

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

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**DOCKET NO. 08 _____-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION TO DETERMINE NEED FOR
CONVERSION OF CAPE CANAVERAL PLANT**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION TO DETERMINE NEED FOR
CONVERSION OF RIVIERA PLANT**

**DIRECT TESTIMONY & EXHIBITS OF:
DR. ROSEMARY MORLEY**

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF DR. ROSEMARY MORLEY

DOCKET NO. 08____-EI

APRIL 30, 2008

Q. Please state your name and business address.

A. My name is Dr. Rosemary Morley, and my business address is 9250 West Flagler, Miami, Florida 33174.

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

A. I am employed by Florida Power & Light Company (FPL) as the Director of Load Forecasting and Analysis.

Q. Please describe your duties and responsibilities as FPL's Director of Load Forecasting and Analysis.

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

Q. Please describe your educational background and professional experience.

A. I hold a bachelor's degree (B.A.) with honors in economics from the University of Maryland and a master's degree (M.A.) in economics from Northwestern University. In 2005, I earned a Doctorate in Business Administration (D.B.A.) from Nova Southeastern University. I began my career with FPL in 1983 as an Assistant Economist. I have since held a variety of positions in the forecasting, planning, and regulatory areas. Between 1996 and 2007, I was the Rate

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1 Development Manager for FPL. During that time I testified on a number of
2 issues, including the forecast of billing determinants by rate class and the
3 Company's load research studies. I am a member of the National Association of
4 Business Economists and the Institute of Business Forecasting and Planning.

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

6 A. Yes. I am sponsoring Exhibits RM-1 through RM-13, which are attached to my
7 direct testimony.

8	Exhibit RM-1	Total Average Customers
9	Exhibit RM-2	Summer Peak Load Per Customer (KW)
10	Exhibit RM-3	Summer Peak Weather
11	Exhibit RM-4	Florida Real Personal Income
12	Exhibit RM-5	Real Price of Electricity
13	Exhibit RM-6	Impact of the 2005 Energy Policy Act
14	Exhibit RM-7	Lee County Electric Cooperative - Summer Peak
15	Exhibit RM-8	Summer Peak Load (MW)
16	Exhibit RM-9	Winter Peak Load Per Customer (KW)
17	Exhibit RM-10	Winter Peak Load (MW)
18	Exhibit RM-11	Net Energy for Load Use Per Customer (KWH)
19	Exhibit RM-12	Lee County Electric Cooperative – Net Energy for
20		Load
21	Exhibit RM-13	Net Energy for Load (GWh)

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to describe FPL's load forecasting process,
3 identify the underlying methodologies and assumptions, and present the load
4 forecast used in this filing.

5 **Q. Please summarize your testimony.**

6 A. My testimony addresses FPL's customer forecast, summer and winter peak
7 demand forecasts, and the net energy for load forecast. My testimony explains
8 how these forecasts are developed and why they are reasonable. My testimony
9 shows that FPL is expected to experience continued growth in its customer base
10 between 2008 and 2017. My testimony shows that summer peak demand is
11 projected to continue to grow albeit at a somewhat slower rate than that
12 experienced historically. By 2017 the cumulative increase over last year's
13 summer peak demand is projected to be 6,659 MW. Finally, my testimony
14 explains that FPL's net energy for load is expected to grow at an annual rate of
15 3.4% between 2008 and 2017.

16

17 **FPL'S EXISTING CUSTOMER BASE**

18

19 **Q. Please describe FPL's service territory.**

20 A. FPL's service territory covers approximately 27,650 square miles within
21 peninsular Florida, which ranges from St. Johns County in the north to Miami-
22 Dade County in the south, and westward to Manatee County. FPL serves
23 customers in 35 counties within this region.

1 **Q. How many customers receive their electric service from FPL?**

2 A. FPL currently serves about 4.5 million customers, as shown on Exhibit RM-1.
3 This amounts to a population of almost 9 million people.
4

5 **LOAD FORECASTING PROCESS AND RESULTS**

6
7 **Q. Please describe FPL's forecasting process.**

8 A. FPL relies on econometrics as the primary tool for projecting future levels of
9 customer growth, net energy for load, and peak demand. An econometric model
10 is a numerical representation, obtained through statistical estimation techniques,
11 of the degree of relationship between a dependent variable, e.g., the level of net
12 energy for load, and the independent (explanatory) variables. A change in any of
13 the independent variables will result in a corresponding change in the dependent
14 variable. On a historical basis, econometric models have proven to be highly
15 effective in explaining changes in the level of customer or load growth. FPL has
16 consistently relied on econometric models for various planning purposes and the
17 modeling results have been reviewed and accepted by this Commission in past
18 proceedings.

