest rates are systematic or market risks. Consequently, for companies with betas less than 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

24

<sup>24</sup>Blue Chip Financial Forecasts, June 1, 2012 at 2.

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

- A As shown in Exhibit MPG-16, the proxy group average *Value Line* beta estimate
  is 0.70.
- 4
- 5

#### Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

A I derived two market risk premium estimates, a forward-looking estimate and one
based on a long-term historical average.

8 The forward-looking estimate was derived by estimating the expected 9 return on the market (as represented by the S&P 500) and subtracting the 10 risk-free rate from this estimate. I estimated the expected return on the S&P 500 11 by adding an expected inflation rate to the long-term historical arithmetic average 12 real return on the market. The real return on the market represents the achieved 13 return above the rate of inflation.

Morningstar's *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook* publication estimates the historical arithmetic average real market return over the period 1926 to 2011 as 8.6%.<sup>25</sup> A current consensus analysts' inflation projection, as measured by the Consumer Price Index, is 2.4%.<sup>26</sup> Using these estimates, the expected market return is 11.21%.<sup>27</sup> The market risk premium then is the difference between the 11.21% expected market return, and my 3.70% risk-free rate estimate, or approximately 7.50%.

The historical estimate of the market risk premium was also estimated by Morningstar in *Stocks, Bonds, Bills and Inflation 2012 Classic Yearbook.* Over the period 1926 through 2011, Morningstar's study estimated that the arithmetic

<sup>&</sup>lt;sup>25</sup>Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook at 84. <sup>26</sup>Blue Chip Financial Forecasts, June 1, 2012 at 2. <sup>27</sup>{ [(1 + 0.086) \* (1 + 0.024)] - 1} \* 100.

average of the achieved total return on the S&P 500 was 11.8%,<sup>28</sup> and the total
return on long-term Treasury bonds was 6.1%.<sup>29</sup> The indicated market risk
premium is 5.7% (11.8% - 6.1% = 5.7%). The average of my market risk
premium estimates (7.5% to 5.7%) is 6.6%.

5

## 6 Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE 7 COMPARE TO THAT ESTIMATED BY MORNINGSTAR?

8 A Morningstar's analysis indicates that a market risk premium falls somewhere in 9 the range of 5.9% to 6.6%. My market risk premium falls in the range of 5.7% to 10 7.5%. My average market risk premium of 6.6% is at the high end of 11 Morningstar's range.

12 Morningstar estimates a forward-looking market risk premium based on 13 actual achieved data from the historical period of 1926 through 2011. Using this 14 data, Morningstar estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. 15 16 The total return includes capital appreciation, dividend or coupon reinvestment 17 returns, and annual yields received from coupons and/or dividend payments. 18 The income return, in contrast, only reflects the income return received from 19 dividend payments or coupon yields. Morningstar argues that the income return 20 is the only true risk-free rate associated with Treasury bonds and is the best approximation of a truly risk-free rate. I disagree with this assessment from 21 22 Morningstar, because it does not reflect a true investment option available to the marketplace and therefore does not produce a legitimate estimate of the 23 expected premium of investing in the stock market versus that of Treasury 24

<sup>28</sup>Morningstar, Inc. Ibbotson SBBI 2012 Classic Yearbook at 83.
 <sup>29</sup>Id.

bonds. Nevertheless, I will use Morningstar's conclusion to show the
 reasonableness of my market risk premium estimates.

3 Morningstar's range is based on several methodologies. First. 4 Morningstar estimates a market risk premium of 6.6% based on the difference 5 between the total market return on common stocks (S&P 500) less the income 6 return on Treasury bond investments. Second, Morningstar found that if the New 7 York Stock Exchange (the "NYSE") was used as the market index rather than the 8 S&P 500, that the market risk premium would be 6.4% and not 6.6%. Third, if 9 only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 5.9%.<sup>30</sup> 10

11 Finally, Morningstar found that the 6.6% market risk premium based on 12 the S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and dividend growth during the period 1980 13 Morningstar believes this abnormal P/E expansion is not 14 through 2001. 15 sustainable. Therefore, Morningstar adjusted this market risk premium estimate 16 to normalize the growth in the P/E ratio to be more in line with the growth in 17 dividends and earnings. Based on this alternative methodology, Morningstar published a long-horizon supply-side market risk premium of 6.1%.<sup>31</sup> 18

19

#### 20 Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown in Exhibit MPG-17, based on my and Morningstar's high-end market risk premium of 6.6%, a risk-free rate of 3.7%, and a beta of 0.70, my CAPM analysis produces a return of 8.32%.

<sup>&</sup>lt;sup>30</sup>Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Morningstar, Inc. Ibbotson SBBI 2012 Valuation Yearbook* at 54. <sup>31</sup>*Id.* at 66.

#### 1 <u>Return on Equity Summary</u>

2 Q BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY 3 ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO 4 YOU RECOMMEND FOR FPL? 5 Α Based on my analyses, I estimate FPL's current market cost of equity to be 9.25%. 6 7 TABLE 6 8 **Return on Common Equity Summary** 9 Description Results 10 DCF 9.40% **Risk Premium** 9.10% 11 CAPM 8.32%

13 My recommended return on common equity of 9.25% is at the midpoint of 14 my recommended range of 9.10% to 9.40%. The high-end of my recommended 15 range is based on my DCF estimate and the low-end is based on my Risk 16 Premium estimate.

17

12

#### 18 **Financial Integrity**

 19
 Q
 WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN

 20
 INVESTMENT GRADE BOND RATING FOR FPL?

21 A Yes. I have reached this conclusion by comparing the key credit rating financial

22 ratios for FPL, at my proposed return on equity and capital structure, to S&P's

23 benchmark financial ratios using S&P's new credit metric ranges.

24

25

## 1 Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT 2 METRIC METHODOLOGY.

S&P publishes a matrix of financial ratios that correspond to its assessment of 3 А 4 the business risk of the utility company and related bond rating. On May 27, 2009, S&P expanded its matrix criteria<sup>32</sup> by including additional business and 5 6 financial risk categories. Based on S&P's most recent credit matrix, the business 7 risk profile categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and 8 "Vulnerable." Most electric utilities have a business risk profile of "Excellent" or 9 "Strong." The financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the 10 electric utilities have a financial risk profile of "Aggressive." FPL has an 11 12 "Excellent" business risk profile and a "Significant" financial risk profile.

13

# 14 Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS 15 IN ITS CREDIT RATING REVIEW.

16 A S&P evaluates a utility's credit rating based on an assessment of its financial and 17 business risks. A combination of financial and business risks equates to the 18 overall assessment of FPL's total credit risk exposure. S&P publishes a matrix of 19 financial ratios that defines the level of financial risk as a function of the level of 20 business risk.

21 S&P publishes ranges for three primary financial ratios that it uses as 22 guidance in its credit review for utility companies. The three primary financial 23 ratio benchmarks it relies on in its credit rating process include: (1) Total Debt to

<sup>&</sup>lt;sup>32</sup>S&P updated its original 2007 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's:* "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1		Total Capital; (2) Debt to Earnings Before Interest, Taxes, Depreciation and
2		Amortization ("EBITDA"); and (3) Funds From Operations ("FFO") to Total Debt.
3		
4	Q	HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE
5		REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?
6	Α	I calculated each of S&P's financial ratios based on FPL's cost of service for its
7		Florida jurisdictional electric operations. While S&P would normally look at total
8		consolidated FPL financial ratios in its credit review process, my investigation in
9		this proceeding is not the same as S&P's. I am attempting to judge the
10		reasonableness of my proposed cost of capital for rate-setting in FPL's Florida
11		regulated utility operations. Hence, I am attempting to determine whether my
12		proposed rate of return will in turn support cash flow metrics, balance sheet
13		strength, and earnings that will support an investment grade bond rating and
14		FPL's financial integrity.
15		
16	Q	DID YOU INCLUDE ANY OFF-BALANCE SHEET DEBT ("OBSD")?
17	Α	Yes. In its most recent report, S&P estimated off-balance sheet debt equivalents
18		of \$922 million attributed to FPL's purchased power agreements ("PPA").
19		
20	Q	PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS
21		FOR FPL.
22	А	The S&P financial metric calculations for FPL at a 9.25% return are developed on
23		Exhibit MPG-18, page 1.
24		FPL's adjusted total debt ratio is approximately 44%. This is at the high
25		end of the "Intermediate" utility guideline range of 35% to 45%. This total debt

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1		ratio will support an investment grade bond rating.
2		As shown on Exhibit MPG-18, page 1, column 1, based on an equity
3		return of 9.25%, FPL will be provided an opportunity to produce a debt to
4		EBITDA ratio of 2.9x. This is at the high end of S&P's "Intermediate" guideline
5		range of 2.0x to 3.0x.33 This ratio also supports an investment grade credit
6		rating.
7		Finally, FPL's retail operations FFO to total debt coverage at a 9.25%
8		equity return would be 25%, which is within the "Significant" metric guideline
9		range of 20% to 30%. The FFO/total debt ratio will support an investment grade
10		bond rating.
11		At my recommended return on equity of 9.25% and proposed capital
12		structure, FPL's financial credit metrics are supportive of its current investment
13		grade utility bond rating.
14		
15		RESPONSE TO FPL WITNESS DR. WILLIAM AVERA
16	Q	WHAT IS FPL'S RETURN ON EQUITY RECOMMENDATION?
17	Α	FPL's rate of return witness, Dr. Avera, recommends a return on equity of
18		11.25%, which is the midpoint of his recommended range of 10.25% to 12.25%
19		after his 15 basis point adjustment for flotation costs. (Avera Direct at 80). He
20		also supports FPL's 25 basis points efficiency adder request (Avera Direct at 81).
21		
22		
23		

<sup>&</sup>lt;sup>33</sup>Standard & Poor's RatingsDirect. "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009 at 4.

1	Q	HOW DID DR. AVERA DEVELOP HIS RETURN ON EQUITY RANGE?
2	Α	Dr. Avera developed his return on equity recommendation by applying the DCF
3		model to a utility proxy group and a non-utility proxy group. He also used a
4		CAPM, RP and Comparable Earnings Model ("CEM") to support his
5		recommendation. Dr. Avera arrived at his recommendations by reviewing FPL's
6		business operations, market conditions, and utility industry trends at the time of
7		his analysis.
8		
9	Q	PLEASE SUMMARIZE DR. AVERA'S PROPOSED RETURN ON EQUITY FOR
10		FPL.
11	Α	As shown below in Table 7, his analyses produce a return on equity in the range
12		of 9.6% to 12.3%. He then included a flotation adder of 15 basis points, and
13		concluded that a reasonable return on equity for FPL is in the range of 10.25% to
14		12.25%, with a midpoint of 11.25%. However, as I will discuss in more detail
15		below, making reasonable adjustments to Dr. Avera's DCF, CAPM and RP
16		studies reduces his return on equity estimate for FPL to the range of 9.0% to
17		9.5%. Dr. Avera's flotation cost return on equity adder should be rejected.
18		
19		
20		
21		
22		
23		
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25		

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	TAI	BLE 7	
	<u>Dr. Avera's Return</u>	n on Equity Analy	<u>'sis</u>
	Model	Avera Proposed	Adjusted
	DCF (Utility)	9.6% - 10.3%	9.5%
	DCF (Non-Utility)	11.5% - 12.3%	Reject
	CAPM (Current)	40.407	7 00/
	Size Adjusted	10.4%	7.6% Reiect
	Unadiusted	10.8%	8.9%
	Size Ádjusted	11.6%	Reject
	Risk Premium		
	Current	9.6%	8.6%
	Projected	10.4%	Reject
	Expected Earnings		
	2014-16	10.5%	Reject
	Othinty Proxy Group	12.0%	Reject
	Recommended ROE*	11.25%	9.0% - 9.5%
	Efficiency Adder	0.25%	
	Adjusted Recommended ROE	11.50%	
	Source: Exhibit WEA-13, page 1 o	f 1.	
	*The recommended ROE includes	a flotation cost add	er of 15 basis
	points.		
Q	DO YOU HAVE COMMENTS REL	ATED TO THE R	ESULTS PRE
	DR. AVERA'S DIRECT TESTIMON	Y?	
Α	Yes. Dr. Avera's results are unrelia	ble because they a	are derived from
	His DCF results reflect stock prices	, dividends and gr	owth rates as o
	•	U	

25 2011. Similarly, his CAPM and risk premium studies reflect Treasury and utility

1 2 yield as of December 2011. Therefore, Dr. Avera's studies should be rejected because they do not reflect the current market environment.

