

**BEFORE THE FLORIDA  
PUBLIC SERVICE COMMISSION**

**DOCKET NO. 050045-EI  
FLORIDA POWER & LIGHT COMPANY**

**MARCH 22, 2005**

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

**TESTIMONY & EXHIBITS OF:**

**LEONARDO E. GREEN**

DOCUMENT NUMBER-DATE

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2                   **FLORIDA POWER & LIGHT COMPANY**

3                   **TESTIMONY OF LEONARDO E. GREEN**

4                   **DOCKET NO. 050045-EI**

5                   **March 22, 2005**

6

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

8    A.    My name is Leonardo E. Green, and my business address is 9250 West Flagler  
9        Street, Miami, Florida 33174.

10 **Q.    By whom are you employed and what is your position?**

11   A.    I am employed by Florida Power & Light Company (FPL or the Company) as the  
12        Manager of Load Forecasting within the Resource Assessment & Planning  
13        Business Unit.

14 **Q.    Please describe your duties and responsibilities in that position.**

15   A.    I am responsible for the development of FPL's peak demand, energy, economic,  
16        and customer forecasts.

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

18   A.    I received a Doctor of Philosophy Degree in Economics from the University of  
19        Missouri-Columbia in 1983. Prior to joining FPL, I worked for Seminole Electric  
20        Cooperative as the Load Forecasting Supervisor in the Rates and Corporate  
21        Planning Department. I joined FPL in April of 1986, as a Senior Forecasting  
22        Analyst in the Research, Economics and Forecasting Department. My  
23        responsibilities included preparation, review, and presentation of the economic,

1 customer, and load forecasts for FPL. In August of 1986 I was promoted to  
2 Supervisor of Economics and Forecasting within the Research, Economics and  
3 Forecasting Department. In July of 1991, I became Manager of Load Forecasting  
4 within the Resource Assessment and Planning Business Unit. I am responsible  
5 for coordinating the entire economic and load forecasting effort at FPL.

6

7 In addition, I have held several Assistant Professorships of Economics and  
8 Statistics as well as research and teaching positions with the University of  
9 Missouri, Florida International University, and the University of South Florida.

10 **Q. Are you sponsoring an exhibit in this case?**

11 A. Yes. I am sponsoring an exhibit consisting of seven documents, LEG-1 through  
12 LEG-7, which are attached to my direct testimony.

13 **Q. Are you sponsoring or co-sponsoring any MFRs in this case?**

14 A. Yes. I am sponsoring the following MFRs:

15 C-40, O & M Compound Multiplier Calculation

16 E-18, Monthly Peaks

17 F-6, Forecasting Models – Sensitivity of Output to Changes in Input Data

18 F-7, Forecasting Models – Historical Data

19

20 Additionally, I am co-sponsoring the following MFRs:

21 C-12, Administrative Expenses

22 C-15, Industry Association Dues

23 C-33, Performance Indices

- 1 C-34, Statistical Information
- 2 C-36, Non-Fuel Operation and Maintenance Expense Compared to CPI
- 3 C-37, O&M Benchmark Comparison by Function
- 4 E-9, Cost of Service – Load Data
- 5 E-11, Development of Coincident and Noncoincident Demands for Cost Study
- 6 E-12, Adjustment to Test Year Revenue
- 7 E-15, Projected Billing Determinants - Derivation
- 8 E-16, Customers by Voltage Level
- 9 E-19a, Demand and Energy Losses
- 10 E-19b, Energy Losses
- 11 E-19c, Demand Losses
- 12 F-5, Forecasting Models
- 13 F-8, Assumptions
- 14 **Q. Are you sponsoring or co-sponsoring any of FPL’s 2007 Forecast Schedules**
- 15 **in this case?**
- 16 A. Yes. I am sponsoring FPL Forecast Schedule F-8, Assumptions.
- 17 **Q. What is the purpose of your testimony?**
- 18 A. My testimony addresses FPL’s customer, energy sales, and peak demand
- 19 forecasts, which are used in this case. I will explain how these forecasts were
- 20 developed and that they are reasonable forecasts. Additionally, I will discuss the
- 21 growth in customers and the demand for electricity experienced in FPL’s service
- 22 territory over the last 20 years.
- 23