19 **Q. How does FPL determine the independent variables that should be used to
20 forecast customer growth, net energy for load, and peak demand?**

21 A. FPL has found that population growth, the economy, weather and the price of
22 electricity are the primary drivers of future electricity needs. Accordingly, the
23 models used to forecast customer growth, net energy for load, and peak demand

1 rely on independent variables representing these various drivers. As discussed
2 later in my testimony, the models used to forecast customer growth, net energy
3 for load and demand vary in terms of the specific independent variables used.
4 However, the assumptions regarding population growth, the economy, weather
5 and the price of electricity are the basic building blocks of the load forecast.

6 **Q. What sources does FPL rely on for projections of these independent**
7 **variables?**

8 A. FPL relies on population projections produced by the University of Florida's
9 Bureau of Economic and Business Research (BEBR). The projected economic
10 conditions are secured from reputable economic forecasting firms such as Global
11 Insight (formerly known as DRI-WEFA). The weather factors are obtained from
12 the National Oceanic and Atmospheric Administration (NOAA). The price of
13 electricity reflects the Commission-approved base rates and adjustment clauses.

14 **Q. What vintage of data did FPL rely on for the load forecast utilized in this**
15 **filing?**

16 A. FPL relied on the most recent forecasts of independent variables available at the
17 time the forecast was developed. The BEBR's population projections produced in
18 November 2007 were utilized. Forecasted economic conditions as of November
19 2007 were obtained from Global Insight. The weather factors reflect actuals as of
20 December 2007. The price of electricity forecast used in the peak and energy
21 forecast is based on the fuel forecast supporting FPL's currently approved clause
22 factors.

1 **Q. Is the load forecast utilized in this filing based on the same methodology used**
2 **in prior filings?**

3 A. Yes. The load forecast utilized in this filing is based on the same methodology
4 reviewed and accepted by the Commission in Docket No. 070650-EI, Petition to
5 determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by
6 Florida Power & Light Company.

7 **Q. Has the load forecast utilized in this filing been used in another filing?**

8 A. Yes. The load forecast utilized in this filing was also utilized in Docket No.
9 080203 –EI, Petition to determine need for West County Energy Center Unit 3
10 electrical power plant, by Florida Power & Light Company, where it was referred
11 to as the Revised Load Forecast.

12

13 **CUSTOMER GROWTH FORECAST**

14

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

16 A. The growth in customers in FPL's service territory is a primary driver of the
17 growth in the level of net energy for load and peak demand. In order to project
18 the growth in the number of customers, FPL relies on population projections
19 produced by BEBR. BEBR typically updates its population projections for the
20 state of Florida on a county-by-county basis once a year. FPL's customer growth
21 forecast is based on BEBR's population projections released in November of
22 2007, the most recent BEBR projections available at the time the forecast was
23 developed.

1 **Q. How do BEBR's November 2007 population projections compare with prior**
2 **projections?**

3 A. While somewhat lower than prior projections, BEBR's November 2007
4 population projections continue to show substantial long-term population growth
5 in Florida. Specifically, BEBR's November 2007 projections show a 1.7% annual
6 growth rate in Florida's population between 2008 and 2017. Although the
7 percentage increase in population is lower than that experienced during the 1980's
8 and 1990's, the absolute numbers remain very large. BEBR's projections show
9 an average annual population increase of 345,223 residents between 2008 and
10 2017. By contrast, the annual population increase in the last twenty years was
11 338,096. By 2017 the cumulative increase in the state's population is projected to
12 be 3.4 million above last year's level.

13 **Q. What is FPL's projected customer growth?**

14 A. The projected customer growth is consistent with BEBR's November 2007
15 population projections. As shown on Exhibit RM-1, the number of FPL
16 customers is expected to increase at an annual rate of 1.7% between 2008 and
17 2017. An annual growth rate of 1.7% is predicted for Florida's population during
18 the same time period. Consistent with BEBR's population projections, the
19 absolute increase in the number of FPL customers remains very large. In fact, the
20 annual average customer growth of 80,689 projected for 2008 thru 2017 is higher
21 than the annual average customer growth of 78,692 experienced since 1990.