3

#### 4 Q WHY IS DR. AVERA'S FLOTATION COST ADJUSTMENT FLAWED?

5 А Dr. Avera's proposed 0.15% flotation cost adjustment is not based on the 6 recovery of prudent and reasonable FPL flotation cost expenses. Rather, as 7 discussed at pages 70-72 of Dr. Avera's direct testimony, he derives a flotation 8 cost adjustment based on generic cost information which followed a study from 9 published literature. Because he does not show that his adjustment is based on 10 FPL's actual and verifiable flotation expenses, however, there simply are no 11 means of verifying whether Dr. Avera's proposal is reasonable or appropriate nor 12 whether it is based on known and measurable FPL costs.

13

#### 14 Q PLEASE DESCRIBE DR. AVERA'S DCF ANALYSIS.

15 A Dr. Avera applied the traditional DCF model to two proxy groups that he 16 concludes have reasonably comparable risk to FPL. Based on his utility group, 17 the DCF results yield a return in the range of 9.6% to 10.3%. Dr. Avera's 18 non-utility group includes companies operating in various industries followed by 19 *Value Line*. Based on this non-utility group, his DCF analysis produces a return 20 on equity in the range of 11.5% to 12.3% (Exhibit WEA-13, page 1 of 1).

- 21
- 22

#### 2 Q DO YOU TAKE ISSUE WITH DR. AVERA'S DCF ANALYSES?

A Yes. I have two major issues concerning his DCF analysis. First, his use of a
non-utility proxy group does not reliably estimate a fair return for FPL. Therefore,
the DCF results produced by his non-utility proxy group should be rejected.

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1 Second, Dr. Avera's proxy group includes a company that is subject to an 2 acquisition. Third, Dr. Avera's DCF model is based on growth rates that are not 3 sustainable in the long-run as required by the constant growth DCF model. 4 5 Q WHY . DO YOU CONSIDER DR. AVERA'S NON-UTILITY GROUP 6 **UNREASONABLE?** 7 А The companies included in Dr. Avera's non-utility proxy group are subject to risks 8 that are different from those affecting FPL's utility operations. As noted by the 9 major credit rating agencies, the utility industry has relatively low risk in 10 comparison with the market. Indeed, the regulatory process itself provides an 11 effective mechanism to mitigate some of the market risks influencing the U.S. 12 economy. Therefore, using Dr. Avera's non-utility proxy group, which is much 13 riskier than the utility industry, will produce an unreliable and inflated return on equity for a low-risk utility like FPL. Therefore, the Commission should disregard 14 15 the results of Dr. Avera's non-utility group.

16

17

18

### Q CAN YOU PROVIDE AN EXAMPLE OF WHY DR. AVERA'S NON-UTILITY GROUP IS NOT A REASONABLE RISK PROXY GROUP FOR FPL?

19 A Yes. One criterion that Dr. Avera uses to select a comparable risk non-utility 20 group in order to estimate FPL's return on equity, is to compare FPL's bond 21 rating to that of the non-regulated group. (Exhibit WEA-3). While this is a 22 reasonable method of estimating and identifying comparable proxy groups within 23 the industry, doing it across industries is not as straightforward and not as 24 reliable. For example, if bond rating alone would adequately help to identify 25 comparable risk companies across industries, then there should not be any

1 observable clear differences in the investment cost for securities that had 2 different bond ratings. However, the industry or circumstances behind the 3 security have a material role in the market's assessment of a fair compensation. For example, U.S. Treasury bonds have a bond rating from Moody's of "AAA." 4 5 The current yield on a U.S. Treasury bond is around 3.10%. In comparison, 6 corporate bonds with a "AAA" rating currently have costs of approximately 3.90%.<sup>34</sup> A corporate bond is approximately 0.80% more expensive than a 7 8 Treasury bond, despite the fact that it has the same bond rating.

9 While "AAA" corporate bonds and U.S. Treasuries have comparable bond 10 ratings, the risk differential is significant largely because of the operating risk 11 differences between the securities. The U.S. government has virtually minimal 12 default risk on its bond issuances, whereas even a "AAA" rated corporate bond 13 has measurable default risk. Similarly, regulated utility operations and the ability 14 to adjust prices to cost of service provide far less default risk than that of 15 non-regulated companies. A regulated company simply has a franchise to a 16 monopolistic service territory, the ability to set prices based on reasonable and 17 prudent costs, and minimal competition. In significant contrast, a non-regulated 18 entity does not have a franchised or monopolistic customer base, must price its services consistent with what the market will permit, and has far more uncertainty 19 20 of selling products that produce cash flows that support financial obligations.

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<sup>34</sup>Blue Chip Financial Forecasts, June 1, 2012 at 2.

### 1 Q YOU STATED THAT DR. AVERA INCLUDED A COMPANY SUBJECT TO AN 2 ACQUISITION. PLEASE EXPLAIN.

A As discussed earlier in my testimony, on page 34 of his direct testimony, Dr.
Avera explained that he excluded two companies because they were subject to
mergers and acquisitions. However, he did not exclude ITC Holdings Corp.,
which is in the process of acquiring Entergy's transmission assets as announced
on December 4, 2011, and, therefore, fails to meet his proxy group selection
criterion.

9

# 10 Q WHY DO YOU BELIEVE THAT THE GROWTH RATES USED IN DR. AVERA'S 11 DCF STUDY ARE NOT A REASONABLE PROXY FOR LONG-TERM 12 SUSTAINABLE GROWTH?

- A Dr. Avera's DCF results are produced by growth rates in the range of 5.1% to
  5.7% as shown on my Exhibit MPG-19. As explained in regards to my own DCF
  study, utility earnings growth cannot exceed the growth of the economy in the
  service territory where it sells its goods and services. Therefore, the GDP growth
  rate is considered a ceiling or a proxy for a maximum sustainable growth rate.
- 18

# 19 Q HOW WILL DR. AVERA'S DCF RETURN CHANGE IF A MULTI-STAGE 20 GROWTH MODEL IS APPLIED?

A I have applied a multi-stage growth DCF model to Dr. Avera's utility proxy group by using the average of his five growth rate estimates for the first stage, which includes the period from year 1 to year 5. The second stage is the transition stage from year 6 to year 10. For the third growth rate stage, which starts in year 11 to perpetuity, I used the projected average 5- to 10-year GDP growth rate of 4.9%. Applying the multi-stage growth DCF version to Dr. Avera's utility group
 yields average and median DCF returns of 9.6% and 9.5%, respectively, as
 shown in Exhibit MPG-20.

4

# 5 Q PLEASE DESCRIBE DR. AVERA'S FORWARD-LOOKING MARKET RISK 6 PREMIUM CAPM ANALYSES.

7 Dr. Avera developed two CAPM analyses based on current and projected Α 8 Treasury bond yields. Dr. Avera estimates a forward-looking return on the 9 market of 13.5%. From this market return estimate he subtracts his risk-free 10 rate, and the current and projected long-term Treasury bond yields of 3.0% and 11 4.3%, respectively, to arrive at a market risk premium of 10.5% and 9.2%. He 12 relies on the average utility beta of 0.70 for the companies included in his proxy 13 group to produce an implied cost of equity for his utility group in the range of 10.4% to 10.8%.<sup>35</sup> He then adds a size adjustment to his CAPM return estimate 14 15 of 0.81% to arrive at his implied cost of equity for the utility proxy group in the 16 range of 11.2% to 11.6%. (Avera Direct, Exhibit WEA-9).

17

#### 18 Q IS DR. AVERA'S FORWARD-LOOKING CAPM ANALYSIS REASONABLE?

19 A No. Dr. Avera's CAPM analysis is based on a market risk premium in the range 20 of 9.2% to 10.5%. This market risk premium is significantly higher than the 21 historical market risk premium of 6.6%. Dr. Avera's 13.5% projected market 22 return used to derive the market risk premium of 9.2% to 10.5% is highly inflated 23 and unreliable. This market return estimate is based on a DCF analysis that 24 includes a growth rate projection of 10.9% and a dividend yield of 2.6%.

<sup>35</sup>Exhibit WEA-9.

1 Dr. Avera's risk premium is dramatically overstated because it is based on a DCF 2 return produced by irrationally high growth outlooks, and is, therefore, not 3 reliable.

4 Specifically, it is simply irrational to expect that securities market capital appreciation and growth will be at 10.9% for an indefinite period of time, as 5 6 reflected in Dr. Avera's market study. This is important because the DCF model 7 requires a sustainable long-term growth rate, not simply a growth rate that might 8 be appropriate for the next five years. The growth rate for the overall securities 9 market must reflect the economy in which its companies operate, and the 10 earnings and dividend-paying ability of those companies. Companies produce 11 earnings and dividends by selling goods and services in the marketplace. 12 Hence, companies' earnings growth and sales growth opportunities cannot be 13 substantially in excess of the expected growth in the overall economy. It is 14 simply not a rational expectation to believe that, for an extended period of time, 15 the growth rate of companies will exceed the growth of the overall economy in which they sell their goods and services. As I mentioned above, Blue Chip 16 17 Financial Forecasts projects an average 5- to 10-year nominal growth in the GDP, or overall U.S. economy, of 4.9%.<sup>36</sup> Hence, expecting a growth rate of 18 19 10.9%, in essence, assumes that the securities market can grow at a rate more 20 than twice that of the overall U.S. economy. This is simply not a rational 21 expectation.

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<sup>36</sup>Blue Chip Financial Forecasts, June 1, 2012.

1 Q IS DR. AVERA'S PROPOSAL TO INCREASE HIS CAPM RETURN ESTIMATE 2 BY 0.8% TO REFLECT A SIZE ADJUSTMENT APPROPRIATE?

No. Dr. Avera's size adjustment is based on estimates made by Morningstar in 3 Α its Ibbotson SBBI 2011 Valuation Yearbook. In that publication, Morningstar 4 estimates various size adjustments based on differentials in utility beta estimates 5 tied to the size of a company. The size adjustment recommended by Dr. Avera 6 reflects companies that have beta estimates in excess of 1.00.37 These beta 7 8 estimates are substantially higher than the beta estimates of 0.70 for the proxy 9 utility group used by Dr. Avera as reflective of FPL's investment risk. Therefore, 10 his beta estimates produce a CAPM return estimate that is not risk comparable to 11 FPL and therefore, is not reasonable for setting a fair return for FPL.

12

# 13QHOW WOULD DR. AVERA'S FORWARD-LOOKING CAPM RETURN14ESTIMATE CHANGE IF A REASONABLE FORWARD-LOOKING MARKET15RISK PREMIUM WERE USED?

A Applying a market risk premium estimate of 6.6%, a beta of 0.70 and using
Dr. Avera's current and projected risk-free rates of 3.0% and 4.3%, respectively,
will produce a CAPM return in the range of 7.62% to 8.92%, rounded to 7.6%
and 8.9%.

