

**BEFORE THE FLORIDA PUBLIC SERVICE
COMMISSION**

**DOCKET NO. 090172-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION TO DETERMINE NEED FOR
FLORIDA ENERGYSECURE LINE**

**REBUTTAL TESTIMONY & EXHIBITS
OF**

JUAN E. ENJAMIO

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FPSC-COMMISSION OF FWS

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2 **FLORIDA POWER & LIGHT COMPANY**

3 **REBUTTAL TESTIMONY OF JUAN E. ENJAMIO**

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5 **JULY 2, 2009**

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

8 A. My name is Juan E. Enjamio. My business address is Florida Power & Light
9 Company, 9250 West Flagler Street, Miami, Florida, 33174.

10 **Q. Have you previously submitted direct testimony in this proceeding?**

11 A. Yes.

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

13 A. Yes. I am sponsoring the following rebuttal exhibits:

14 ● JEE-10 Economic Evaluation Results of Different Gas Transportation
15 Alternatives Using Updated Assumptions

16 ● JEE-11 Economic Analysis Results: Projection of Approximate Bill
17 Impacts for Different Gas Transportation Alternatives - Updated
18 Assumptions

19 ● JEE-12 Cost of Capital - Updated

20 **Q. What is the purpose of your rebuttal testimony?**

21 A. The purpose of my rebuttal testimony is to comment on the testimony of Florida
22 Gas Transmission Company, LLC ("FGT") witnesses Michael T. Langston and

1 Mr. Langston also questioned the need for the FPL Florida EnergySecure Line
2 based on his estimates of inconsistencies he incorrectly claims exist between
3 FPL's 2009 Ten-Year Site Plan and other data provided in this docket. I discuss
4 Mr. Langston's analysis and show that it is incorrect and further explain that there
5 are no inconsistencies between data shown in FPL's Ten-Year Site Plan filed on
6 April 1, 2009 and other sources of information.

7
8 Both Mr. Langston and Dr. Schlesinger incorrectly allege that FPL's use of
9 declining revenue requirements for recovering the costs of the Florida
10 EnergySecure Line while using flat transportation rates for both FGT and
11 Company E creates an inconsistency that they claim somehow favors the FPL
12 proposal. They further incorrectly state that FPL's proposal will result in higher
13 costs to customers. In my rebuttal testimony, I explain why FPL's approach to
14 analyzing the comparative economics of both proposals through application of the
15 CPVRR method is appropriate, that the use of declining revenue requirements in
16 the analysis is correct, and that FGT has not shown any appropriate economic
17 analysis that disputes FPL's conclusions that the Florida EnergySecure Line/
18 Company E proposal result in the lowest costs to customers.

19
20 **REBUTTAL OF FGT WITNESS LANGSTON**

21
22 **Q. On page 11 of his testimony Mr. Langston states that FPL's analysis of the**
23 **FGT proposal shown in pre-filed direct testimony is based on its January 12,**

1 **2009 proposal. FGT subsequently submitted its March 18 proposal. Has FPL**
2 **analyzed the March 18 proposal?**

3 A. Yes. In response to Staff's First Ser of Interrogatories, number 27, FPL completed
4 an economic analysis of the March 18 proposal. In this analysis, the only changes
5 were to revise the FGT costs. This economic analysis showed that FPL's Florida
6 EnergySecure Line/Company E proposal would provide savings ranging from \$26
7 million to \$313 million (CPVRR) when compared to the FGT March 18 proposal.

8 **Q. Has FPL performed any further economic analysis of the competing**
9 **proposals using assumptions that are more recent?**

10 A. Yes. FPL has completed a more recent economic analysis. In this updated
11 analysis, FPL changed the following assumptions from those used in the
12 economic analysis shown in my direct testimony in this docket:

- 13 • Reflected the revenue requirements of temporary compression needed at the
14 Cape Canaveral Energy Center starting in 2013. The original analysis showed
15 these costs starting in 2014.
- 16 • Used a 12.5% return on equity, consistent with FPL's petition for increase in
17 rates, Docket 080677-EI. The original analysis used the currently approved
18 return on equity rate of 11.75%.
- 19 • Increased the escalation rate of operations and maintenance costs for the
20 Florida EnergySecure line to 2.5%, from the previous escalation rate of
21 approximately 2.0%. This change was made to ensure consistency among all
22 major escalation rates used in the analysis.