1 **Q. Is FPL's projected customer growth reasonable?**

2 A. Yes. The forecast incorporates the most recent BEBR population projections
3 available at the time the forecast was developed and relies on the forecasting
4 methods previously reviewed and accepted by the Commission.

5

6

SUMMER PEAK DEMAND FORECAST

7

8 **Q. Is FPL's need for power driven by the demand forecast, the energy forecast,
9 or both?**

10 A. FPL's need for power, i.e., the amount of resources needed, is driven by the peak
11 demand forecast because FPL's needs are currently determined by the summer
12 reserve margin criterion. While FPL uses both a reserve margin and Loss of Load
13 Probability reliability criteria, the reserve margin criterion driven by the peak load
14 forecast has established the magnitude of the resource need for many years. This
15 is addressed in FPL witness Sim's testimony.

16 **Q. What is FPL's process to forecast summer peak demand?**

17 A. Growth in FPL's peak demand has been a function of a larger customer base,
18 weather conditions, economic growth, changing patterns of customer behavior
19 (including an increasing stock of electricity-consuming appliances) and more
20 efficient heating and cooling appliances. FPL has developed peak demand
21 models to capture these behavioral relationships.

22

1 The summer peak forecast is developed using an econometric model. The model
2 is a per-customer model that includes: the real price of electricity, Florida real
3 personal income as an economic driver, average temperature on the day of the
4 peak and a heat buildup weather variable consisting of the sum of the cooling
5 degree hours during the peak day and three prior days. The forecasted summer
6 peak usage per customer is shown on Exhibit RM-2. The forecasted summer peak
7 usage per customer is multiplied by the projected total customers to derive an
8 initial estimate of FPL's system summer peak. Adjustments are then made for the
9 2005 Energy Policy Act and the addition of Lee County's load. The final
10 estimate of FPL's system summer peak is shown on Exhibit RM-8.

11 **Q. What weather assumptions did FPL assume for the summer peak**
12 **projections?**

13 A. FPL uses the average temperature on the day of the peak and the sum of the
14 cooling degree hours during the day of the peak and three prior days in its
15 summer peak projections. In forecasting these weather variables, FPL relies on a
16 normal weather outlook. Normal weather is based on historical averages since
17 1980. Exhibit RM-3 shows the actual and forecasted values for the two weather
18 variables included in the summer peak per customer model.

19 **Q. What assumptions regarding the economy were assumed for the summer**
20 **peak projections?**

21 A. Florida's real personal income provided by Global Insight is used as the economic
22 driver in the summer peak projections. Global Insight's forecast shows that real
23 personal income will grow at a somewhat slower rate than that experienced in

1 recent years. Real personal income grew by 4.4% annually between 1982 and
2 2006 and by 4.3% in the last five years. By comparison, real personal income is
3 forecasted to grow at an annual rate of 4.0% between 2007 and 2017. Exhibit
4 RM-4 shows the actual and forecasted values for Florida's real personal income.

5 **Q. What assumptions regarding the price of electricity were assumed for the**
6 **summer peak projections?**

7 A. The real price of electricity assumed is shown in Exhibit RM-5. The forecast
8 shows that the real price of electricity is projected to decline by 0.9% annually
9 between 2008 and 2017. This forecast reflects fuel factors approved by the
10 Commission in November 2007.

11 **Q. What impact did the 2005 Energy Policy Act have on the summer peak**
12 **projections?**

13 A. In 2005, Congress passed the Energy Policy Act mandating certain appliance
14 efficiency standards and insulation for new construction, which is expected to
15 reduce electricity demand in the future. FPL estimated the 2005 Energy Policy
16 Act would reduce the projected peak demand by approximately 387 MW in 2008
17 to as much as 1,256 MW in the year 2014. The annual estimated impact of the
18 2005 Energy Policy Act is shown on Exhibit RM-6. To arrive at FPL's projected
19 peak demand values the estimated impact from the 2005 Energy Policy Act was
20 deducted as line item adjustments from the originally projected peaks for the
21 corresponding years.