20

#### 21 Q PLEASE DESCRIBE DR. AVERA'S UTILITY RISK PREMIUM ANALYSIS.

A Dr. Avera's utility bond yield versus authorized return on common equity risk
 premium is shown in Exhibit WEA-11. As shown on page 3 of this exhibit,
 Dr. Avera estimated an annual equity risk premium by subtracting Moody's

<sup>37</sup>2011 SBBI Valuation Yearbook at 90.

average bond yield from the electric utility regulatory commission authorized
 return on common equity over the period 1974 through 2011. Based on this
 analysis, Dr. Avera estimates an average indicated equity risk premium over
 current utility bond yields of 3.41%.

Dr. Avera then adjusts this average equity risk premium using a 5 regression analysis based on an expectation that there is an ongoing inverse 6 7 relationship between interest rates and equity risk premiums. Based on this regression analysis, Dr. Avera increases his equity risk premium from 3.41%, up 8 9 to 5.24% and 4.68% relative to the current and projected average bond yields. 10 He then adds these inflated equity risk premiums to the current and projected "A" 11 rated utility bond yields of 4.33% and 5.72%, respectively, to produce a return on 12 equity of 9.57% and 10.40%, respectively.

13

#### 14

#### Q ARE DR. AVERA'S UTILITY RISK PREMIUM ANALYSES REASONABLE?

15 А No. Dr. Avera develops a forward-looking risk premium model relying on 16 forecasted interest rates and volatile utility yield spreads, which are highly 17 uncertain and prone to inaccurate results. Further, Dr. Avera's proposal to adjust 18 the actual equity risk premium of 3.41% to 5.24% and 4.68% to reflect an inverse 19 relationship between interest rates and utility equity risk premiums is flawed and 20 not reliable. This adjustment is inappropriate and not consistent with academic 21 literature that finds that this relationship should change with risk changes and not 22 simply changes to interest rates.

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## 1 Q DO YOU HAVE ANY COMMENTS CONCERNING DR. AVERA'S 2 FORECASTED UTILITY YIELD OF 5.72%?

Yes. Dr. Avera develops his forecasted utility yield based on the 6-month 3 А 4 historical spreads of "BBB-AA" and "A-AA" rated utility bond yields of 0.90% and 5 0.28%, respectively, added to his projected "AA" utility bond yield of 5.44%. (Exhibit WEA-6). This approach is unreasonable because Dr. Avera relies 6 7 exclusively on projected interest rates. The accuracy of his projections is highly 8 problematic. Indeed, while interest rates have been projected to increase over 9 the last several years, those increased interest rate projections have turned out to 10 be wrong.

11

# 12 Q WHY DO YOU BELIEVE THAT THE ACCURACY OF FORECASTED 13 INTEREST RATES IS HIGHLY PROBLEMATIC?

A Over the last several years, observable current interest rates have been a more accurate predictor of future interest rates than economists' consensus projections. Exhibit MPG-21 illustrates this point. On this exhibit, under Columns 1 and 2, I show the actual market yield at the time a projection is made for Treasury bond yields two years in the future. In Column 1, I show the actual Treasury yield and, in Column 2, I show the projected yield two years out.

As shown in Columns 1 and 2, over the last several years, Treasury yields were projected to increase relative to the actual Treasury yields at the time of the projection. In Column 4, I show what the Treasury yield actually turned out to be two years after the forecast. Under Column 5, I show the actual yield change at the time of the projections relative to the projected yield change.

25

As shown in this exhibit, over the last several years, economists consistently have been projecting that interest rates will increase. However, as demonstrated under Column 5, those yield projections have turned out to be overstated in virtually every case. Indeed, actual Treasury yields have decreased or remained flat over the last five years, rather than increase as the economists' projections indicated. As such, current observable interest rates are just as likely to predict future interest rates as are economists' projections.

8

9 Q WHY IS DR. AVERA'S USE OF A SIMPLE INVERSE RELATIONSHIP 10 BETWEEN INTEREST RATES AND EQUITY RISK PREMIUMS NOT 11 REASONABLE?

- 12 A Equity risk premiums change with the market's perception of the risk of stock 13 investments versus bond investments. This risk relationship depends on many 14 factors including the level of nominal interest rates. Dr. Avera's approach simply 15 ignores all other relevant factors that help to properly gauge the level of equity 16 risk premiums, except for changes in interest rates. Hence, Dr. Avera's simplistic 17 equity risk premium model is unreliable and flawed.
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 19
 Q
 WHY DO YOU BELIEVE EQUITY RISK PREMIUMS VARY BY CHANGES IN

 20
 RISK PERCEPTION AND NOT ONLY INTEREST RATE CHANGES?

A Academic studies have shown that, in the past, the relationship between equity
 risk premiums and interest rates changes over time and is influenced by changes

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- in perception of the risk of bond investments relative to equity investments, and
   not simply changes to interest rates.<sup>38</sup>
- In the 1980s, equity risk premiums were inversely related to interest rates, but that was likely attributable to the interest rate volatility that existed at that time. Interest rate volatility currently is much lower than it was in the 1980s.<sup>39</sup> As such, when interest rates were more volatile, the relative perception of bond investment risk increased relative to the investment risk of equities. This changing investment risk perception caused changes in equity risk premiums.

9 In today's marketplace, interest rate variability is not as extreme as it was 10 Nevertheless, changes in the perceived risk of bond during the 1980s. 11 investments relative to equity investments still drive changes in equity premiums. 12 However, a relative investment risk differential cannot be measured simply by 13 observing nominal interest rates. Changes in nominal interest rates are highly 14 influenced by changes to inflation outlooks, which also change equity return 15 expectations. As such, the relevant factor needed to explain changes in equity 16 risk premiums is the relative changes to the risk of equity versus debt securities investments, not simply changes to interest rates. 17

18 Importantly, Dr. Avera's analysis simply ignores investment risk 19 differentials. He bases his adjustment to the equity risk premium exclusively on 20 changes in nominal interest rates. This is a flawed methodology and does not 21 produce accurate or reliable risk premium estimates. His results should be 22 rejected by the Commission.

 <sup>&</sup>lt;sup>38</sup> The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts,"
 Robert S. Harris and Felicia C. Marston, *Journal of Applied Finance*, Volume 11, No. 1, 2001 and
 "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Eugene F. Brigham, Dilip K.
 Shome, and Steve R. Vinson, *Financial Management*, Spring 1985.
 <sup>39</sup> Morningstar SBBI, 2009 Yearbook at 95-96.

# 1QCAN DR. AVERA'S RISK PREMIUM ANALYSES BASED ON CURRENT AND2PROJECTED YIELDS BE MODIFIED TO PRODUCE MORE REASONABLE3RESULTS?

A Yes. Eliminating the inverse relationship adjustment to the equity risk premium
of 3.41% and relying on Dr. Avera's current "A" rated utility yield of 4.33% will
result in a return on equity risk premium of 7.74%, rounded to 7.7%. Using
Dr. Avera's 2011 equity risk premium of 5.09% as shown on page 3 of his Exhibit
WEA-11 and his current "A" rated utility yield of 4.33% will result in a return of
9.42%, rounded to 9.4%. Therefore, Dr. Avera's risk premium will be in the
range of 7.7% to 9.4%, with a midpoint of 8.6%.

11

#### 12 Q PLEASE DESCRIBE DR. AVERA'S COMPARABLE EARNINGS ANALYSIS.

13 A Dr. Avera's comparable earnings analysis is based on *Value Line*'s projected 14 earned return on book equities for his utility proxy group, adjusted to reflect 15 average year equity returns. Based on a review of projected earnings over the 16 next three to five years, and using this methodology, Dr. Avera estimates a return 17 on equity for FPL of 12.0% (Avera Direct at 70). Based on *Value Line* electric 18 utility industry projections, Dr. Avera estimates the return on equity for FPL to be 10.5%. (Avera Direct at 69).

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# 1QIS THE COMPARABLE EARNINGS ANALYSIS A REASONABLE METHOD2FOR ESTIMATING A FAIR RETURN ON EQUITY FOR FPL?

3 No. A comparable earnings analysis does not measure the return an investor А requires in order to make an investment. Rather, it measures the earned return 4 on book equity that companies have experienced in the past or are projected to 5 6 achieve in the future. The returns investors require in order to assume the risk of 7 an investment are measured from prevailing stock market prices. A comparable 8 earnings analysis measures an accounting return on book equity. Therefore, 9 such a return is not developed from observable market data. A return estimate 10 using a comparable earnings analysis can differ significantly from the return 11 investors currently require. Therefore, Dr. Avera's comparable earnings 12 approach should be rejected.

13

#### 14 Return on Equity Performance Adder

# 15 Q PLEASE DESCRIBE FPL'S PROPOSED 25 BASIS POINTS RETURN ON 16 EQUITY PERFORMANCE ADDER.

17 A The performance adder rationale is described in FPL witnesses Dewhurst's and 18 Deaton's testimony. The witnesses state that FPL is proposing a 25 basis point 19 return on equity performance adder that will be applied if FPL's residential 20 electric bill is the lowest of residential bills of other Florida utilities. The 25 basis 21 points adder will continue to be included in the development of FPL's rates as 22 long as FPL's residential rate bill is the lowest in the state over succeeding 23 12-month averages. (Deaton Direct at 23).

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# 1 Q IS THE COMPANY'S PROPOSAL FOR A 25 BASIS POINTS RETURN ON 2 EQUITY PERFORMANCE ADDER REASONABLE?

As outlined in greater detail above, the Company's financial risk is 3 No. А significantly mitigated through an excessive common equity ratio, and its 4 operating risk is reduced through implementation of several regulatory tracker 5 6 mechanisms. This risk reduction rewards FPL's shareholders through lower investment risks via lower financial risk and lower operating risk. A return on 7 8 equity performance adder is neither reasonable nor warranted for FPL. Indeed, 9 my recommended return on equity already awards FPL fair compensation.

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# 11 Q WOULD A RETURN ON EQUITY PERFORMANCE ADDER INCENTIVIZE FPL

#### 12 TO KEEP COSTS LOW?

13 Α No. The Company's proposal will justify a return on equity performance adder 14 based on maintaining competitive "residential" rates alone. This incentive then produces an economic reward for FPL to erroneously shift costs to non-15 residential customers, in an effort to keep its residential costs low and thus justify 16 17 its return on equity incentive. Setting rates to encourage a bias in class cost of 18 service and rate designs for non-residential customers is inefficient and should 19 be rejected. Indeed, the Company's incentive to keep residential rates low, even 20 at the expense of inflating non-residential rates, can hurt economic development 21 of its service territory, harm its business customers, and negatively impact its 22 service area economy. For all these reasons, FPL's proposal for a return on 23 equity performance adder should be rejected.

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#### 1 Proposed Step Increase

### 2 Q IS FPL PROPOSING A STEP INCREASE FOR ITS CAPE CANAVERAL 3 MODERNIZATION INVESTMENT?

A Yes. FPL projects that its Cape Canaveral Modernization investment is projected
to be placed in-service around June of 2013, however the actual in-service date
is not known and measurable. Therefore, the Company is proposing to remove
the Cape Canaveral costs from base rates, and include it in a Cape Canaveral
step adjustment that will go into effect after the Cape Canaveral project is inservice. (Ousdahl Direct at 11).

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### 11 Q DO YOU BELIEVE THE COMPANY'S PROPOSAL FOR A STEP INCREASE IS 12 REASONABLE?

- 13 А I appreciate the uncertainty of how long the Cape Canaveral project will actually be in-service during the 2013 forecasted test year, therefore it is difficult to 14 15 accurately adjust base rates to include the in-service timing of this investment. 16 However, the actual level of this investment is not so significant that it deserves 17 such extraordinary rate treatment. Indeed, the Company's estimate of the 18 revenue requirement to Cape Canaveral in the Step Increase is \$174 million, 19 excluding the return on equity performance adder. This is less than 33% of total 20 base rate revenues. The revenue requirement of this project assuming it is in-21 service 7 of the 13 months of the forecasted test year would be approximately 22 \$20 million less than that included in the Step Increase.
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### 1 Q DO YOU BELIEVE THAT FPL HAS ACCURATELY REMOVED ALL CAPE 2 CANAVERAL COSTS FROM BASE RATES?