- 1 ● Updated the price of steel pipe utilized in the EnergySecure proposal to
2 \$1,350 per ton to reflect the current market price. To ensure that all projects
3 were evaluated on the same basis, FPL also adjusted the FGT and Company E
4 prices based on the steel price-tracker mechanisms provided by each party.

5 This adjustment resulted in a lower overall transportation rate for all parties.

6 The results of the economic analysis, after changing the above-mentioned
7 assumptions, show that the FPL Florida EnergySecure Line/Company E Proposal
8 results in savings to FPL's customers ranging from \$115 million to \$400 million
9 CPVRR. These results are shown in Exhibits JEE-10 and JEE-11.

10 **Q. On page 12 of his testimony, Mr. Langston states that FGT could have**
11 **incorporated approximately \$132 million of savings in its proposal assuming**
12 **FPL's 36-mile oil/gas pipeline from the Martin Plant to the 45th Street**
13 **terminal were available to transport gas to the Riviera Plant. Does this**
14 **assertion affect your conclusion that the FPL EnergySecure Line/ Company**
15 **E proposal is the most cost-effective alternative?**

16 **A.** No. As discussed in the rebuttal testimony of FPL witness Robert Sharra, FGT's
17 claimed savings do not account for the approximate \$86 million in costs that FPL
18 would incur to upgrade the existing oil/gas line to serve the modernized Riviera
19 Beach units. I have evaluated the economics of FGT's March 18, 2009 proposal
20 taking into account both FGT's claimed savings and FPL's additional costs using
21 the conventional CPVRR analysis. My analysis confirms that the FPL proposal
22 would still be more cost-effective than the FGT alternative for all of the three
23 generation resource plans described in my direct testimony.

1 Q. On page 13 of his testimony, Mr. Langston states “the Commission cannot
2 consider the intrastate pipeline in a vacuum”. Has FPL proposed that the
3 Commission consider the intrastate line in a vacuum, as Mr. Langston
4 suggests?

5 A. No. FPL is not proposing that the Commission consider the Florida EnergySecure
6 Line in a vacuum. On the contrary, in developing the costs of the Florida Energy
7 Secure Line/Company E proposal, FPL included the costs of the EnergySecure
8 Line as well as the transportation costs associated with the Company E interstate
9 pipeline. In the economic analysis presented in my direct testimony comparing
10 the two proposed gas transportation alternatives, FPL identified all relevant gas
11 transportation costs required to provide an adequate supply of gas for all of its
12 future generation resources for a study period equal to the expected life of the
13 Florida EnergySecure Line.

14 Q. On pages 14 and 15 of his testimony, Mr. Langston questions the population
15 projections for the 2012-2022 period used by FPL witness Morley in the
16 development of FPL’s demand forecast. Are these concerns valid?

17 A. No. In her rebuttal testimony, FPL witness Morley addresses the load demand
18 forecast questions raised by Mr. Langston and explains why the population
19 forecast used by FPL is proper and reasonable even if lower population growth is
20 assumed in the short-term. The comparative economic methodology (CPVRR)
21 used in this evaluation is a life-cycle analysis conducted for the 40-year life of the
22 project. FPL witness Morley’s focus on the long-term population forecast is
23 appropriate.

1 Q. Do you agree with FGT witness Langston's assertion on Page 15 of his
2 testimony that the information provided by FPL in its 2009 Ten Year Site
3 Plan does not support the construction of an additional 600 MMcf/d of
4 capacity?