1 **Q. Why is FPL adjusting its summer peak projections for Lee County?**

2 A. FPL is projected to begin providing electric service to Lee County in 2010. Lee
3 County is a not-for-profit electric distribution cooperative serving a five-county
4 area in Southwest Florida. In August 2007, the parties came to an agreement by
5 which FPL will become Lee County's power supplier in two phases. In the short-
6 term phase, FPL will provide partial requirements service to two of the three Lee
7 County delivery points, which serve approximately 25 percent of Lee County's
8 load, for the term January 1, 2010 through December 31, 2013. Lee County's
9 peak load requirement will be approximately 200 MW during this first phase. In
10 the long-term phase, which commences in January 2014, FPL will serve Lee
11 County's full retail load. During this second phase, Lee County's peak load
12 requirement will initially be about 900 MW, growing annually thereafter.
13 Because Lee County's load is not reflected in FPL's historical loads, a line item
14 adjustment was made to the summer peak forecast to account for this load.
15 Exhibit RM-7 shows the amount of Lee County's annual summer peak load
16 projected to be served by FPL.

17 **Q. How will the power sales to Lee County affect FPL's retail customers?**

18 A. FPL expects costs to retail customers to be lower over the term of the contract as
19 result of the Lee County power sales than they would otherwise be. This is
20 because, among other reasons, service under the Lee County contract will result in
21 the allocation of a smaller share of total system costs to serving FPL's retail
22 customers. On balance, FPL's retail customers would not be disadvantaged and,
23 in fact, are expected to be better off as a result of the Lee County power sales.

1 **Q. What is FPL's projected summer peak demand?**

2 A. As shown on Exhibit RM-8, FPL is projecting an annual increase of 2.8% in the
3 summer peak demand between 2008 and 2017. This growth rate reflects the
4 projected increases in the number of customers and in use per customer, as well as
5 the adjustments for the 2005 Energy Policy Act and Lee County discussed above.
6 While the projected percentage growth is slower than that experienced
7 historically, the absolute level of growth remains very large. An annual increase
8 of 696 MW is projected between 2008 and 2017. By 2017, the cumulative
9 increase over last year's summer peak demand is projected to be 6,659 MW.

10 **Q. Is FPL's projected summer peak demand reasonable?**

11 A. Yes. FPL's projected summer peak demand is based on reasonable assumptions,
12 is consistent with historical experience, and relies on the forecasting methods
13 previously reviewed and accepted by the Commission.

14

15 **WINTER AND MONTHLY PEAK DEMAND FORECASTS**

16

17 **Q. What is FPL's process to forecast winter peak demand?**

18 A. Like the system summer peak model, the winter peak model is also an
19 econometric model. The winter peak model is a per-customer model that includes
20 two weather-related variables: the square of the minimum temperature on the
21 peak day and heating degree hours from the prior day until 9:00 a.m. of the peak
22 day. In addition, the model also has an economic term, Florida real personal
23 income. The winter peak usage per customer is shown on Exhibit RM-9. The

1 projected winter peak load per customer value is multiplied by the total customers
2 to derive FPL's system winter peak as shown on Exhibit RM-10.

3 **Q. What is FPL's projected winter peak demand?**

4 A. The winter peak grows from 16,815 MW in 2007 to 28,418 MW in 2017 or
5 11,603 MW in absolute terms as shown in Exhibit RM-10. The apparent
6 accelerated growth in the winter peak forecast is a reflection of the fact that in the
7 2007 winter season, FPL's service territory did not experience a "normal" winter
8 peak.

9 **Q. What is FPL's process to forecast monthly peak demands?**

10 A. The forecasting process consists of the following:
11 - Development of the historical seasonal factor for each month by using
12 ratios of historical monthly peaks to seasonal peak (Summer is April-
13 October; Winter is November-March).
14 - Application of the monthly ratios to their respective seasonal peak forecast
15 (summer and winter peaks) to derive the peak forecast by month. This
16 process assumes that the seasonal factors remain unchanged over the
17 forecasting period.

18 Monthly peak forecasts are used in planning and also provide information for the
19 scheduling of maintenance for power plants and fuel budgeting.

1 **Q. Are FPL's winter peak demand and monthly peak demand forecasts**
2 **reasonable for planning purposes?**

3 A. Yes. FPL's winter peak demand and monthly peak demand forecasts are based on
4 reasonable assumptions, are consistent with historical experience, and rely on the
5 forecasting methods previously reviewed and accepted by the Commission.

6

7 **NET ENERGY FOR LOAD FORECAST**

8

9 **Q. How does FPL forecast energy sales?**

10 A. FPL forecasts energy sales using an econometric model for total net energy for
11 load, which is energy generated net of plant use. An econometric model for net
12 energy for load is more reliable than models for billed energy sales because the
13 explanatory variables can be better matched to usage. This is so because the net
14 energy for load data does not have to be attuned to account for billing cycle
15 adjustments, which might distort the real time match between the production and
16 consumption of electricity.