1                   **DESCRIPTION OF THE HISTORICAL GROWTH IN FPL'S SERVICE**

2   **TERRITORY AND FLORIDA**

3   **Q.     Please describe the historical growth in FPL's service territory.**

4   **A.     Between 1985 and 2004, the average number of FPL customers served has**  
5           **increased by 1.6 million representing an increase of 61%. The increase in**  
6           **customers of 1.6 million in the last twenty years is the same as the prior twenty**  
7           **year period from 1966 to 1985. Energy sales have increased by 52,095 GWh for**  
8           **the period of 1985 to 2004 representing a growth of 93%. The energy usage for**  
9           **an average residential customer has increased by approximately 30% during the**  
10          **last twenty years. Similarly, summer peak demand increased by 93% during the**  
11          **last twenty years, representing an increase of 9,891 MW<sup>1</sup>.**

12 **Q.     How does this historical growth compare to the rest of the state of Florida?**

13 **A.     The growth rates for FPL's service territory are comparable to the growth rates**  
14          **for the rest of Florida. Between 1985 and 2003, for the entire state of Florida, the**  
15          **number of customers grew from 5 million to 8 million, annual energy sales grew**  
16          **from 112,853 GWh to 219,021 GWh, and summer peak demand grew from**  
17          **21,848 MW to 40,387 MW. This represents a growth of 61.5% in the number of**  
18          **customers, an increase of 94.1% in energy sales, and an increase of 84.9% in peak**  
19          **demand. FPL represents approximately 50% of the state's total electrical system**  
20          **and its growth characteristics mimic those for the rest of the state.**

21  
22  

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<sup>1</sup> The annual peaks for the same period grew by 64%.

1                   **FPL'S LOAD FORECASTING PROCESS AND RESULTS**

2   **Q.   Please describe FPL's forecasting process.**

3   A.   FPL relies on econometrics as the primary tool for projecting future levels of  
4       customer growth, energy sales, and peak demand. An econometric model is a  
5       numerical representation, obtained through statistical estimation techniques, of the  
6       degree of relationship between a dependent variable, e.g., the level of energy  
7       sales, and the independent (explanatory) variables, which I describe in the  
8       following paragraph. A change in any of the independent variables will result in a  
9       corresponding change in the dependent variable. On a historical basis,  
10      econometric models have proven to be highly effective in explaining changes in  
11      the level of customer or load growth. These models have consistently been used  
12      by FPL for various planning purposes and the modeling results have been  
13      reviewed and accepted by this Commission in past regulatory proceedings.

14  
15      Predicting the level of the dependent variable in future years requires assumptions  
16      regarding the levels of the explanatory variables. Explanatory variables include  
17      assumptions on the future number of customers, projected economic conditions,  
18      weather, and the price of electricity, each of which is obtained from various  
19      sources. For example, the future number of customers is based on population  
20      projections produced by the University of Florida's Bureau of Economic and  
21      Business Research (BEBR). The projected economic conditions are secured from  
22      reputable economic forecasting firms such as Global Insight (formerly known as  
23      DRI-WEFA). The weather factors are obtained from the National Oceanographic

1 and Atmospheric Administration (NOAA). The price of electricity for the model  
2 reflects the Commission-approved base rates and adjustment clauses. Seasonal  
3 factors in the consumption of electricity come from two sources: the weather  
4 seasons, and the population seasonal pattern. FPL performs substantial analysis  
5 to ensure that the assumptions regarding the explanatory variables are reasonable.  
6 This ensures that the forecast of customers, energy sales, and peak demand are  
7 both realistic and rational.

### 9 FPL'S CUSTOMER FORECAST

10 **Q. Please explain the development of FPL's customer growth forecast.**

11 A. The growth in customers in FPL's service territory is the primary driver of the  
12 growth in the level of energy sales and peak demand. In order to project the  
13 growth in the number of customers, FPL relies on population projections  
14 produced by BEBR. Once a year, BEBR updates its population projections for  
15 the state of Florida on a county-by-county basis. FPL's customer forecast is  
16 based on BEBR's population projections released in April of 2004 and  
17 incorporates an adjustment by FPL for the impact of the 2004 hurricanes on future  
18 customer growth.