5 A. No. The information provided in FPL's Ten Year Site Plan refers to total annual
6 use. Mr. Langston has divided the annual gas use by number of days in the year to
7 come up with an average daily use. However, as Mr. Langston himself points out
8 on page 15 of his testimony, FPL has to take into account the peak gas demand in
9 its planning. In fact, FPL's peak demand is the driving factor in determining the
10 need for gas transportation capacity. FPL's 2009 Ten Year Site Plan shows
11 annual gas use, but does not provide any information on FPL's peak gas use.

12 Q. On page 16 of his testimony, FGT witness Langston estimates that FPL's gas
13 use in 2014 could be estimated at 2,116,604 Mcf/d (2.1 Bcf/d), and based on
14 this estimate he concludes that in 2014 FPL would need a capacity addition
15 of only 200 MMcf/d, instead of 600 MMcf/d. Is Mr. Langston's estimate
16 correct?

17 A. No. Mr. Langston starts his estimate by using FPL's peak historical daily gas use
18 of 1,716,604 Mcf/d, which occurred in 2007. This figure was provided by FPL in
19 response to FGT's Second Set of Interrogatories, No. 53. Mr. Langston then adds
20 400,000 Mcf/d of demand for the Cape Canaveral Energy Center and the Riviera
21 Beach Energy Center to arrive at a total peak estimate use in 2014 of 2,116,604
22 Mcf/d. However, in his calculation, Mr. Langston neglected to add the gas
23 requirements for the West County Energy Center Units 1, 2, and 3, each of which

1 has a peak demand of 200,000 Mcf/d and which come in-service from 2009 to
2 2011. If Mr. Langston had taken the gas requirements for the West County
3 Energy Center Units into account in his calculation, he would have shown a 2014
4 need of 2,716,604 Mcf/d, or an incremental need of 800,000 Mcf/d.

5 **Q. On page 31 of his testimony, Mr. Langston states that the different rate**
6 **recovery mechanisms affect the economic outcome of the alternative analysis.**
7 **Is he correct?**

8 A. No. Mr. Langston is incorrect in his assertion. The fact that FPL will recover the
9 revenue requirements of the Florida EnergySecure Line through base rates, while
10 it recovers gas transportation costs through the Fuel Cost Recovery Clause does
11 not affect the outcome of the economic analysis. I explain this in detail later in
12 this rebuttal testimony when addressing a similar assertion by FGT Witness
13 Schlesinger.

14 **Q. Mr. Langston concludes on page 32 of his testimony that the Florida**
15 **EnergySecure Line will result in excess costs to FPL's customers. Is he**
16 **correct?**

17 A. No, he is not. The only way to determine which of the two competing proposals
18 results in lower overall costs to FPL's customers is to conduct a life-cycle cost
19 analysis including all the relevant costs and system impacts of both proposals.
20 The proposal with the lowest long-term cost impact on FPL customers is
21 determined by comparing the CPVRR cost over the expected life of the asset.
22 This is the proper standard accepted by the Commission. Using this approach,
23 FPL has shown that FGT's proposal would result in excess CPVRR costs to

1 FPL's customers ranging from \$204 to \$513 million as shown in Exhibit JEE-7
2 included in my direct testimony. Mr. Langston has not presented any evidence
3 that he has performed a CPVRR life-cycle analysis of the two proposals.

4 **Q. Did FPL base its economic analysis on an assumed rate that is based on a**
5 **100% load factor of the Florida EnergySecure Line, as stated in pages 30 and**
6 **36 of Mr. Langston's testimony?**

7 A. No. In its economic analysis, FPL did not compute any transportation rate,
8 assumed or otherwise, for the Florida EnergySecure Line. Instead, the annual
9 revenue requirements of the line were used directly in the computations. FPL
10 performed its economic analysis recognizing that it would recover all the revenue
11 requirements associated with the Florida EnergySecure Line, and also that in the
12 early years of operation FPL would not need the full 600 Mcf/d provided by the
13 Florida EnergySecure Line. However, as indicated in my direct testimony, even
14 without full utilization of the proposed Florida EnergySecure Line on day one,
15 FPL's proposal is the most cost-effective for customers.