17 **Q. What inputs does the econometric model used to forecast net energy for load**
18 **rely on?**

19 A. The model used to forecast net energy for load is a per-customer model that
20 includes: the real price of electricity, Florida real personal income as an
21 economic driver, cooling degree hours and heating degree hours.

1 **Q. What has been FPL's recent net energy per customer?**

2 A. Net energy per customer declined by 0.4% in 2006 and by another 0.9% in 2007.
3 Mild weather and a substantial increase in the price of electricity contributed to
4 these declines. In addition, the current housing slump may be depressing
5 consumer spending for many goods, including electricity. The downturn in
6 housing is a cyclical phenomenon and most experts predict the state's housing
7 sector will begin to rebound within the next twelve months.

8 **Q. What is FPL's projected net energy per customer?**

9 A. FPL's net energy per customer model shows an annual growth rate of 1.4%
10 between 2008 and 2017. This projected rate of growth is a function of long-run
11 economic growth and projected declines in the real price of electricity, in addition
12 to an assumption of normal weather.

13 **Q. How does FPL's projected net energy per customer compare historically?**

14 A. FPL's 1.4% projected growth in net energy per customer between 2008 and 2017
15 is consistent with the long-run growth in net energy per customer experienced
16 prior to 2004. Net energy per customer grew at an annual rate of 1.5% between
17 1993 and 2003.

18 **Q. Should net energy per customer since 2004 be included in your historical
19 comparisons?**

20 A. No. Historical growth rates in net energy per customer ending in 2007 or 2006 are
21 heavily influenced by the substantial increase in electricity prices experienced in
22 2006. Likewise, two unusually active hurricane seasons in 2004 and 2005
23 depressed net energy use per customer in 2004 and 2005.

1 **Q. How is FPL's projected net energy per customer converted into a forecast of**
2 **net energy for load?**

3 A. A preliminary estimate of net energy for load is developed by multiplying FPL's
4 projected net energy for load per customer by the customer forecast. An
5 adjustment is then made to reflect the additional net energy for load resulting
6 from sales to Lee County. Exhibit RM-12 shows the contribution to net energy
7 for load attributed to Lee County.

8 **Q. What is FPL's projected net energy for load?**

9 A. FPL's projected net energy for load is expected to grow at rates similar to those
10 experienced historically. As shown in Exhibit RM-13, FPL is projecting a 3.4%
11 annual growth rate in net energy for load between 2008 and 2017. This projected
12 annual growth in net energy for load reflects a somewhat slower rate of customer
13 growth combined with additional load from Lee County. As a result, the
14 projected growth rate is only slightly higher than the 3.2% annual growth rate
15 experienced between 1980 and 2007. Owing to a larger customer base, the
16 absolute level of increase in gigawatt-hours (GWh) is expected to be higher than
17 that experienced historically. The forecast shows an annual increase in net energy
18 for load of 4,654 GWh between 2008 and 2017 versus an annual increase of 2,439
19 GWh experienced between 1980 and 2007.

20 **Q. Is FPL's projected net energy for load reasonable?**

21 A. Yes. FPL's projected net energy for load is based on reasonable assumptions, is
22 consistent with historical experience, and rely on the forecasting methods
23 previously reviewed and accepted by the Commission. A forecast is considered

1 reasonable if good judgment is used in estimating (availing oneself of the
2 appropriate and most credible assumptions on hand) and testing the model and if
3 the results or outputs make sense when compared to prior similar situations. FPL
4 followed this approach in preparing the forecast.

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

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

12 A. Yes.

TOTAL AVERAGE CUSTOMERS

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	85,615	2.7%
HISTORY (1990 to 2007)	78,692	2.1%
FORECAST (2008 to 2017)	80,689	1.7%

HISTORY

		Growth	
		Absolute	%
1980	2,184,974	110,647	5.3%
1981	2,285,187	100,214	4.6%
1982	2,358,167	72,980	3.2%
1983	2,429,688	71,521	3.0%
1984	2,520,523	90,835	3.7%
1985	2,617,556	97,033	3.8%
1986	2,723,555	105,999	4.0%
1987	2,840,207	116,651	4.3%
1988	2,953,663	113,457	4.0%
1989	3,064,436	110,773	3.8%
1990	3,158,817	94,381	3.1%
1991	3,226,455	67,638	2.1%
1992	3,281,238	54,783	1.7%
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%
2005	4,321,895	97,386	2.3%
2006	4,409,563	87,667	2.0%
2007	4,496,589	87,027	2.0%