19 **Q. What was the impact of the 2004 hurricane season on FPL's projections of  
20 customer growth?**

21 A. Because BEBR will not be incorporating the impact of the 2004 hurricanes in its  
22 population projection until April 2005, FPL has separately estimated their impact  
23 on its customer growth. These estimates were based on FPL's experience

1 following Hurricane Andrew. Document LEG-1 displays the growth in the  
2 number of FPL customers since 1966 in which the values shown for each month  
3 represent the growth in the number customers over the same month of the  
4 previous year. Since 1966, the growth in customers has exhibited three distinct  
5 cycles of growth patterns. In each cycle, the growth peaked at about 120,000  
6 customers per year and then declined and bottomed at approximately 60,000 per  
7 year. The only exception to this pattern occurred following Hurricane Andrew  
8 where customer growth dropped to approximately 65,000 per year and hovered  
9 around this figure for the next six years before recovering to a more robust  
10 growth. As shown in LEG-1, in the current cycle, FPL's customer growth  
11 reached a peak during the period of August 2003 to August 2004, with  
12 approximately 120,000 customers having been added. However, as a  
13 consequence of the three hurricanes (Charley, Francis and Jeanne) that struck  
14 FPL's service territory in 2004, growth significantly declined. In fact, comparing  
15 October 2004 to October 2003, FPL added only 93,790 customers. Furthermore,  
16 by December of 2004, customer growth had continued to decline, to only 89,934  
17 over December of 2003.

18  
19 Before the hurricanes hit Florida in 2004, FPL was projecting an annual increase  
20 of 80,000 new customers in 2005, 82,000 new customers in 2006, and 81,000 new  
21 customers in 2007. When the impact of the 2004 hurricanes is taken into account,  
22 the resulting projections are 72,000 new customers in 2005, 75,000 in 2006 and a  
23 return to a trend of 80,000 in 2007, as shown in Document LEG-2. FPL is



1 assuming that the impact of the 2004 hurricanes will be short-lived and customer  
2 growth will return to a more normal level in a couple of years as opposed to the  
3 impact of Hurricane Andrew which lasted six years. This difference is primarily  
4 due to the assumption that population growth in Florida will be fueled by larger  
5 numbers of baby boomers retiring and moving to Florida, as well as an increasing  
6 availability of jobs.

7 **Q. Is FPL's customer growth forecast reasonable?**

8 A. Yes. The forecast incorporates the most recent projections made by the  
9 University of Florida and accounts for the impact of the 2004 hurricanes. FPL  
10 assumes no lingering effect in terms of customer growth with a return to normal  
11 growth in two years, primarily due to demographics.

12  
13 **FPL'S ENERGY SALES FORECAST**

14 **Q. Please describe the process FPL used to forecast energy sales.**

15 A. The forecast of energy sales consists of three steps. First, total Net Energy for  
16 Load (NEL), which is energy generated net of plant use, is projected. A superior  
17 econometric forecasting model is obtained if NEL, instead of billed energy sales,  
18 is matched to the explanatory variables. This is so because the NEL data do not  
19 have to be attuned to account for billing cycle adjustments, which might distort  
20 the real time match between the production and consumption of electricity.

21  
22 Next, a line loss factor and a billing cycle adjustment are applied to the NEL to  
23 arrive at total customer electricity use. Finally, revenue class models are

1 developed to distribute the forecast of total end-use sales of electricity forecast to  
2 the different revenue classes (residential, commercial, industrial, etc.). FPL's  
3 process and models used for forecasting energy sales are discussed in detail in  
4 MFR F-5.

5  
6 To project energy sales by revenue class, separate models for the residential,  
7 commercial, and industrial revenue classes are developed. These revenue class  
8 models are developed to obtain an objective allocation of the total energy sales  
9 among FPL's different revenue classes. The sum of the sales for all revenue  
10 classes will result in total energy sales. The energy sales for each revenue class is  
11 then adjusted to reflect the total energy sales derived from the NEL model.