16 **Q. Will the Florida EnergySecure/Company E proposal result in higher long-**
17 **term costs to FPL electric customers, as stated by Mr. Langston in page 45 of**
18 **his testimony?**

19 A. No. In Exhibit JEE-7 to my direct testimony in this docket, I show that the
20 Florida EnergySecure Line results in lower CPVRR costs for the three resource
21 plans under consideration. The purpose of performing a life-cycle cost analysis
22 for the life of the proposed alternatives, which computes the CPVRR costs for
23 each, is to identify the alternative that has the lowest cost to FPL's customers over

1 the study life. When comparing projects where the future energy sales are not
2 affected by the proposed alternatives, the project with the lowest CPVRR cost
3 will necessarily result in the lowest long-term costs to customers. The CPVRR
4 cost methodology used in the FPL economic analysis in this docket is the same
5 methodology that FPL has used in multiple economic analyses presented to the
6 Commission in generation need analyses and has long been accepted by the
7 Commission as the proper standard for evaluating the long term costs to
8 customers so that important resource planning decisions are not based on short-
9 sighted considerations.

10
11 **REBUTTAL OF FGT WITNESS SCHLESINGER**

12
13 **Q. FGT witness Schlesinger claims on page 14 of his testimony that FPL has**
14 **used internally inconsistent assumptions for the pipeline alternatives. He**
15 **further states on page 15 of his testimony that this “inconsistency” unfairly**
16 **tips the results towards FPL’s own proposal. Do you agree?**

17 **A.** No. Dr. Schlesinger’s assertion is apparently based on FPL’s appropriate use of
18 declining revenue requirements to recover the costs associated with the Florida
19 EnergySecure line while using flat gas transportation rates for the interstate
20 pipelines (both for FGT and for Company E). This is not an inconsistency, but
21 instead correctly reflects the way in which FPL recovers costs from its customers
22 for the different components of the two alternative gas transportation plans.

1 As explained by FPL witness Forrest, FPL proposes to place the costs of the
2 Florida EnergySecure Line in electric rate base. As is appropriate for all capital
3 investments, FPL would recover these revenue requirements using a declining
4 depreciation schedule resulting in capital revenue requirements that decrease over
5 the expected life of the project. This is not only the proper method but also the
6 required method for recovery of these costs. I will also point out that if for
7 purposes of the economic comparison FPL had “levelized” its revenue
8 requirements for the Florida EnergySecure Line over the life of the project,
9 resulting in flat revenue requirements, the results of the economic analysis would
10 have been the same. The levelized revenue requirements of a project are the flat
11 stream of annual revenue requirements that result in the same CPVRR costs as the
12 stream of annual revenue requirements computed using the traditional declining
13 method. Since achieving the lowest CPVRR costs is the standard used to measure
14 the cost-effectiveness of alternative proposals, the use of flat versus declining
15 revenue requirements for the pipeline would not affect the economic analysis of
16 the two competing proposals.

17
18 Costs for long-term gas transportation contracts generally reflect flat long-term
19 rates for the life of the contracts. Both FGT and Company E have proposed flat
20 long-term rates for their transportation services. These flat rates would be
21 recovered from FPL’s customers over time through the Fuel Cost Recovery
22 Clause.

1 In summary, it is correct and proper that in the economic analysis that compares
2 the competing gas transportation alternatives under consideration in this
3 proceeding, the revenue requirements of the Florida EnergySecure Line be
4 computed using the declining revenue requirement methodology while the costs
5 of gas transportation for both FGT and Company E be computed using flat gas
6 transportation rates. This is not a mix of apples and oranges. It is the proper
7 method to be used in comparing the long-term cost impacts that these projects
8 would have on FPL's customers.