FORECAST

	<u>Forecast</u>	<u>Absolute</u>	<u>Growth</u>	
				%
2008	4,555,880	59,291		1.3%
2009	4,628,744	72,863		1.6%
2010	4,708,603	79,859		1.7%
2011	4,796,344	87,741		1.9%
2012	4,880,891	84,547		1.8%
2013	4,960,871	79,980		1.6%
2014	5,039,871	79,000		1.6%
2015	5,119,700	79,829		1.6%
2016	5,200,465	80,765		1.6%
2017	5,282,082	81,618		1.6%

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SUMMER PEAK LOAD PER CUSTOMER (KW)

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	0.02	0.4%
FORECAST (2008 to 2017)	0.05	1.0%

HISTORY

		Growth	
		Absolute	%
1980	4.40	0.23	5.6%
1981	4.26	-0.14	-3.2%
1982	4.18	-0.08	-1.9%
1983	4.39	0.21	5.1%
1984	4.07	-0.32	-7.3%
1985	4.07	0.00	-0.1%
1986	4.05	-0.02	-0.6%
1987	4.36	0.32	7.8%
1988	4.19	-0.17	-3.9%
1989	4.38	0.19	4.5%
1990	4.35	-0.03	-0.6%
1991	4.38	0.02	0.5%
1992	4.47	0.09	2.1%
1993	4.55	0.08	1.8%
1994	4.44	-0.11	-2.5%
1995	4.53	0.10	2.2%
1996	4.52	-0.01	-0.2%
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	0.02	0.3%
2003	4.78	0.00	-0.1%
2004	4.86	0.09	1.8%
2005	5.15	0.29	6.0%
2006	4.95	-0.21	-4.0%
2007	4.88	-0.06	-1.3%

FORECAST

		Growth	
	Forecast	Absolute	%
2008	4.99	0.11	2.2%
2009	5.04	0.04	0.9%
2010	5.10	0.06	1.3%
2011	5.17	0.07	1.4%
2012	5.24	0.07	1.4%
2013	5.30	0.06	1.2%
2014	5.34	0.04	0.8%
2015	5.38	0.04	0.8%
2016	5.43	0.04	0.8%
2017	5.47	0.04	0.8%

SUMMER PEAK WEATHER

<u>Year</u>	<u>Average Temperature</u>	<u>Sum of Cooling Degree Hours</u>
1985	84.5	1,020
1986	83.1	1,053
1987	85.7	1,228
1988	83.9	1,065
1989	85.0	1,164
1990	84.5	1,176
1991	84.7	1,129
1992	84.9	1,135
1993	86.2	1,279
1994	84.9	987
1995	84.5	1,013
1996	84.4	1,147
1997	84.8	1,136
1998	86.0	1,227
1999	83.1	1,196
2000	83.0	1,122
2001	84.5	1,141
2002	83.3	1,115
2003	84.1	1,133
2004	84.4	1,065
2005	86.9	1,257
2006	85.0	1,208
2007	85.8	1,254
2008	84.7	1,148
2009	84.7	1,148
2010	84.7	1,148
2011	84.7	1,148
2012	84.7	1,148
2013	84.7	1,148
2014	84.7	1,148
2015	84.7	1,148
2016	84.7	1,148
2017	84.7	1,148

FLORIDA REAL PERSONAL INCOME

AVERAGE ANNUAL GROWTH

HISTORY (1982 to 2006)	15,560	4.4%
FORECAST (2007 to 2017)	29,255	4.0%

HISTORY

		Absolute	Growth	%
1982	204,906			
1983	217,848	12,942		6.3%
1984	234,777	16,929		7.8%
1985	249,229	14,452		6.2%
1986	262,675	13,446		5.4%
1987	274,790	12,115		4.6%
1988	289,863	15,072		5.5%
1989	309,241	19,378		6.7%
1990	316,752	7,511		2.4%
1991	317,009	258		0.1%
1992	324,698	7,689		2.4%
1993	333,870	9,172		2.8%
1994	344,074	10,205		3.1%
1995	360,213	16,139		4.7%
1996	375,571	15,358		4.3%
1997	391,151	15,580		4.1%
1998	419,300	28,149		7.2%
1999	434,346	15,046		3.6%
2000	457,517	23,171		5.3%
2001	468,813	11,297		2.5%
2002	478,533	9,720		2.1%
2003	487,088	8,555		1.8%
2004	521,380	34,292		7.0%
2005	552,645	31,265		6.0%
2006	578,356	25,711		4.7%