12 **Q. What are the primary inputs to determine the growth in energy sales?**

13 A. The growth in energy sales comes from the overall growth in the number of new  
14 customers as shown on Document LEG-2 and per capita use of electricity by all  
15 customers, shown on Document LEG-3. The product of per capita use and the  
16 number of customers yields the NEL for a given period as shown in Document  
17 LEG-4. The per capita use of electricity and the increased number of new  
18 customers are both linked directly to the performance of the local and national  
19 economy. When the economy is booming, the use of electricity increases in all  
20 sectors: residential, commercial, industrial, etc. A strong economy creates new  
21 jobs that attract new customers. Under these conditions, new households develop,  
22 including those of retirees from other states. However, the reverse also holds true.  
23 If the economy is performing poorly, customers with reduced incomes are more

1 apprehensive as to expenditures and tend to restrict their consumption of goods  
2 and services. Electricity demand and sales slacken when incomes fall. Job  
3 contractions reduce the number of new customers coming to Florida seeking  
4 employment opportunities, and new household formations are postponed. FPL  
5 relies on the outlook for the state and national economy produced by Global  
6 Insight and the population growth forecast developed by the University of Florida.

7 **Q. What is the state of Florida's current economic outlook?**

8 A. Florida's economy has continued to grow at a strong pace, and although the 2004  
9 hurricanes were a setback, the economy is expected to bounce back strongly.  
10 According to Global Insight's 2004 Fourth Quarter Outlook, the "Florida  
11 economy will remain a job leader in the years ahead." The strong population  
12 growth is largely due to baby boomers approaching retirement and the availability  
13 of jobs. Florida has been outperforming the national economy as shown in  
14 Document LEG-5, and that pattern is projected to continue. The strong  
15 population growth will result in increased demand for various services and new  
16 homes; thus, these two sectors are leading the growth for Florida's economy.

17 **Q. What is the nation's current economic outlook?**

18 A. Global Insight projects that the U.S economy is expected to grow at an annual rate  
19 of 3.5% in 2005, 3.3% in 2006, and 3.2% in 2007. Growth will be steady but not  
20 stellar. Construction activity at the national level has been very strong, similar to  
21 that of Florida's experience, but is expected to slow down in 2006 and 2007,  
22 primarily due to mortgage rates increasing. There are two principal risks to this  
23 outlook at the national level: one is the possibility of higher interest rates

1           stemming from trade deficits and inflationary pressures, and the other is  
2           potentially higher oil prices. These risk factors could further slow down the  
3           growth in the national economy.

4   **Q.    Would there be an impact on your energy sales forecast if there is a change**  
5   **in the current state and national economic conditions?**

6   A.    Yes, there would be. Every forecast involves a degree of uncertainty. As I  
7           previously stated in my testimony, Florida's economy should outperform the  
8           nation in the near future. However, the macroeconomic variables such as interest  
9           rates, different inflation indices, and the price of oil will all influence the output of  
10          the Florida economy. Should there be a significant departure from the most likely  
11          scenario for the state and national economy as forecasted by Global Insight, a  
12          corresponding impact on the growth in customers, the level of energy sales, and  
13          peak demand will occur.

14 **Q.    What were the basic economic assumptions included in the forecast?**

15 A.    The energy sales forecast was produced in October of 2004 shortly after the end  
16          of the 2004 hurricane events. At that time Global Insight's outlook was that the  
17          national economy will gradually evolve from an unemployment rate just over  
18          5.5% to the path of "full employment" (4.5%-5.5% unemployment rate). The  
19          economy of the state of Florida was forecasted again to outperform the rest of the  
20          nation between 2005 and 2007, driven primarily by high growth in job creation  
21          resulting from high tech and health services industries moving to Florida, and a  
22          vibrant construction industry remaining at its already record levels. This forecast  
23          also reflects that, as a consequence of the hurricanes in 2004, there will be

1 substantial reconstruction activity and infusion of insurance funds into the local  
2 economy. This reconstruction activity typically occurs in stages: reduced  
3 employment for a short period (a couple of months) followed by increased  
4 employment as reconstruction proceeds (for perhaps 2 years) and finally a lull as  
5 the reconstruction nears completion. Furthermore, the reconstruction fuels the  
6 manufacturing sector to service this reconstruction with construction material,  
7 furniture and transportation equipment. Economic projections show job growth  
8 of 2.2% in 2004, 2.9% in 2005 and 2.2% in 2006. New housing starts in 2004  
9 were up by almost 15% over 2003, a banner year, and real per capita income is  
10 growing at 2.1%. The preliminary indicators suggest a continuation of optimistic  
11 economic conditions.