9 **Q. On page 16 of his testimony, Dr. Schlesinger states that the Florida**
10 **EnergySecure Line/Company E proposal does not provide the most cost-**
11 **effective source of natural gas supply, transport and delivery. Do you agree?**

12 A. No. As discussed both in my direct testimony and earlier in this rebuttal
13 testimony, the CPVRR methodology that considers all relevant system impacts
14 over the life of the project is the correct measure for determining cost-
15 effectiveness of competing alternatives. As shown in Exhibit JEE-7, the Florida
16 EnergySecure Line/Company E Proposal results in CPVRR savings ranging from
17 \$208 to \$513 million when compared to FGT's January 12 proposal. In addition,
18 attached to my rebuttal testimony is Exhibit JEE-10, which shows a CPVRR
19 savings from \$115 to \$400 million when the updated Florida EnergySecure
20 Line/Company E Proposal is compared to FGT's unsolicited March 18 proposal.
21 I therefore conclude that the Florida EnergySecure Line is the most cost-effective
22 source of gas supply, transportation and delivery for FPL's customers. I should
23 also point out that I believe that the benefits to FPL's customers of the Florida

1 EnergySecure/Company E proposal in FPL's economic analysis is understated
2 because it does not include potential savings to FPL's customers from sales of
3 unused gas transportation capacity to third parties, as discussed in the direct and
4 rebuttal testimony of FPL witness Sexton, nor does it include the economic
5 benefits that increased gas transportation competition will likely provide, as
6 discussed in the direct and supplemental testimony of FPL witness Ogur.

7 **Q. Does this conclude your rebuttal testimony?**

8 **A. Yes.**

**Economic Evaluation Results of Different Gas Transportation Alternatives
 Using Updated Assumptions**
Differential Cost: Company B Option vs. Florida EnergySecure Line
 (Positive numbers mean savings to the Florida EnergySecure Line)
CPVRR* thru 2053 (2009\$)

	Differential Cost: Gas Transportation \$ Million	Differential Cost: Variable Costs (fuel and other) \$ Million	Total Differential Cost: \$ Million	
1	Base Case	6	112	118
2	RPS Scenario	6	109	115
3	Nuclear Delay Scenario	295	105	400

* CPVRR= Cumulative Present Value of Revenue Requirements

**Economic Analysis Results: Projection of Approximate Bill Impacts
for Different Gas Transportation Alternatives - Revised Assumptions
Long-Term Resource Plan (Base Case)**
(A negative value indicates a reduction in rates due to the Florida EnergySecure Line)

	(1)	(2)	(3) = (1)-(2)	(4)	(5) = ((3)x1,000,000x100) / ((4)x1,000,000)	(6) = ((5)x1,000) / 100
Year	Plan with FPL Option Annual Total Revenue Requirements (\$millions, Nominal \$)	Plan with Company B Annual Total Revenue Requirements (\$millions, Nominal \$)	Differential in Annual Total Revenue Requirements (\$millions, Nominal \$)	Projected Total Sales After DSM (GWh at the meter)	Differential in System Average Electric Rates (cents/kWh)	Differential in Customer Bill of 1,000 kwh (\$)
2014	6,548	6,324	224	113,497	\$0.20	\$1.97
2015	7,177	6,966	212	116,032	\$0.18	\$1.82
2016	7,911	7,717	194	118,353	\$0.16	\$1.64
2017	8,606	8,426	180	120,821	\$0.15	\$1.49
2018	9,052	8,882	170	123,846	\$0.14	\$1.37
2019	9,835	9,677	158	126,896	\$0.12	\$1.24
2020	10,062	9,915	148	130,473	\$0.11	\$1.13
2021	10,528	10,459	69	134,244	\$0.05	\$0.52
2022	11,141	11,152	-11	137,300	-\$0.01	-\$0.08
2023	11,709	11,768	-59	140,139	-\$0.04	-\$0.42
2024	12,494	12,580	-85	142,671	-\$0.06	-\$0.60
2025	13,329	13,422	-93	145,164	-\$0.06	-\$0.64
2026	14,069	14,249	-180	147,740	-\$0.12	-\$1.22
2027	14,960	15,154	-193	149,913	-\$0.13	-\$1.29
2028	15,765	15,977	-211	152,104	-\$0.14	-\$1.39
2029	16,768	16,991	-223	154,465	-\$0.14	-\$1.44
2030	17,812	18,045	-232	156,650	-\$0.15	-\$1.48
2031	18,818	19,052	-234	158,638	-\$0.15	-\$1.48
2032	20,244	20,490	-246	160,243	-\$0.15	-\$1.53
2033	22,314	22,567	-252	160,544	-\$0.16	-\$1.57
2034	22,509	22,767	-258	155,987	-\$0.17	-\$1.65
2035	23,940	24,206	-266	158,571	-\$0.17	-\$1.68
2036	26,098	26,372	-274	159,635	-\$0.17	-\$1.72
2037	27,441	27,721	-281	160,417	-\$0.17	-\$1.75
2038	28,805	29,092	-287	162,019	-\$0.18	-\$1.77
2039	30,298	30,591	-293	163,752	-\$0.18	-\$1.79
2040	31,964	32,267	-303	165,366	-\$0.18	-\$1.83