It does not appear so but I cannot say for certain. Therefore, I recommend FPL 3 А 4 be required to demonstrate that the amount of construction work in progress ("CWIP") proposed to be included in rate base on Schedule B-13, page 2 5 (\$520,809), does not include any Cape Canaveral Modernization costs or related 6 7 transmission investment. The amount of CWIP proposed to be included in rate base by the Company appears to be approximately equal to the amount of the 8 9 Cape Canaveral project and transmission-related investments during the 10 13-month projected test year period. However, I cannot determine accurately 11 what is included in the CWIP in rate base amount based on the Company's filing.

12 Therefore, I recommend that if the Commission approves the Step 13 Increase, and carve-out of Cape Canaveral costs, then it should require FPL to detail what is included in CWIP to be included in rate base and prove that the 14 15 CWIP in rate base balance does not include any Cape Canaveral and related 16 transmission investment costs. If the CWIP in rate base balance does include 17 Cape Canaveral costs, then those costs should also be removed from base 18 rates, consistent with pulling all other Cape Canaveral costs out of base rates. If 19 the CWIP adjustment is not made, then FPL will over-recover its Cape Canaveral 20 costs once the Step Increase goes into effect.

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#### Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

23 A Yes, it does.

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#### **Qualifications of Michael P. Gorman** 1 2 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. Michael P. Gorman. My business address is 16690 Swingley Ridge Road, 3 Α 4 Suite 140, Chesterfield, MO 63017. 5 PLEASE STATE YOUR OCCUPATION. 6 Q 7 А I am a consultant in the field of public utility regulation and a Managing Principal 8 with Brubaker & Associates, Inc., energy, economic and regulatory consultants. 9 PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK 10 Q 11 EXPERIENCE. 12 Α In 1983 I received a Bachelors of Science Degree in Electrical Engineering from 13 Southern Illinois University, and in 1986, I received a Masters Degree in Business Administration with a concentration in Finance from the University of 14 15 Illinois at Springfield. I have also completed several graduate level economics 16 courses. In August of 1983, I accepted an analyst position with the Illinois 17 18 Commerce Commission ("ICC"). In this position, I performed a variety of anal-19 yses for both formal and informal investigations before the ICC, including:

20 marginal cost of energy, central dispatch, avoided cost of energy, annual system 21 production costs, and working capital. In October of 1986, I was promoted to the 22 position of Senior Analyst. In this position, I assumed the additional respon-23 sibilities of technical leader on projects, and my areas of responsibility were 24 expanded to include utility financial modeling and financial analyses.

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#### BRUBAKER & ASSOCIATES, INC.

#### Appendix A of Michael P. Gorman FPSC Docket No. 120015-El Page 2

In 1987, I was promoted to Director of the Financial Analysis Department.
In this position, I was responsible for all financial analyses conducted by the staff.
Among other things, I conducted analyses and sponsored testimony before the
ICC on rate of return, financial integrity, financial modeling and related issues. I
also supervised the development of all Staff analyses and testimony on these
same issues. In addition, I supervised the Staff's review and recommendations
to the Commission concerning utility plans to issue debt and equity securities.

8 In August of 1989, I accepted a position with Merrill-Lynch as a financial 9 consultant. After receiving all required securities licenses, I worked with indi-10 vidual investors and small businesses in evaluating and selecting investments 11 suitable to their requirements.

12 In September of 1990, I accepted a position with Drazen-Brubaker & 13 Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. 14 ("BAI") was formed. It includes most of the former DBA principals and Staff. 15 Since 1990, I have performed various analyses and sponsored testimony on cost 16 of capital, cost/benefits of utility mergers and acquisitions, utility reorganizations, 17 level of operating expenses and rate base, cost of service studies, and analyses 18 relating industrial jobs and economic development. I also participated in a study 19 used to revise the financial policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have participated in rate

BRUBAKER & ASSOCIATES, INC.

cases on rate design and class cost of service for electric, natural gas, water and
 wastewater utilities. I have also analyzed commodity pricing indices and forward
 pricing methods for third party supply agreements, and have also conducted
 regional electric market price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices
in Phoenix, Arizona and Corpus Christi, Texas.

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#### 8 Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

9 А Yes. I have sponsored testimony on cost of capital, revenue requirements, cost 10 of service and other issues before the Federal Energy Regulatory Commission 11 and numerous state regulatory commissions including: Arkansas, Arizona, 12 California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, 13 Kansas, Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New 14 York, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, 15 Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and 16 before the provincial regulatory boards in Alberta and Nova Scotia, Canada. I 17 have also sponsored testimony before the Board of Public Utilities in Kansas 18 City, Kansas; presented rate setting position reports to the regulatory board of 19 the municipal utility in Austin, Texas, and Salt River Project, Arizona, on behalf of 20 industrial customers; and negotiated rate disputes for industrial customers of the 21 Municipal Electric Authority of Georgia in the LaGrange, Georgia district.

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BRUBAKER & ASSOCIATES, INC.

1	Q	PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR
2		ORGANIZATIONS TO WHICH YOU BELONG.
3	А	I earned the designation of Chartered Financial Analyst ("CFA") from the CFA
4		Institute. The CFA charter was awarded after successfully completing three
5		examinations which covered the subject areas of financial accounting,
6		economics, fixed income and equity valuation and professional and ethical
7		conduct. I am a member of the CFA Institute's Financial Analyst Society.
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#### Rate of Return Adjusted Capital Structure <u>2013 Test Year</u>

<u>Line</u>	Description	<u>Ar</u>	<u>nount (000)</u> (1)	<u>A</u>	Specific diustments (2)	<u>A</u>	Pro Rata diustments (3)	Ju	ris Adjusted <u>Amount</u> (4)	<u>Weight</u> (5)	<u>Cost</u> (6)	Weighted <u>Cost</u> (7)
1	Long-Term Debt*	\$	8,323,729	\$	(678,773)	\$	(1,459,285)	\$	6,258,221	29.33%	5.08%	1.49%
2	Customer Deposits	\$	515,139	\$	-	\$	(98,331)	\$	416,808	1.95%	5.99%	0.12%
3	Common Equity	\$	12,271,648	\$	(329,728)	\$	(2,279,499)	\$	9,463,336	44.35%	9.25%	4.10%
4	Short-Term Debt	\$	444,601	\$	-	\$	(84,866)	\$	352,323	1.65%	2.11%	0.03%
5	Deferred Income Tax	\$	5,610,164	\$	(227,260)	\$	(538,067)	\$	4,844,837	22.71%	0.00%	0.00%
6	Investment Tax Credit	<u>\$</u>	169,377	\$	(168.239)	<u>\$</u>	(196)	<u>\$</u>	923	<u>0.00%</u>	7.41%	0.00%
7	Total	\$	27,334,658	\$	(1,404,000)	\$	(4,460,245)	\$	21,336,448	100.00%		5.74%

#### Investor-Supplied Capital Structure

<u>Line</u>	<b>Description</b>	An	Adjusted 1 <u>ount (000)**</u> (1)	<u>Weight</u> (2)	<u>A</u>	djustments (3)	Adjusted <u>Amount</u> (4)	<u>Weight</u> (5)	<u>Cost</u> (6)	Weighted <u>Cost</u> (7)
8	Long-Term Debt	\$	7,644,956	37.21%	\$	(1,459,285)	\$ 6,258,221	37.51%	5.08%	1.90%
9	Customer Deposits	\$	515,139	2.51%	\$	(98,331)	\$ 608,220	3.65%	5.99%	0.22%
10	Short-Term Debt	\$	444,601	2.16%	\$	(84,866)	\$ 352,323	2.11%	2.11%	0.04%
12	Common Equity	\$	11,941,920	<u>58.12%</u>	\$	(2,279,499)	\$ 9,463,336	<u>56.73%</u>	9.25%	<u>5.25%</u>
13	Total	\$	20,546,616	100.00%	\$	3,921,982	\$ 16,682,100	100.00%		7.41%

Source:

Schedule D-1a.

\* The long-term debt balance reflects an additional \$200 million debt issuance in May 2012 and 80 basis points reduced cost of projected debt issuances.

\*\* Sum of Columns 1 and 2, Lines 1, 3, and 4.

### **Base Rate Allocation**

Line	Description	Amount
1	Plant in Service: Base Rate Retail	\$ 30,424,227
2	Plant in Service: Total Utility	\$ 35,230,269
3	Base Rate Allocation	86.36%
4	Other Allocation	13.64%
5	Deferred Income Tax	\$ 5,610,164
6	Base Rate	\$ 4,844,837
7	Other	\$ 765,327

Source: Schedule B-1.