12 **Q. What is FPL's Energy Sales forecast?**

13 A. FPL's energy use per customer is projected to grow at an annual rate of 1.6% in  
14 2005, 2006, and 2007, as shown in Document LEG-3. Customer growth is  
15 projected to grow at 1.7% for 2005 and 2006, and 1.8% for 2007. The resulting  
16 growth in energy sales is estimated at 3.3% in 2005, 3.4% in 2006, and 3.5% in  
17 2007, as shown in Document LEG-4. These energy and customer growth  
18 parameters are similar to and slightly above the average of the last five years, a  
19 period characterized by good economic performance, low prices of electricity, and  
20 hotter than normal weather conditions.

21 **Q. Is FPL's forecast of energy sales reasonable?**

22 A. Yes. A forecast is considered reasonable if good judgment is used in estimating  
23 (availing oneself of the appropriate and most credible assumptions on hand) and

1 testing the model and if the results or outputs make sense when compared to prior  
2 similar situations. FPL followed this approach in preparing the forecast.

3  
4 The models employed by FPL have good descriptive statistics with high degrees  
5 of statistical significance. FPL is confident that the relationship that exists  
6 between the level of energy sales and the economy, weather, customers, price of  
7 electricity, and other variables has been properly assessed and numerically  
8 quantified.

9  
10 Furthermore, FPL was thorough and comprehensive in securing the best data  
11 available to assess the impact of the 2004 hurricanes and their aftermath. FPL  
12 relied on several sources of data and utilized the most respected firms in the  
13 industry.

#### 14 15 **FPL'S PEAK DEMAND FORECAST**

16 **Q. Please describe FPL's process to forecast the level of peak demand.**

17 A. FPL employs econometric models to predict the level of peak demand in its  
18 service territory. The rate of absolute growth in FPL system load has been a  
19 function of a larger customer base, weather conditions, continued economic  
20 growth, changing patterns of customer behavior (including an increasing number  
21 of electricity-consuming appliances) and more efficient heating and cooling  
22 appliances. FPL develops peak demand models to capture these relationships.

23

1 The summer peak forecast is developed using an econometric model. The model  
2 is a per-customer model that includes the total number of FPL customers, the  
3 price of electricity, real Florida personal income as an economic driver, and  
4 maximum temperature as a weather variable.

5  
6 Like the system summer peak model, the winter peak model is also an  
7 econometric model. The winter peak model is a per-customer model that includes  
8 two weather-related variables: (1) the minimum temperature on the peak day; and  
9 (2) heating degree hours from the prior day until 9:00 A.M. of the peak day. In  
10 addition, the model also has an economic variable, Florida real personal income.

11  
12 Additionally, monthly peaks are forecasted to provide information to be used in  
13 rate design and for the scheduling of maintenance for power plants and fuel  
14 budgeting. The monthly peak forecasting process consists of the following  
15 actions:

- 16 - Development of historical seasonal factors for each month using the ratios  
17 of historical monthly peaks to seasonal peaks (Summer = April through  
18 October; Winter = November through March).
- 19 - Application of the seasonal factors to their respective seasonal peak  
20 forecast to derive the peak forecasts by month. This process assumes that  
21 the monthly ratios remain unchanged over the forecasting period.

1 **Q. How does FPL's projected rate of growth in peak demand compare to its**  
2 **historical growth?**

3 A. FPL's projected rate of growth in peak demand is very similar to its historical  
4 growth. Using summer peak demand as an example and as shown in Document  
5 LEG-6, FPL's peak demand grew from 15,266 MW in 1993 to 20,545 MW in  
6 2004. In 2004, FPL customers set six all-time peak records for electricity used on  
7 the Company's system. For the forward-looking period, FPL is projecting a peak  
8 demand of 21,769 MW by 2007, which is a 2.8% compound annual growth rate  
9 between 2005 and 2007. The growth in peak per customer is projected to grow at  
10 an annual average rate of 1.0% for the next three years compared to an annual  
11 average growth of 0.6% for the last 12 years as shown in Document LEG-7.