Notes: (1) This projection assumes instantaneous adjustment to electric rates and is for illustrative purposes only.
(2) The values presented in Columns (1), (2), and (3) are total system revenue requirements and include all costs: capital, system fuel, etc.
(3) FPL option is the Florida EnergySecure Line/ Company E Pipeline Project.

**Economic Analysis Results: Projection of Approximate Bill Impacts
for Different Gas Transportation Alternatives - Revised Assumptions
RPS Scenario**
(A negative value indicates a reduction in rates due to the Florida EnergySecure Line)

	(1)	(2)	(3) = (1)-(2)	(4)	(5) = ((3)x1,000,000x100) /((4)x1,000,000)	(6) = ((5)x1,000) / 100
Year	Plan with FPL Option Annual Total Revenue Requirements (\$millions, Nominal \$)	Plan with Company B Annual Total Revenue Requirements (\$millions, Nominal \$)	Differential in Annual Total Revenue Requirements (\$millions, Nominal \$)	Projected Total Sales After DSM (GWh at the meter)	Differential in System Average Electric Rates (cents/kWh)	Differential in Customer Bill of 1,000 kWh (\$)
2014	6,485	6,260	225	113,497	\$0.20	\$1.98
2015	7,083	6,872	211	116,032	\$0.18	\$1.82
2016	7,799	7,603	196	118,353	\$0.17	\$1.65
2017	8,476	8,295	181	120,821	\$0.15	\$1.50
2018	8,869	8,698	170	123,846	\$0.14	\$1.38
2019	9,600	9,442	159	126,896	\$0.13	\$1.25
2020	9,775	9,626	150	130,473	\$0.11	\$1.15
2021	10,221	10,150	70	134,244	\$0.05	\$0.52
2022	10,805	10,814	-10	137,300	-\$0.01	-\$0.07
2023	11,328	11,388	-59	140,139	-\$0.04	-\$0.42
2024	12,035	12,124	-89	142,671	-\$0.06	-\$0.62
2025	12,844	12,937	-93	145,164	-\$0.06	-\$0.64
2026	13,557	13,736	-179	147,740	-\$0.12	-\$1.21
2027	14,358	14,554	-196	149,913	-\$0.13	-\$1.31
2028	15,076	15,284	-209	152,104	-\$0.14	-\$1.37
2029	16,031	16,254	-223	154,465	-\$0.14	-\$1.44
2030	17,040	17,270	-230	156,650	-\$0.15	-\$1.47
2031	17,901	18,135	-234	158,638	-\$0.15	-\$1.47
2032	19,104	19,351	-246	160,243	-\$0.15	-\$1.54
2033	21,208	21,461	-253	160,544	-\$0.16	-\$1.58
2034	21,347	21,606	-259	155,987	-\$0.17	-\$1.66
2035	22,566	22,831	-265	158,571	-\$0.17	-\$1.67
2036	24,504	24,777	-274	159,635	-\$0.17	-\$1.71
2037	25,759	26,036	-278	160,417	-\$0.17	-\$1.73
2038	27,022	27,308	-286	162,019	-\$0.18	-\$1.77
2039	28,224	28,507	-283	163,752	-\$0.17	-\$1.73
2040	29,494	29,795	-301	165,366	-\$0.18	-\$1.82

Notes: (1) This projection assumes instantaneous adjustment to electric rates and is for illustrative purposes only.
(2) The values presented in Columns (1), (2), and (3) are total system revenue requirements and include all costs: capital, system fuel, etc.
(3) FPL option is the Florida EnergySecure Line/ Company E Pipeline Project.