#### Embedded Cost of Debt (Adjusted)

	Description/	Da	rte			Amoun	t (\$0	)00)	. 1	Disc (Prem)		issuance		Annual		Interest		Total
Line	Coupon Rate	<u>Issuance</u>	<u>Maturity</u>	Years	E	Principal	Qu	tstanding	ŝ	on Principal		<u>Expense</u>	An	nortization		Expense	An	nual Cost
	(1)	(2)	(3)	(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)
	First Mortgage Bo	onds:																
1	5.625%	Apr-03	Apr-34	31.01	\$	500,000	\$	500,000	\$	6,480	\$	2,199	\$	280	\$	28,125	\$	28,405
2	5.400%	Sep-05	Oct-35	30.08	\$	300,000	\$	300,000	\$	4,030	\$	1,594	\$	187	\$	16,200	\$	16,387
3	5.650%	Jan-06	Feb-37	31.06	\$	400,000	\$	400,000	\$	6,364	\$	1,996	\$	269	\$	22,600	\$	22,869
4	6.200%	Apr-06	Apr-36	30.02	\$	300,000	\$	300,000	\$	2,693	\$	1,738	\$	148	\$	18,600	\$	18,748
5	4.950%	Jun-05	Jun-35	30.02	\$	300,000	\$	300,000	\$	4,893	\$	1,635	\$	217	\$	14,850	\$	15,067
6	4.850%	Dec-02	Feb-13	10,18	\$	400,000	\$	61,538	\$	2,600	\$	1,839	\$	36	\$	1,617	\$	1,653
7	5.850%	Dec-02	Feb-33	30.19	\$	200,000	\$	200,000	\$	2,212	\$	911	\$	103	\$	11,700	\$	11,803
8	5.850%	Apr-07	May-37	30.10	\$	300,000	\$	300,000	\$	600	\$	4,097	\$	156	\$	17,550	\$	17,706
9	5.550%	Oct-07	Nov-17	10.09	\$	300,000	\$	300,000	\$	84	\$	3,524	\$	357	\$	16,650	\$	17,007
10	5.950%	Jan-08	Feb-38	30.11	\$	600,000	Ś	600,000	Ś	3,260	\$	7,839	Ś	369	\$	35,700	S	36,069
11	5.960%	Mar-09	Apr-39	30.10	ŝ	500,000	Ś	500,000	ŝ	500	ŝ	6.256	Ś	224	ŝ	29,800	ŝ	30.024
12	5.250%	Dec-10	Feb-41	30.19	ŝ	400.000	ŝ	400.000	ŝ	989	Ś	5,408	ŝ	212	Ś	21.000	ŝ	21,212
13	5.690%	Feb-10	Feb-40	30.02	Ś	500,000	ŝ	500.000	•		Ŝ	4.375	Ś	146	ŝ	28,450	ŝ	28,596
14	5 125%	.lun-11	.lun-41	30.02	ŝ	250,000	ŝ	250 000	\$	225	ŝ	2 190	ŝ	80	ŝ	12 813	ŝ	12 893
15	5 650%	Jan-04	Feb-35	31 11	ŝ	240,000	ŝ	240 000	ŝ	2 775	ŝ	1 260	ŝ	130	ŝ	13 560	š	13 690
16	5.950%	Oct-03	Oct-33	30.02	ŝ	300,000	š	300,000	š	5 802	ŝ	1 527	ŝ	244	š	17 850	š	18 094
17	4 050%	Max-12	.km-42	30.07	ž	600,000	ž	800,000	-	0,002	ž	6,090	š	203	ž	24 300	ž	24 503
18	4 125%	Dec-11	Feb-42	30 19	ŝ	600,000	š	600,000			ŝ	5 256	š	174	š	24 750	ŝ	24 924
10	4 250%	Dec.12	Dec-42	30.02	ž	250,000	ž	250,000			ž	2 188	ž	73	ž	10 826	ž	10 898
20	4.290%	Feb-13	Feb-43	30.02		750,000	ंड	634,815			š	6,583	-	219	ŝ	27,225		27,444
24	Cán — Coousiáisaá	lan Dandai																
21	Storin Securitizat	Nev 07	A 13	e 25		440.000		47.004		47		4 600		450		050		4 000
22	5.044%	May-07	Aug-13	0.20	÷	140,000	\$	17,901	- D	4/	<u>ې</u>	1,620	\$	156	ş	853	ş	1,009
23	0.12/% 5.2560/	May-07	Aug-15	0.20	÷.	100,000	÷.	99, <b>∠</b> 30	•	40	- -	1,151	\$	144		5,088	\$	5,232
24	5.236%	way-u/	Aug-19	12.20	Ф	200,000	Þ	200,000	¢	30	Þ	3,334	¢	280	Þ	15,137	Þ	15,417
25	Unsecured Pollut	ion Control	and Industi	rial Deve	lopr	nent Bond	8:											
26	Var Dade County	Aug-91	Feb-23	31.50	\$	15,000	\$	15,000			\$	520	\$	17	\$	242	\$	259
27	Var Jacksonville	Mar-94	Sep-24	30.50	\$	45,960	\$	45,960			\$	397	\$	13	\$	753	\$	766
28	Var Manatee	Mar-94	Sep-24	30.50	\$	16,510	\$	16,510			\$	132	\$	4	\$	271	\$	275
29	Var Dade County	Dec-93	Jun-21	27.50	\$	45,800	\$	45,750			\$	711	\$	26	\$	750	\$	776
30	Var Putnam	Mar-94	Sep-24	30.50	\$	4,480	\$	4,480			\$	83	\$	3	\$	73	\$	76
31	Var Jacksonville	May-92	May-27	35.00	\$	28,300	\$	28,300			\$	371	\$	11	\$	464	\$	475
32	Var Dade County	Mar-95	Apr-20	25.08	\$	8,600	\$	8,635			\$	182	\$	7	\$	139	\$	146
33	Var Jacksonville	Jun-95	May-29	33.92	\$	52,000	\$	51,940			\$	345	\$	10	\$	838	\$	848
34	Var Martin	Apr-00	Jul-22	22.25	\$	95,700	\$	95,700		•	\$	499	\$	22	\$	1,569	\$	1,591
35	Var St Lucie	Sep-00	Sep-28	28.00	\$	242,210	\$	242,210			\$	570	\$	20	\$	3,910	\$	3,930
36	Var St Lucie	May-03	May-24	21.00	\$	78,785	\$	78,785			\$	442	\$	21	\$	1,272	\$	1,293
37	Subtotal Long-Te	rm Debt					\$8	3,574,619	\$	43,690	\$	78,842	\$	4,562	\$	425,324	\$	429,885
38	Unamortized Prem	ium, Discour	nt				\$	(106,815)										
39	Total Long-Term	Debt					\$8	3,467,804										
40	Embedded Cost o	of Long-Terr	n Debt					5.08%	]									

### **Proxy Group**

		Credit	Ratings <sup>1</sup>	Common	Equity Ratios	S&P Business
<u>Line</u>	Company	<u>S&amp;P</u> (1)	Moody's (2)	<u>AUS</u> <sup>1</sup> (3)	<u>Value Line</u> <sup>2</sup> (4)	<u>Risk Score<sup>3</sup></u> (5)
1	Alliant Energy	A-	A2	51.2%	50.9%	Excellent
2	Consolidated Edison	A-	A3	51.0%	52.5%	Excellent
3	Dominion Resources	А	Baa1	36.7%	39.3%	Excellent
4	Integrys Energy Group	A-	A2	55.1%	60.6%	Excellent
5	NextEra Energy, Inc.	А	Aa3	38.8%	41.8%	Strong
6	OGE Energy Corp.	BBB+	Baa1	42.3%	48.4%	Strong
7	PG&E Corp.	BBB	A3	48.3%	50.2%	Strong
8	SCANA Corp	<b>A</b> -	A3	42.1%	45.7%	Excellent
9	Sempra Energy	A+	Aa3	45.5%	49.2%	Strong
10	Southern Co.	А	A2	46.5%	47.1%	Excellent
11	Vectren Corp.	A-	A2	45.4%	48.4%	Excellent
12	Wisconsin Energy	A-	A1	43.9%	46.0%	Excellent
13	Xcel Energy, Inc.	Α	A3	45.5%	48.9%	Excellent
14	Average	<b>A</b> -	A2	45.6%	<b>48</b> .4%	Excellent
15	Florida Power & Light Company	A-4	A2 <sup>4</sup>		<b>46</b> .95% <sup>5</sup>	Excellent

Sources:

<sup>1</sup> AUS Utility Reports , June 2012. <sup>2</sup> The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

<sup>3</sup> S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest To Weakest," April 20, 2012.

<sup>4</sup> Dewhurst Direct at 34.

<sup>5</sup> MFR's, Schedule D-1a, page 1.

#### **Consensus Analysts' Growth Rates**

		Zacks			NL	Reu	Average of	
<u>Line</u>	Company	Estimated Growth % <sup>1</sup> (1)	Number of Estimates (2)	Estimated <u>Growth %<sup>2</sup></u> (3)	Number of Estimates (4)	Estimated Growth % <sup>3</sup> (5)	Number of Estimates (6)	Growth <u>Rates</u> (7)
1 .	Alliant Energy	6.18%	N/A	6.40%	4	5.94%	5	6.17%
2	Consolidated Edison	3.60%	N/A	3.60%	6	3.40%	8	3.53%
3	Dominion Resources	4.93%	N/A	4.90%	3	4.91%	6	4.91%
4	Integrys Energy Group	4.50%	N/A	4.50%	4	7.20%	4	5.40%
5	NextEra Energy, Inc.	5.70%	N/A	5.60%	4	5.68%	12	5.66%
6	OGE Energy Corp.	5.53%	N/A	6.00%	3	5.00%	2	5.51%
7	PG&E Corp.	2.47%	N/A	1.90%	5	2.94%	8	2.44%
8	SCANA Corp	4.50%	N/A	4.70%	3	4.62%	4	4.61%
9	Sempra Energy	6.80%	N/A	6.00%	3	6.70%	3	6.50%
10	Southern Co.	5.04%	N/A	5.40%	7	5.64%	9	5.36%
11	Vectren Corp.	4.33%	N/A	5.00%	2	5.50%	2	4.94%
12	Wisconsin Energy	5.28%	N/A	5.00%	5	6.23%	7	5.50%
13	Xcel Energy, Inc.	4.86%	N/A	5.00%	8	5.14%	12	5.00%
14	Average	4.90%	N/A	4.92%	4	5.30%	6	5.04%

Sources:

<sup>1</sup> Zacks Elite, http://www.zackselite.com/, downloaded on June 17, 2012.

<sup>2</sup> SNL Interactive, http://www.snl.com/, downloaded on June 17, 2012.

<sup>3</sup> Reuters, http://www.reuters.com/, downloaded on June 17, 2012.

### Constant Growth DCF Model (Consensus Analysts' Growth Rates)

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Company	13-Week AVG <u>Stock Price<sup>1</sup></u> (1)	Analysts' <u>Growth<sup>2</sup></u> (2)	Annualized <u>Dividend<sup>3</sup></u> (3)	Adjusted <u>Yield</u> (4)	Constant <u>Growth DCF</u> (5)
Alliant Energy	\$43.79	6.17%	\$1.80	4.36%	10.54%
Consolidated Edison	\$59.16	3.53%	\$2.42	4.24%	7.77%
Dominion Resources	\$51.68	4.91%	\$2.11	4.28%	9.20%
Integrys Energy Group	\$53.56	5.40%	\$2.72	5.35%	10.75%
NextEra Energy, Inc.	\$63.76	5.66%	\$2.40	3.98%	9.64%
OGE Energy Corp.	\$53.08	5.51%	\$1.57	3.12%	8.63%
PG&E Corp.	\$43.65	2.44%	\$1.82	4.27%	6.71%
SCANA Corp	\$45.83	4.61%	\$1.98	4.52%	9.13%
Sempra Energy	\$63.29	6.50%	\$2.40	4.04%	10.54%
Southern Co.	\$45.51	5.36%	\$1.96	4.54%	9.90%
Vectren Corp.	\$29.01	4.94%	\$1.40	5.06%	10.01%
Wisconsin Energy	\$36.37	5.50%	\$1.20	3.48%	8.98%
Xcel Energy, Inc.	\$27.09	5.00%	\$1.04	4.03%	9.03%
Average Median	\$47.37	5.04%	\$1.91	4.25%	9.29% 9.20%
	Company Alliant Energy Consolidated Edison Dominion Resources Integrys Energy Group NextEra Energy, Inc. OGE Energy Corp. PG&E Corp. SCANA Corp Sempra Energy Southern Co. Vectren Corp. Wisconsin Energy Xcel Energy, Inc.	CompanyStock Price1 (1)Alliant Energy\$43.79Consolidated Edison\$59.16Dominion Resources\$51.68Integrys Energy Group\$53.56NextEra Energy, Inc.\$63.76OGE Energy Corp.\$53.08PG&E Corp.\$43.65SCANA Corp\$45.83Sempra Energy\$63.29Southern Co.\$45.51Vectren Corp.\$29.01Wisconsin Energy\$36.37Xcel Energy, Inc.\$27.09Average\$47.37Median\$47.37	Company         Stock Price <sup>1</sup> (1)         Growth <sup>2</sup> (2)           Alliant Energy         \$43.79         6.17%           Consolidated Edison         \$59.16         3.53%           Dominion Resources         \$51.68         4.91%           Integrys Energy Group         \$53.56         5.40%           NextEra Energy, Inc.         \$63.76         5.66%           OGE Energy Corp.         \$53.08         5.51%           PG&E Corp.         \$43.65         2.44%           SCANA Corp         \$45.83         4.61%           Sempra Energy         \$63.29         6.50%           Southern Co.         \$45.51         5.36%           Vectren Corp.         \$29.01         4.94%           Wisconsin Energy         \$36.37         5.50%           Xcel Energy, Inc.         \$27.09         5.00%	CompanyStock Price1 (1)Growth2 (2)Dividend3 (3)Alliant Energy\$43.796.17%\$1.80Consolidated Edison\$59.163.53%\$2.42Dominion Resources\$51.684.91%\$2.11Integrys Energy Group\$53.565.40%\$2.72NextEra Energy, Inc.\$63.765.66%\$2.40OGE Energy Corp.\$53.085.51%\$1.57PG&E Corp.\$43.652.44%\$1.82SCANA Corp\$45.834.61%\$1.98Sempra Energy\$63.296.50%\$2.40Southern Co.\$45.515.36%\$1.96Vectren Corp.\$29.014.94%\$1.40Wisconsin Energy\$36.375.50%\$1.20Xcel Energy, Inc.\$27.095.00%\$1.04	CompanyStock Price1 (1)Growth2 (2)Dividend3 (3)Yield (4)Alliant Energy\$43.796.17%\$1.804.36%Consolidated Edison\$59.163.53%\$2.424.24%Dominion Resources\$51.684.91%\$2.114.28%Integrys Energy Group\$53.565.40%\$2.725.35%NextEra Energy, Inc.\$63.765.66%\$2.403.98%OGE Energy Corp.\$53.085.51%\$1.573.12%PG&E Corp.\$43.652.44%\$1.824.27%SCANA Corp\$45.834.61%\$1.984.52%Sempra Energy\$63.296.50%\$2.404.04%Southern Co.\$45.515.36%\$1.964.54%Vectren Corp.\$29.014.94%\$1.405.06%Wisconsin Energy\$36.375.50%\$1.203.48%Xcel Energy, Inc.\$27.095.00%\$1.044.03%

Sources:

<sup>1</sup> SNL Financial, downloaded on June 17, 2012.