12 **Q. Is FPL's peak demand forecast reasonable?**

13 A. Yes. FPL is confident that the relationship that exists between the level of peak  
14 demand and the economy, weather, customers, price of electricity, and other  
15 variables has been properly assessed and numerically quantified. The forecast  
16 incorporates the most recent population estimates, including the impact of the  
17 2004 hurricanes. The models employed by FPL have good descriptive statistics  
18 with high degrees of statistical significance.

19 **Q. Please summarize your testimony.**

20 A. My testimony addresses FPL's customer, energy sales, and peak demand forecasts  
21 used in this case. I have explained how these forecasts are developed and that  
22 they are reasonable forecasts.

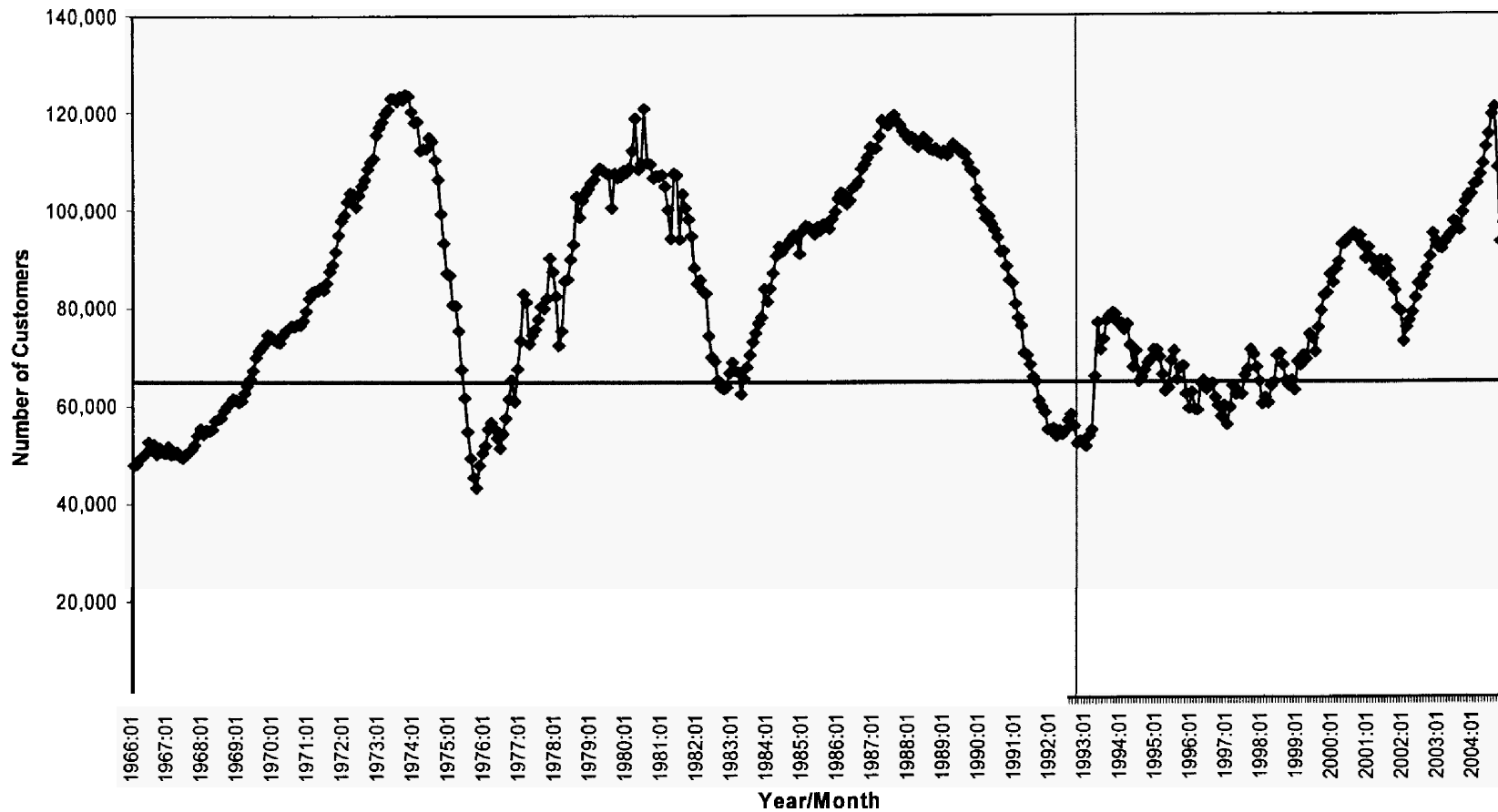


1 In summary, my testimony shows that FPL is projecting customer growth to be  
2 1.7% in 2005 and 2006, and 1.8% in 2007. FPL is projecting energy sales to  
3 increase by 3.3% in 2005, 3.4% in 2006 and 3.5% in 2007. Additionally, FPL is  
4 projecting peak demand to increase by 0.3% in 2005, by 2.7% in 2006, and 2.8%  
5 in 2007.

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

7 **A. Yes.**

## Total Customers: Absolute Monthly Growth



### ANNUAL CUSTOMER GROWTH

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Annual</u>
2000	85,400	88,208	89,666	93,271	93,474	94,366	95,011	95,624	94,646	95,056	93,052	90,318	92,341
2001	92,616	90,323	87,919	89,035	89,895	86,891	89,847	88,114	85,071	83,778	80,126	79,556	86,931