**Economic Analysis Results: Projection of Approximate Bill Impacts
for Different Gas Transportation Alternatives - Revised Assumptions
Nuclear Delay**

(A negative value indicates a reduction in rates due to the Florida EnergySecure Line)

	(1)	(2)	(3) = (1)-(2)	(4)	(5) = ((3)x1,000,000x100) / ((4)x1,000,000)	(6) = ((5)x1,000) / 100
Year	Plan with FPL Option Annual Total Revenue Requirements (\$millions, Nominal \$)	Plan with Company B Annual Total Revenue Requirements (\$millions, Nominal \$)	Differential in Annual Total Revenue Requirements (\$millions, Nominal \$)	Projected Total Sales After DSM (GWh at the meter)	Differential in System Average Electric Rates (cents/kWh)	Differential in Customer Bill of 1,000 kWh (\$)
2014	6,548	6,324	224	113,497	\$0.20	\$1.97
2015	7,177	6,966	212	116,032	\$0.18	\$1.82
2016	7,911	7,717	194	118,353	\$0.16	\$1.64
2017	8,606	8,426	180	120,821	\$0.15	\$1.49
2018	9,469	9,443	26	123,846	\$0.02	\$0.21
2019	10,569	10,558	12	126,896	\$0.01	\$0.09
2020	11,487	11,531	-44	130,473	-\$0.03	-\$0.34
2021	12,278	12,325	-47	134,244	-\$0.04	-\$0.35
2022	12,495	12,554	-58	137,300	-\$0.04	-\$0.43
2023	12,639	12,725	-85	140,139	-\$0.06	-\$0.61
2024	12,879	12,974	-95	142,671	-\$0.07	-\$0.66
2025	13,249	13,388	-139	145,164	-\$0.10	-\$0.96
2026	14,060	14,239	-179	147,740	-\$0.12	-\$1.21
2027	14,928	15,124	-196	149,913	-\$0.13	-\$1.30
2028	15,740	15,951	-212	152,104	-\$0.14	-\$1.39
2029	16,717	16,936	-219	154,465	-\$0.14	-\$1.42
2030	17,817	18,045	-229	156,650	-\$0.15	-\$1.46
2031	18,820	19,051	-232	158,638	-\$0.15	-\$1.46
2032	20,198	20,445	-247	160,243	-\$0.15	-\$1.54
2033	22,285	22,539	-254	160,544	-\$0.16	-\$1.58
2034	22,472	22,732	-260	155,987	-\$0.17	-\$1.66
2035	23,890	24,155	-265	158,571	-\$0.17	-\$1.67
2036	26,098	26,373	-275	159,635	-\$0.17	-\$1.72
2037	27,442	27,721	-279	160,417	-\$0.17	-\$1.74
2038	28,805	29,091	-287	162,019	-\$0.18	-\$1.77
2039	30,291	30,585	-293	163,752	-\$0.18	-\$1.79
2040	31,891	32,189	-298	165,366	-\$0.18	-\$1.80

Notes: (1) This projection assumes instantaneous adjustment to electric rates and is for illustrative purposes only.
(2) The values presented in Columns (1), (2), and (3) are total system revenue requirements and include all costs: capital, system fuel, etc.
(3) FPL option is the Florida EnergySecure Line/ Company E Pipeline Project.

COST OF CAPITAL - UPDATED

SOURCE	WEIGHT	LONG LIVE ASSETS		AFTER TAX
		COST	WTD COST	
DEBT	44.2%	7.03%	3.11%	1.91%
PREFERRED	0.0%	0.00%	0.0%	0.0%
COMMON	55.8%	12.50%	6.98%	6.98%
TOTAL	100.0%		10.08%	8.89%

DISCOUNT RATE:

8.89%