<sup>2</sup> Exhibit MPG-4.

<sup>3</sup> The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

### **Payout Ratios**

		Dividend	s Per Share	Earnings	Per Share	Payou	ut Ratio
Line	Company	<u>2011</u> (1)	Projected (2)	<u>2011</u> (3)	Projected (4)	<u>2011</u> (5)	Projected (6)
1	Alliant Energy	\$1.70	\$2.20	\$2.75	\$3.60	61.82%	61.11%
2	Consolidated Edison	\$2.40	\$2.50	\$3,57	\$4.25	67.23%	58.82%
3	Dominion Resources	\$1.97	\$2.60	\$2.76	\$4.00	71.38%	65.00%
4	Integrys Energy Group	\$2.72	\$2.80	\$2.88	\$4.25	94.44%	65.88%
5	NextEra Energy, Inc.	\$2.20	\$3.20	\$4.82	\$6.00	45.64%	53.33%
6	OGE Energy Corp.	\$1.52	\$1.90	\$3.45	\$4.25	44.06%	44.71%
7	PG&E Corp.	\$1.82	\$2.00	\$2.78	\$3.75	65.47%	53.33%
8	SCANA Corp	\$1.94	\$2.15	\$2.97	\$3.75	65.32%	57.33%
9	Sempra Energy	\$1.92	\$2.80	\$4.47	\$5.75	42.95%	48.70%
10	Southern Co.	\$1.87	\$2.25	\$2.55	\$3.25	73.33%	69.23%
11	Vectren Corp.	\$1.39	\$1.60	\$1.73	\$2.50	80.35%	64.00%
12	Wisconsin Energy	\$1.04	\$1.80	\$2.18	\$2.75	47.71%	65.45%
13	Xcel Energy, Inc.	\$1.03	\$1.35	\$1.72	\$2.25	59.88%	60.00%
14	Average	\$1.81	\$2.24	\$2.97	\$3.87	63.04%	58.99%

Source:

The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

### Sustainable Growth Rate

						3 to 5 Yea	Projections					Sustainable
		Dividends	Earnings	Book Value	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Growth
<u>Line</u>	Company	<u>Per Share</u> (1)	<u>Per Share</u> (2)	Per Share (3)	Growth (4)	<u>ROE</u> (5)	Factor (6)	<u>ROE</u> (7)	Ratio (8)	<u>Rate</u> (9)	Growth Rate (10)	<u>Rate</u> (11)
1	Alliant Energy	\$2.20	\$3.60	\$32.35	3.57%	11.13%	1.02	11.32%	61.11%	38.89%	4.40%	4.94%
2	Consolidated Edison	\$2.50	\$4.25	\$47.00	3.78%	9.04%	1.02	9.21%	58.82%	41.18%	3.79%	3.80%
3	Dominion Resources	\$2.60	\$4.00	\$27.25	6.30%	14.68%	1.03	15.13%	65.00%	35.00%	5.29%	6.65%
4	Integrys Energy Group	\$2.80	\$4.25	\$44.25	3.09%	9.60%	1.02	9.75%	65.88%	34.12%	3.33%	3.33%
5	NextEra Energy, Inc.	\$3.20	\$6.00	\$49.25	6.52%	12.18%	1.03	12.57%	53.33%	46.67%	5.86%	6.38%
6	OGE Energy Corp.	\$1.90	\$4.25	\$36.75	7.06%	11.56%	1.03	11.96%	44.71%	55.29%	6.61%	7.11%
7	PG&E Corp.	\$2.00	\$3.75	\$36.00	4.17%	10.42%	1.02	10.63%	53.33%	46.67%	4.96%	5.49%
8	SCANA Corp	\$2.15	\$3.75	\$39.50	5.71%	9.49%	1.03	9.76%	57.33%	42.67%	4.16%	6.42%
9	Sempra Energy	\$2.80	\$5.75	\$52.00	4.87%	11.06%	1.02	11.32%	48.70%	51.30%	5.81%	6.08%
10	Southern Co.	\$2.25	\$3.25	\$26.25	5.25%	12.38%	1.03	12.70%	69.23%	30.77%	3.91%	5.98%
11	Vectren Corp.	\$1.60	\$2.50	\$21.00	3.26%	11.90%	1.02	12.10%	64.00%	36.00%	4.35%	5.25%
12	Wisconsin Energy	\$1.80	\$2.75	\$20.25	3.32%	13.58%	1.02	13.80%	65.45%	34.55%	4.77%	4.77%
13	Xcel Energy, Inc.	\$1.35	\$2.25	\$21.75	4.52%	10.34%	1.02	10.57%	60.00%	40.00%	4.23%	4.86%
14	Average	\$2.24	\$3.87	\$34.89	4.72%	11.34%	1.02	11.60%	58.99%	41.01%	4.73%	5.47%

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### Sustainable Growth Rate

		13-Week	2011	Market	Commo	n Shares				
		Average		to Book	Outstandin	g (in Millions) <sup>2</sup>				
Line	Company	Stock Price <sup>1</sup>	Per Share <sup>2</sup>	Ratio	2011	3-5 Years	<u>Growth</u>	S Factor <sup>3</sup>	V Factor <sup>4</sup>	<u>S * V⁵</u>
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Alliant Energy	\$43.79	\$27.14	1.61	111.02	116.00	0.88%	1.42%	38.02%	0.54%
2	Consolidated Edison	\$59.16	\$39.05	1.51	292.89	293.00	0.01%	0.01%	33.99%	0.00%
3	Dominion Resources	\$51.68	\$20.08	2.57	570.00	595.00	0.86%	2.22%	61.14%	1.36%
4	Integrys Energy Group	\$53.56	\$38.01	1.41	77.91	77.90	0.00%	0.00%	29.03%	0.00%
5	NextEra Energy, Inc.	\$63.76	\$35.92	1.77	416.00	430.00	0.66%	1.18%	43.66%	0.51%
6	OGE Energy Corp.	\$53.08	\$26.13	2.03	98.10	100.50	0.48%	0.98%	50.77%	0.50%
7	PG&E Corp.	\$43.65	\$29.35	1.49	412.26	435.00	1.08%	1.61%	32.76%	0.53%
8	SCANA Corp	\$45.83	\$29.92	1.53	130.00	160.00	4.24%	6.50%	34.72%	2.26%
9	Sempra Energy	\$63.29	\$41.00	1.54	239.93	246.00	0.50%	0.77%	35.22%	0.27%
10	Southern Co.	\$45.51	\$20.32	2.24	865.13	940.00	1.67%	3.75%	55.35%	2.07%
11	Vectren Corp.	\$29.01	\$17.89	1.62	81.90	88.00	1.45%	2.35%	38.33%	0.90%
12	Wisconsin Energy	\$36.37	\$17.20	2.11	230.49	223.00	-0.66%	-1.39%	52.70%	-0.73%
13	Xcel Energy, Inc.	\$27.09	\$17.44	1.55	486.49	515.00	1.15%	1.78%	35.63%	0.63%
14	Average	\$47.37	\$27.65	1.77	308.62	<b>324.5</b> 7	1.18%	2.05%	41.64%	0.87%

Sources and Notes:

<sup>1</sup> SNL Financial, downloaded on June 17, 2012.

<sup>2</sup> The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

<sup>3</sup> Expected Growth in the Number of Shares, Column (3) \* Column (6).

<sup>4</sup> Expected Profit of Stock Investment, [1 - 1 / Column (3)].

<sup>5</sup> Column (9) Line 15 excludes negative values.

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### Constant Growth DCF Model (Sustainable Growth Rate)

<u>Line</u>	Company	13-Week AVG <u>Stock Price<sup>1</sup></u> (1)	Sustainable <u>Growth<sup>2</sup></u> (2)	Annualized <u>Dividend<sup>3</sup></u> (3)	Adjusted <u>Yield</u> (4)	Constant <u>Growth DCF</u> (5)
1	Alliant Energy	\$43.79	4.94%	\$1.80	4.31%	9.26%
2	Consolidated Edison	\$59.16	3.80%	\$2.42	4.25%	8.04%
3	Dominion Resources	\$51.68	6.65%	\$2,11	4.35%	11.01%
4	Integrys Energy Group	\$53.56	3.33%	\$2.72	5.25%	8.57%
5	NextEra Energy, Inc.	\$63.76	6.38%	\$2.40	4.00%	10.38%
6	OGE Energy Corp.	\$53.08	7.11%	\$1.57	3.17%	10.28%
7	PG&E Corp.	\$43.65	5.49%	\$1.82	4.40%	9.88%
8	SCANA Corp	\$45.83	6.42%	\$1.98	4.60%	11.02%
9	Sempra Energy	\$63.29	6.08%	\$2.40	4.02%	10.10%
10	Southern Co.	\$45.51	5.98%	\$1.96	4.56%	10.55%
11	Vectren Corp.	\$29.01	5.25%	\$1.40	5.08%	10.33%
12	Wisconsin Energy	\$36.37	4.77%	\$1.20	3.46%	8.23%
13	Xcel Energy, Inc.	\$27.09	4.86%	\$1.04	4.03%	8.89%
14	Average	\$47.37	5.47%	\$1.91	4.27%	9.73%
15	Median					10.10%

#### Sources:

<sup>1</sup> SNL Financial, downloaded on June 17, 2012.

<sup>2</sup>Exhibit MPG-7, page 1 of 2.

<sup>3</sup> The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

Electricity Sales Are Linked to U.S. Economic Growth



Note:

1988 represents the base year. Graph depicts increases or decreases from the base year.

#### Sources:

U.S. Department of Energy, Energy Information Administration. Edison Electric Institute, http://www.eei.org.

#### Multi-Stage Growth DCF Model

		13-Week AVG	Annualized	First Stage		Se	Third Stage	Multi-Stage			
Line	Company	Stock Price <sup>1</sup>	Dividend <sup>2</sup>	Growth <sup>3</sup>	Year 6	Year 7	Year 8	Year 9	Year 10	Growth <sup>4</sup>	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Alliant Energy	\$43.79	\$1.80	6.17%	5.96%	5.75%	5.54%	5.32%	5.11%	4.90%	9.56%
2	Consolidated Edison	\$59.16	\$2.42	3.53%	3.76%	3.99%	4.22%	4.44%	4.67%	4.90%	8.83%
3	Dominion Resources	\$51.68	\$2.11	4.91%	4.91%	4.91%	4.91%	4.90%	4.90%	4.90%	9.19%
4	Integrys Energy Group	\$53.56	\$2.72	5.40%	5.32%	5.23%	5.15%	5.07%	4.98%	4.90%	10.39%
5	NextEra Energy, Inc.	\$63.76	\$2.40	5.66%	5.53%	5.41%	5.28%	5.15%	5.03%	4.90%	9.04%
6	OGE Energy Corp.	\$53.08	\$1.57	5.51%	5.41%	5.31%	5.21%	5.10%	5.00%	4.90%	8.12%
7	PG&E Corp.	\$43.65	\$1.82	2.44%	2.85%	3.26%	3.67%	4.08%	4.49%	4.90%	8.63%
8	SCANA Corp	\$45.83	\$1.98	4.61%	4.66%	4.70%	4.75%	4.80%	4.85%	4.90%	9.35%
9	Sempra Energy	\$63.29	\$2.40	6.50%	6.23%	5.97%	5.70%	5.43%	5.17%	4.90%	9.29%
10	Southern Co.	\$45.51	\$1.96	5.36%	5.28%	5.21%	5.13%	5.05%	4.98%	4.90%	9.55%
11	Vectren Corp.	\$29.01	\$1.40	4.94%	4.94%	4.93%	4.92%	4.91%	4.91%	4.90%	9.98%
12	Wisconsin Energy	\$36.37	\$1.20	5.50%	5.40%	5.30%	5.20%	5.10%	5.00%	4.90%	8.49%
13	Xcel Energy, Inc.	\$27.09	\$1.04	5.00%	4.98%	4.97%	4.95%	4.93%	4.92%	4.90%	8.95%
14 15	A∨erage Median	\$47.37	\$1.91	5.04%	5.02%	4.99%	4.97%	4.95%	4.92%	4.90%	9.18% 9.19%

Sources:

<sup>1</sup> SNL Financial, downloaded on June 17, 2012.