2002	73,264	76,202	77,695	79,306	82,301	85,258	84,665	86,858	88,455	90,767	95,516	93,992	84,523
2003	92,592	92,335	93,671	94,609	95,440	97,992	97,753	96,185	99,756	101,940	103,247	103,474	97,416
2004	105,470	105,696	107,492	109,724	112,992	115,477	119,403	120,971	108,910	93,790	97,603	89,934	107,289

Note: In the last five years, FPL's customer's growth slowed in the latter months of 2001 & 2004 due to the events of September 11<sup>th</sup> and an active hurricane season respectively.

**TOTAL AVERAGE CUSTOMERS**

	Absolute	%
HISTORY (1993 to 2004)	78,606	2.1%
FORECAST (2005 to 2007)	75,816	1.8%

		GROWTH	
		Absolute	%
1993	3,355,794	74,556	2.3%
1994	3,422,187	66,393	2.0%
1995	3,488,796	66,609	1.9%
1996	3,550,747	61,951	1.8%
1997	3,615,485	64,738	1.8%
1998	3,680,470	64,985	1.8%
1999	3,756,009	75,539	2.1%
2000	3,848,350	92,341	2.5%
2001	3,935,281	86,931	2.3%
2002	4,019,805	84,523	2.1%
2003	4,117,221	97,416	2.4%
2004	4,224,509	107,289	2.6%

**FORECAST**

		GROWTH	
		Absolute	%
2005	4,296,957	72,448	1.7%
2006	4,371,957	74,999	1.7%
2007	4,451,957	80,001	1.8%

**NET ENERGY FOR LOAD PER CUSTOMER (KWH)**

**AVERAGE ANNUAL GROWTH**

	Absolute	%
HISTORY (1993 to 2004)	276	1.1%
FORECAST (2005 to 2007)	416	1.6%

**HISTORY**

	KWH	GROWTH	
		Absolute	%
1993	22,580	303	1.4%
1994	23,487	907	4.0%
1995	24,066	579	2.5%
1996	23,846	-220	-0.9%
1997	24,022	176	0.7%
1998	25,177	1,155	4.8%
1999	24,350	-827	-3.3%
2000	24,943	593	2.4%
2001	25,006	63	0.3%
2002	25,907	901	3.6%
2003	26,326	418	1.6%
2004	25,588	-737	-2.8%

**FORECAST**

	KWH	GROWTH	
		Absolute	%
2005	25,994	406	1.6%
2006	26,410	416	1.6%
2007	26,837	427	1.6%