FORECAST

	<u>Forecast</u>	<u>Absolute</u>	<u>Growth</u>	<u>%</u>
2007	602,067	23,711		4.1%
2008	625,083	23,016		3.8%
2009	652,204	27,120		4.3%
2010	680,950	28,746		4.4%
2011	710,329	29,380		4.3%
2012	740,927	30,598		4.3%
2013	770,345	29,417		4.0%
2014	800,072	29,727		3.9%
2015	830,709	30,638		3.8%
2016	862,403	31,694		3.8%
2017	894,618	32,215		3.7%

REAL PRICE OF ELECTRICITY

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	-0.04	-0.8%
FORECAST (2008 to 2017)	-0.04	-0.9%

HISTORY

		Growth	
		Absolute	%
1980	6.30	0.05	0.8%
1981	7.18	0.88	13.9%
1982	6.71	-0.47	-6.5%
1983	6.65	-0.06	-1.0%
1984	7.63	0.98	14.8%
1985	7.67	0.04	0.5%
1986	6.84	-0.83	-10.8%
1987	6.55	-0.29	-4.2%
1988	6.48	-0.07	-1.1%
1989	5.94	-0.53	-8.2%
1990	5.63	-0.31	-5.2%
1991	5.56	-0.08	-1.3%
1992	5.22	-0.34	-6.1%
1993	5.11	-0.11	-2.1%
1994	4.62	-0.49	-9.6%
1995	4.57	-0.05	-1.0%
1996	4.71	0.14	3.0%
1997	4.59	-0.12	-2.5%
1998	4.37	-0.22	-4.9%
1999	4.10	-0.27	-6.1%
2000	3.98	-0.12	-2.9%
2001	4.55	0.56	14.1%
2002	4.07	-0.48	-10.5%
2003	4.32	0.25	6.2%
2004	4.43	0.11	2.4%
2005	4.55	0.12	2.7%
2006	5.53	0.98	21.6%
2007	5.13	-0.40	-7.3%

FORECAST

	Forecast	Growth	
		Absolute	%
2008	5.01	-0.12	-2.3%
2009	5.01	0.01	0.1%
2010	4.82	-0.19	-3.8%
2011	4.60	-0.22	-4.6%
2012	4.37	-0.23	-5.0%
2013	4.23	-0.14	-3.2%
2014	4.32	0.09	2.1%
2015	4.42	0.09	2.2%
2016	4.50	0.08	1.9%
2017	4.62	0.12	2.7%

IMPACT OF THE 2005 ENERGY POLICY ACT

	MW
2008	387
2009	518
2010	660
2011	806
2012	953
2013	1103
2014	1256
2015	1256
2016	1256
2017	1256

LEE COUNTY ELECTRIC COOPERATIVE - SUMMER PEAK

	MW
2010	196
2011	200
2012	204
2013	208
2014	901
2015	928
2016	955
2017	982
2018	1009
2019	1036
2020	1063

SUMMER PEAK LOAD (MW)

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	457	3.1%
FORECAST (2008 to 2017)	696	2.8%

HISTORY

		Absolute	Growth %
1980	9,623	973	11.2%
1981	9,738	115	1.2%
1982	9,862	124	1.3%
1983	10,676	814	8.3%
1984	10,270	-406	-3.8%
1985	10,654	384	3.7%
1986	11,022	368	3.5%
1987	12,394	1,372	12.4%
1988	12,382	-12	-0.1%
1989	13,425	1,043	8.4%
1990	13,754	329	2.5%
1991	14,123	369	2.7%
1992	14,661	538	3.8%
1993	15,266	605	4.1%
1994	15,179	-87	-0.6%
1995	15,813	634	4.2%
1996	16,064	251	1.6%
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%
2005	22,276	1,731	8.4%
2006	21,819	-457	-2.1%
2007	21,962	143	0.7%