<sup>2</sup> The Value Line Investment Survey, March 23, May 4, and May 25, 2012.

<sup>3</sup> Exhibit MPG-4.

<sup>4</sup> Blue Chip Financial Forecasts, June 1, 2012 at 14.

Common Stock Market / Book Ratio Exhibit MPG-11, Page 1 of 1 Docket No. 120015-EI

**Common Stock Market/Book Ratio** 



Docket No. 120015-EI Common Stock Market/Book Ratio Exhibit MPG-11, Page 1 of 1

# Equity Risk Premium - Treasury Bond

		Authorized		Indicated
		Electric	Treasury	Risk
Line	Year	Returns <sup>1</sup>	Bond Yield <sup>2</sup>	Premium
		(1)	(2)	(3)
	1000	40.000	7.000/	0.40%
1	1986	13.93%	7.80%	6.13%
2	1987	12.99%	8.58%	4.41%
3	1988	12.79%	8.96%	3.83%
4	1989	12.97%	8.45%	4.52%
5	1990	12.70%	8.61%	4.09%
6	1991	12.55%	8.14%	4.41%
7	1992	12.09%	7.67%	4.42%
8	1993	11.41%	6.60%	4.81%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.70%	4.69%
12	1997	11.40%	6.61%	4.79%
13	1998	11.66%	5.58%	6.08%
14	1999	10.77%	5.87%	4.90%
15	2000	11.43%	5.94%	5.49%
16	2001	11.09%	5.49%	5.60%
17	2002	11.16%	5.43%	5.73%
18	2003	10.97%	4.96%	6.01%
19	2004	10.75%	5.05%	5.70%
20	2005	10.54%	4.65%	5.89%
21	2006	10.36%	4.99%	5.37%
22	2007	10.36%	4.83%	5.53%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.07%	6.41%
25	2010	10,34%	4.25%	6.09%
26	2011	10.22%	3.91%	6.31%
27	Average	11. <b>45</b> %	6.22%	5.23%

Sources:

<sup>&</sup>lt;sup>1</sup> Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 10, 2012.

<sup>&</sup>lt;sup>2</sup> St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

#### Authorized Average Indicated Risk Electric "A" Rated Utility Returns<sup>1</sup> Bond Yield<sup>2</sup> Line Year Premium (1) (2) (3) 1 1986 13.93% 9.58% 4.35% 2 1987 12.99% 10.10% 2.89% 3 1988 12.79% 10.49% 2.30% 4 1989 12.97% 9.77% 3.20% 5 12.70% 1990 9.86% 2.84% 6 1991 12.55% 3.19% 9.36% 7 1992 12.09% 8.69% 3.40% 8 1993 11.41% 7.59% 3.82% 9 11.34% 1994 8.31% 3.03% 10 1995 11.55% 7.89% 3.66% 1996 11 11.39% 7.75% 3.64% 12 1997 11.40% 7.60% 3.80% 13 1998 11.66% 7.04% 4.62% 10.77% 14 1999 7.62% 3.15% 15 2000 3.19% 11.43% 8.24% 16 2001 11.09% 7.76% 3.33% 17 2002 7.37% 3.79% 11,16% 18 2003 10.97% 6.58% 4.39% 19 2004 10.75% 6.16% 4.59% 20 2005 10.54% 5.65% 4.89% 21 2006 6.07% 4.29% 10.36% 22 2007 4.29% 10.36% 6.07% 23 2008 10.46% 6.53% 3.93% 24 2009 10.48% 6.04% 4.44% 25 2010 4.88% 10.34% 5.46% 26 2011 5.04% 5.18% 10.22% 27 Average 11.45% 7.64% 3.81%

### **Equity Risk Premium - Utility Bond**

Sources:

<sup>1</sup> Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and January 10, 2012.

<sup>&</sup>lt;sup>2</sup> Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2011 were obtained from http://credittrends.moodys.com/.

#### **Bond Yield Spreads**

		T-Bond <u>Yield<sup>1</sup></u> (1)		Utility Bond	d						
<u>Líne</u>	Year		<u>A<sup>2</sup></u> (2)	<u>Baa²</u> (3)	A-T-Bond <u>Spread</u> (4)	Baa-T-Bond <u>Spread</u> (5)	<u>Aaa<sup>1</sup></u> (6)	<u>Baa<sup>1</sup></u> (7)	Aaa-T-Bond <u>Spread</u> (8)	Baa-T-Bond <u>Spread</u> (9)	Otility to Corp. Baa <u>Spread</u> (10)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	0.56%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	0.65%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.29%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%
14	1993	6,60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	-0.01%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.08%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.08%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.00%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	-0.14%
27	2006	4.99%	6.07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	-0.16%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	-0.15%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	-0.08%
32	2011	3.91%	5.04%	5.56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	-0.10%
33	Average	7.30%	8.87%	9.27%	1.58%	1.98%	8.12%	9.25%	0.83%	1.95%	0.03%

Yield Spreads Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

<sup>1</sup> St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.

<sup>2</sup> Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility

yields from 2010-2011 were obtained from http://credittrends.moodys.com/.

# **Treasury and Utility Bond Yields**

		Treasury	"A" Rated Utility	"Baa" Rated Utility
Line	Date	Bond Yield <sup>1</sup>	Bond Yield <sup>2</sup>	Bond Yield <sup>2</sup>
		(1)	(2)	(3)
1	06/15/12	2.70%	4.08%	4.90%
2	06/08/12	2.77%	4.16%	4.97%
3	06/01/12	2.53%	3.92%	4.75%
4	05/25/12	2.85%	4.20%	5.02%
5	05/18/12	2.80%	4.08%	4.85%
6	05/11/12	3.02%	4.22%	4.96%
7	05/04/12	3.07%	4.29%	5.03%
8	04/27/12	3.12%	4.33%	5.06%
9	04/20/12	3.12%	4.35%	5.07%
10	04/13/12	3.14%	4.37%	5.08%
11	04/06/12	3.21%	4.44%	5.13%
12	03/30/12	3.35%	4.54%	5.20%
13	03/23/12	3.31%	4.51%	5.15%
14	Average	3.00%	4.27%	5.01%
15	Spread To Treasury	*	1.27%	2.01%

Sources:

<sup>1</sup> St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org. <sup>2</sup> http://credittrends.moodys.com/.

Docket No. 120015-EI Treasury and Utility Bond Yields Exhibit MPG-15, Page 2 of 3





www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Docket No. 120015-El Treasury and Utility Bond Yields Exhibit MPG-15, Page 2 of 3

Merchant Bond Record.

Docket No. 120015-EI Treasury and Utility Bond Yields Exhibit MPG-15, Page 3 of 3



### Yield Spread Between Utility Bonds and 30-Year Treasury Bonds

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

# Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
1	Alliant Energy	0.75
2	Consolidated Edison	0.60
3	Dominion Resources	0.70
4	Integrys Energy Group	0.90
5	NextEra Energy, Inc.	0.75
6	OGE Energy Corp.	0.80
7	PG&E Corp.	0.55
8	SCANA Corp	0.70
9	Sempra Energy	0.80
10	Southern Co.	0.55
11	Vectren Corp.	0.70
12	Wisconsin Energy	0.65
13	Xcel Energy, Inc.	0.65
14	Average	0.70

Source:

*The Value Line Investment Survey,* March 23, May 4, and May 25, 2012.

Docket No. 120015-EI CAPM Return Exhibit MPG-17, Page 1 of 1

# Florida Power & Light Company

### **CAPM Return**

<u>Line</u>	<b>Description</b>	Market Risk <u>Premium</u>
1	Risk-Free Rate <sup>1</sup>	3.70%
2	Risk Premium <sup>2</sup>	6.60%
3	Beta <sup>3</sup>	0.70
4	CAPM	8.32%

Sources:

- <sup>1</sup> Blue Chip Financial Forecasts; June 1, 2012, at 2.
- <sup>2</sup> Morningstar, Inc. *Ibbotson SBBI 2012 Classic Yearbook* at 86, and Morningstar, Inc. *Ibbotson SBBI 2012 Valuation Yearbook* at 54 and 66.

<sup>3</sup> Exhibit MPG-16.

### Standard & Poor's Credit Metrics

			Retail			
			ost of Service	S&P Ben	chmark <sup>1/2</sup>	
Line	Description	Amount		Significant	Significant	Reference
			(1)	(2)	(3)	(4)
1	Rate Base	\$	21,036,823			Schedule A-1.
2	Weighted Common Return		5.45%			Page 2, Line 3, Col. 4.
3	Pre-Tax Rate of Return		10.91%			Page 2, Line 4, Col. 5.
4	Income to Common	\$	1,145,633			Line 1 x Line 2.
5	EBIT	\$	2,295,072			Line 1 x Line 3.
6	Depreciation & Amortization	\$	802,761			Schedule C-1.
7	Imputed Amortization	\$	57,400			Standard & Poor's, April 24, 2012.
8	Deferred Income Taxes & ITC	\$	309,008			Schedule C-22, page 3 of 3.
9	Funds from Operations (FFO)	\$	2,314,802			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$	47,800			Standard & Poor's, April 24, 2012.
11	EBITDA	\$	3,203,033			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio		44%	35% - 45%	45% - 50%	Page 3, Line 3, Col. 2.
13	Debt to EBITDA		2.9x	2.0x - 3.0x	3.0x - 4.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt		25%	30% - 45%	20% - 30%	Line 9 / (Line 1 x Line 12).

Sources:

<sup>1</sup> Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009

<sup>2</sup> S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," April 20, 2011.

Note:

Based on the April 2012 S&P metrics, FPL has an "Excellent" business profile and an "Intermediate" financial profile.

### Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	<b>Description</b>	<u>Amount (000)</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)	Pre-Tax Weighted <u>Cost</u> (5)
1	Long-Term Debt	\$ 6,258,221	38.93%	5.08%	1.98%	1.98%
2	Short-Term Debt	\$ 352,323	2.19%	2.11%	0.05%	0.05%
3	Common Equity	<u>\$ 9,463,336</u>	<u>58.87%</u>	9.25%	<u>5.45%</u>	<u>8.89%</u>
4	Total	\$ 16,073,880	100.00%		7.47%	10.91%

5 Tax Conversion Factor\*

1.6319

Sources: Exhibit MPG-1. \* Schedule A-1.