**NET ENERGY FOR LOAD (GWH)**

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**AVERAGE ANNUAL GROWTH**

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	Absolute	%
HISTORY (1993 to 2004)	2,917	3.3%
FORECAST (2005 to 2007)	3,793	3.4%

**HISTORY**

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	GWH	GROWTH	
		Absolute	%
1993	75,774	2,677	3.7%
1994	80,376	4,601	6.1%
1995	83,961	3,585	4.5%
1996	84,671	710	0.8%
1997	86,850	2,179	2.6%
1998	92,663	5,813	6.7%
1999	91,460	-1,203	-1.3%
2000	95,989	4,529	5.0%
2001	98,404	2,415	2.5%
2002	104,141	5,737	5.8%
2003	108,388	4,247	4.1%
2004	108,097	-291	-0.3%

**FORECAST**

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	GWH	GROWTH	
		Absolute	%
2005	111,695	3,598	3.3%
2006	115,463	3,768	3.4%
2007	119,477	4,015	3.5%

## COMPARISON OF NON-AGRICULTURAL EMPLOYMENT

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### AVERAGE ANNUAL GROWTH

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	Absolute (000s)	%
U.S. (1993 to 2004)	1,880	1.5%
FLORIDA (1993 to 2004)	173	2.7%

### HISTORY

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	GROWTH			GROWTH		
	US (000s)	Absolute (000s)	%	FLORIDA (000s)	Absolute (000s)	%
1993	110,847	2,124	2.0%	5,572	213	4.0%
1994	114,282	3,435	3.1%	5,799	228	4.1%
1995	117,306	3,024	2.6%	5,996	197	3.4%
1996	119,699	2,392	2.0%	6,183	187	3.1%
1997	122,767	3,068	2.6%	6,414	231	3.7%
1998	125,924	3,157	2.6%	6,636	222	3.5%
1999	128,992	3,068	2.4%	6,827	191	2.9%
2000	131,791	2,800	2.2%	7,079	252	3.7%
2001	131,837	46	0.0%	7,170	91	1.3%
2002	130,343	-1,494	-1.1%	7,180	10	0.1%
2003	129,937	-406	-0.3%	7,285	105	1.5%
2004	131,281	1,344	1.0%	7,440	156	2.1%

**SUMMER PEAK LOAD (MW)**

	Absolute	%
HISTORY (1993 to 2004)	490	2.7%
FORECAST (2005 to 2007)	408	2.8%

	MW	GROWTH	
		Absolute	%
1993	15,266	605	4.1%
1994	15,179	-87	-0.6%
1995	16,172	993	6.5%
1996	16,064	-108	-0.7%
1997	16,613	549	3.4%
1998	17,897	1,284	7.7%
1999	17,615	-282	-1.6%
2000	17,808	193	1.1%
2001	18,754	946	5.3%
2002	19,219	465	2.5%
2003	19,668	449	2.3%
2004	20,545	877	4.5%

**FORECAST**

	MW	GROWTH	
		Absolute	%
2005	20,614	69	0.3%
2006	21,178	564	2.7%
2007	21,769	591	2.8%

**SUMMER PEAK LOAD PER CUSTOMER (KW)**

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**AVERAGE ANNUAL GROWTH**

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	Absolute	%
HISTORY (1993 to 2004)	0.03	0.6%
FORECAST (2005 to 2007)	0.01	1.0%

**HISTORY**

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	KW	GROWTH	
		Absolute	%
1993	4.55	0.08	1.8%
1994	4.44	-0.11	-2.5%
1995	4.64	0.20	4.5%
1996	4.52	-0.11	-2.4%
1997	4.59	0.07	1.6%
1998	4.86	0.27	5.8%
1999	4.69	-0.17	-3.6%
2000	4.63	-0.06	-1.3%
2001	4.77	0.14	3.0%
2002	4.78	0.01	0.3%
2003	4.78	0.00	0.0%
2004	4.86	0.09	1.8%

**FORECAST**

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	KW	GROWTH	
		Absolute	%
2005	4.80	-0.07	-1.4%
2006	4.84	0.05	1.0%
2007	4.89	0.05	0.9%