### Standard & Poor's Credit Metrics (Financial Capital Structure)

<u>Line</u>	<u>Description</u>	<u>Ar</u>	<u>nount (000)</u> (1)	<u>Weight</u> (2)
1	Long-Term Debt	\$	6,258,221	36.82%
2	Short-Term Debt	\$	352,323	2.07%
3	Off Balance Sheet Debt*	\$	922,000	<u>5.42</u> %
4	Total Debt	\$	7,532,544	44.32%
5	Common Equity	\$	9,463,336	<u>55.68</u> %
6	Total	\$	16,995,880	100.00%

Sources:

Exhibit MPG-1.

\* Standard & Poor's: RatingsDirect, "Florida Power & Light Co.," April 24, 2012.

### Avera Constant Growth DCF Model

		Stock	Annualized	Dividend	end Growth Rates					Cost of Equity Estimates				
Line	Company	Price	Dividend	Yield	Value Line	IBES	Zacks	br+sv	Value Line	IBES	Zacks	br+sv	_	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
1	Aliant Energy	\$41.09	\$1.80	4.4%	7.0%	4.9%	6.0%	5.6%	11.4%	9.3%	10.4%	10.0%		
2	Consolidated Edison	\$58.26	\$2.40	4.1%	3.0%	3.7%	3.3%	3.9%	7.1%	7.8%	7.4%	8.0%		
3	Dominion Resources	\$51.11	\$2.11	4.1%	4.5%	3.2%	5.0%	5.2%	8.6%	7.3%	9.1%	9.3%		
4	Integrys Energy Group	\$51.42	\$2.72	5.3%	9.0%	9.4%	4.5%	3.1%	14.3%	14.7%	9.8%	8.4%		
5	ITC Holdings Corp.	\$73.04	\$1.45	2.0%	14.0%	18.8%	16.5%	13.8%	16.0%	20.7%	18.5%	15.8%		
6	NextEra Energy	\$55.39	\$2.28	4.1%	4.5%	5.8%	6.4%	6.4%	8.6%	9.9%	10.5%	10.5%		
7	OGE Energy Corp.	\$51.39	\$1.59	3.1%	6.5%	8.3%	6.8%	7.0%	9.6%	11.3%	9.9%	10.1%		
8	PG&E Corp.	\$40.70	\$1.82	4.5%	6.0%	1.4%	4.0%	6.0%	10.5%	5.9%	8.5%	10.4%		
9	SCANA Corp.	\$42.11	\$1.98	4.7%	3.0%	4.6%	4.2%	5.0%	7.7%	9.3%	8.9%	9.7%		
10	Sempra Energy	\$53.09	\$2.04	3.8%	3.5%	7.3%	7.0%	6.1%	7.3%	11.2%	10.8%	9.9%		
11	Southern Company	\$43.20	\$1.94	4.5%	6.0%	5.9%	5.1%	5.6%	10.5%	10.4%	9.6%	10.1%		
12	Vectren Corp.	\$28.56	\$1.41	4.9%	5.5%	6.0%	4.7%	3.9%	10.4%	10.9%	9.6%	8.8%		
13	Wisconsin	\$32.46	\$1.20	3.7%	8.5%	7.8%	7.5%	4.7%	12.2%	11.5%	11.2%	8.4%		
14	Xcel Energy	\$25.67	\$1.06	4.1%	5.0%	5.3%	5.1%	4.3%	9.1%	9.4%	9.2%	8.4%		
15	Average (Avera)	\$46.25	\$1.84	4.1%	6.1%	6.6%	6.2%	5.8%	10.2%	10.3%	10.2%	9.9%		
16 17	Average (All Excl. ITC) Median (All Excl. ITC)	\$44.19	\$1.87	4.3%	5.5%	5.7%	5.4%	5.1%	9.8% 9.6%	9.9% 9.9%	9.6% 9.6%	9.4% 9.7%	Exhib	

Source: Exhibit WEA-4.

#### Multi-Stage Growth DCF Model

			Growth Rates			First Stage Second Stage Growth						Third Stage	Multi-Stage		
Line	Company	Stock Price	Dividend <sup>1</sup>	V Line	IBES	Zacks	br+sv	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth <sup>3</sup>	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				-			5 000	5.004	5 7 4 4		5.000				-
1	Aliant Energy	\$41.17	\$1.70	7.0%	4.9%	6.0%	5.6%	5.9%	5./1%	5.55%	5.39%	5.23%	5.06%	4.90%	9.50%
2	Consolidated Edison	\$32.07	\$1.54	3.0%	3.7%	3.3%	3.9%	3.5%	3.71%	3.95%	4.19%	4.43%	4.66%	4.90%	9.51%
3	Dominion Resources	\$38.81	\$1.84	4.5%	3.2%	5.0%	5.2%	4.5%	4.55%	4.62%	4.69%	4.76%	4.83%	4.90%	9.74%
4	Integrys Energy Group	\$20.00	\$0.79	9.0%	9.4%	4.5%	3.1%	6.5%	6.23%	5.97%	5.70%	5.43%	5.17%	4.90%	9.47%
5	ITC Holdings Corp.	\$35.92	\$1.09	14.0%	18.8%	16.5%	13.8%	15.8%	13.96%	12.15%	10.34%	8.53%	6.71%	4.90%	10,93%
6	NextEra Energy	\$20.64	\$0.84	4.5%	5.8%	6.4%	6.4%	5.8%	5.63%	5.48%	5.34%	5.19%	5.05%	4.90%	9.41%
7	OGE Energy Corp.	\$51.36	\$2.32	6.5%	8.3%	6.8%	7.0%	7.2%	6.78%	6.40%	6.03%	5.65%	5.28%	4.90%	10.33%
8	PG&E Corp.	\$39.75	\$1.29	6.0%	1.4%	4.0%	6.0%	4.4%	4.44%	4.53%	4.63%	4.72%	4.81%	4.90%	8.18%
9	SCANA Corp.	\$68.58	\$3.32	3.0%	4.6%	4.2%	5.0%	4.2%	4.32%	4.43%	4.55%	4.67%	4.78%	4.90%	9.76%
10	Sempra Energy	\$44.65	\$2.20	3.5%	7.3%	7.0%	6.1%	6.0%	5.80%	5.62%	5.44%	5.26%	5.08%	4.90%	10.42%
11	Southern Company	\$20.74	\$0.83	6.0%	5.9%	5.1%	5.6%	5.7%	5.53%	5.40%	5.28%	5.15%	5.03%	4.90%	9.30%
12	Vectren Corp.	\$25.51	\$1.24	5.5%	6.0%	4.7%	3.9%	5.0%	5.00%	4.98%	4.96%	4.94%	4.92%	4.90%	10.04%
13	Wisconsin	\$40.18	\$1.20	8.5%	7.8%	7.5%	4.7%	7.1%	6.75%	6.38%	6.01%	5.64%	5.27%	4.90%	8.50%
14	Xcel Energy	\$51.48	\$2.72	5.0%	5.3%	5.1%	4.3%	4.9%	4.92%	4.92%	4.91%	4.91%	4.90%	4.90%	10.45%
15 16	Average (All Excl. ITC) Median (All Excl. ITC)	\$38.07	\$1.68	5.5%	5.7%	5.4%	5.1%	5.4%	5.3%	5.2%	5.2%	5.1%	5.0%	4.9%	9.6% 9.5%

Sources:

<sup>1</sup> Exhibit WEA-4.

<sup>2</sup> Blue Chip Financial Forecasts, June 1, 2012 at 14.

#### Accuracy of Interest Rate Forecasts (Long-Term Treasury Bond Yields - Projected Vs. Actual)

		Publication Data			Actual Yield	Projected Yield
		Prior Quarter	Projected	Projected	in Projected	Higher (Lower)
Line	Date	Actual Yield	Yield	Quarter	Quarter	Than Actual Yield*
		(1)	(2)	(3)	(4)	(5)
						.,
1	Dec-00	5.8%	5.8%	1Q, 02	5.6%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%
3	Jun-01	5.4%	5.8%	30,02	5.2%	0.6%
4	Sep-01	5.7%	5.9%	40,02	5.1%	0.8%
5	Dec-01	5.5%	5.7%	10,03	5.0%	0.7%
6	Mar-02	5.3%	5.9%	20,03	4.7%	1.2%
7	Jun-02	5.6%	6.2%	30,03	5.2%	1.0%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%
9	Dec-02	5.2%	5.7%	10,04	4.9%	0.8%
10	Mar-03	5.1%	5.7%	20,04	5.4%	0.3%
11	Jun-03	5.0%	5.4%	30,04	5.1%	0.3%
12	Sep-03	4.7%	5.8%	40,04	4.9%	0.9%
13	Dec-03	5.2%	5.9%	10,05	4.8%	1.1%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.4%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%
16	Sep-04	5.4%	6.0%	40,05	4.8%	1.2%
17	Dec-04	5.1%	5.8%	10.06	4.6%	1.2%
18	Mar-05	4.9%	5.6%	20.06	5.1%	0.5%
19	Jun-05	4.8%	5.5%	30,06	5.0%	0.5%
20	Sep-05	4.6%	5.2%	4Q.06	4.7%	0.5%
21	Dec-05	4.5%	5.3%	10.07	4.8%	0.5%
22	Mar-06	4.8%	5.1%	20.07	5.0%	0.1%
23	Jun-06	4.6%	5.3%	30.07	4.9%	0.4%
24	Sep-06	5.1%	5.2%	40.07	4.6%	0.6%
25	Dec-06	5.0%	5.0%	10.08	4.4%	0.6%
26	Mar-07	4.7%	5.1%	20.08	4.6%	0.5%
27	Jun-07	4.8%	5.1%	3Q. 08	4.5%	0.7%
28	Sep-07	5.0%	5.2%	40.08	3.7%	1.5%
29	Dec-07	4.9%	4.8%	10.09	3.5%	1.4%
30	Mar-08	4.6%	4.8%	20.09	4.0%	0.8%
31	Jun-08	4 4%	4.9%	30.09	4.3%	0.6%
32	Sep-08	4.6%	5.1%	40.09	4.3%	0.8%
33	Dec-08	4.5%	4.6%	10, 10	4.6%	0.0%
34	Mar-09	3.7%	4.1%	2Q, 10	4.4%	-0.3%
35	Jun-09	3.5%	4.6%	3Q. 10	3.9%	0.8%
36	Sep-09	4.0%	5.0%	4Q, 10	4.2%	0.8%
37	Dec-09	4.3%	5.0%	10, 11	4.6%	0.4%
38	Mar-10	4.3%	5.2%	2Q, 11	4.3%	0.9%
39	Jun-10	4.6%	5.2%	3Q, 11	3.7%	1.5%
40	Sep-10	4.4%	4.7%	4Q, 11	3.0%	1.7%
41	Dec-10	3.9%	4.6%	1Q, 12	3.1%	1.5%
42	Jan-11	4.2%	5.0%	2Q, 12		
43	Feb-11	4.2%	5.0%	2Q, 12		
44	Mar-11	4.2%	5.1%	2Q, 12		
45	Apr-11	4.6%	5.2%	3Q, 12		
46	May-11	4.6%	5.2%	3Q, 12		
47	Jun-11	4.6%	5.2%	3Q, 12		
48	Jul-11	4.4%	5.2%	4Q, 12		
49	Aug-11	4.3%	5.0%	4Q, 12		
50	Sep-11	4.3%	4.2%	4Q, 12		
51	Oct-11	3.7%	3.9%	1Q, 13		
52	Nov-11	3.7%	3.8%	1Q, 13		
53	Dec-11	3.7%	3.8%	1Q, 13		
54	Jan-12	3.0%	3.8%	2Q, 13		
55	Feb-12	3.0%	3.8%	2Q, 13		
56	Mar-12	3.0%	3.8%	2Q, 13		
57	Apr-12	3.1%	3.9%	3Q, 13		
58	May-12	3.1%	3.9%	3Q, 13		

Source:

Blue Chip Financial Forecasts, Various Dates. \* Col. 2 - Col. 4.