FORECAST

	<u>Forecast</u>	<u>Absolute</u>	<u>Growth</u> %
2008	22,356	394	1.8%
2009	22,792	436	1.9%
2010	23,554	762	3.3%
2011	24,191	637	2.7%
2012	24,837	646	2.7%
2013	25,414	578	2.3%
2014	26,576	1,162	4.6%
2015	27,241	665	2.5%
2016	27,932	691	2.5%
2017	28,621	689	2.5%

WINTER PEAK LOAD PER CUSTOMER (KW)

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	-0.03	-0.6%
FORECAST (2008 to 2017)	0.05	1.0%

HISTORY

		Growth	
		Absolute	%
1980	4.45	0.22	5.1%
1981	4.97	0.52	11.6%
1982	4.81	-0.16	-3.2%
1983	3.82	-0.99	-20.6%
1984	4.38	0.56	14.8%
1985	4.79	0.40	9.2%
1986	4.46	-0.33	-6.9%
1987	3.80	-0.66	-14.9%
1988	4.19	0.39	10.4%
1989	4.20	0.01	0.3%
1990	5.08	0.88	20.9%
1991	3.68	-1.40	-27.6%
1992	4.06	0.38	10.4%
1993	3.85	-0.21	-5.1%
1994	3.68	-0.17	-4.5%
1995	4.75	1.07	29.0%
1996	5.14	0.39	8.3%
1997	4.78	-0.36	-6.9%
1998	3.55	-1.24	-25.8%
1999	4.47	0.92	26.1%
2000	4.43	-0.04	-0.9%
2001	4.62	0.19	4.3%
2002	4.38	-0.25	-5.3%
2003	4.90	0.53	12.0%
2004	3.49	-1.41	-28.8%
2005	4.19	0.70	20.0%
2006	4.46	0.27	6.5%
2007	3.74	-0.72	-16.2%

FORECAST

	<u>Forecast</u>	<u>Absolute</u>	<u>Growth</u>
			%
2008	4.90	1.16	31.1%
2009	4.92	0.01	0.3%
2010	4.98	0.07	1.3%
2011	5.00	0.02	0.3%
2012	5.02	0.02	0.4%
2013	5.03	0.02	0.4%
2014	5.22	0.18	3.6%
2015	5.27	0.05	1.0%
2016	5.32	0.05	1.0%
2017	5.38	0.06	1.0%

WINTER PEAK LOAD (MW)

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	262	2.0%
FORECAST (2008 to 2017)	676	2.7%

HISTORY

		Growth	
		Absolute	%
1980	9,732	941	10.7%
1981	11,360	1,628	16.7%
1982	11,345	-15	-0.1%
1983	9,280	-2,065	-18.2%
1984	11,050	1,770	19.1%
1985	12,533	1,483	13.4%
1986	12,139	-394	-3.1%
1987	10,779	-1,360	-11.2%
1988	12,372	1,593	14.8%
1989	12,876	504	4.1%
1990	16,046	3,170	24.6%
1991	11,868	-4,178	-26.0%
1992	13,319	1,451	12.2%
1993	12,932	-387	-2.9%
1994	12,594	-338	-2.6%
1995	16,563	3,969	31.5%
1996	18,252	1,689	10.2%
1997	17,298	-954	-5.2%
1998	13,060	-4,238	-24.5%
1999	16,802	3,742	28.7%
2000	17,057	255	1.5%
2001	18,199	1,142	6.7%
2002	17,597	-602	-3.3%
2003	20,190	2,593	14.7%
2004	14,752	-5,438	-26.9%
2005	18,108	3,356	22.7%
2006	19,683	1,575	8.7%
2007	16,815	-2,868	-14.6%

FORECAST

		Growth	
	Forecast	Absolute	%
2008	22,332	5,517	32.8%
2009	22,755	422	1.9%
2010	23,454	699	3.1%
2011	23,971	517	2.2%
2012	24,487	516	2.2%
2013	24,976	489	2.0%
2014	26,290	1,314	5.3%
2015	26,979	689	2.6%
2016	27,690	711	2.6%
2017	28,418	728	2.6%

NET ENERGY FOR LOAD USE PER CUSTOMER (KWH)

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	120	0.5%
FORECAST (2008 to 2017)	372	1.4%

HISTORY

		Growth	
		Absolute	%
1980	22,174	315	1.4%
1981	21,890	-284	-1.3%
1982	21,429	-461	-2.1%
1983	21,608	179	0.8%
1984	21,086	-522	-2.4%
1985	21,393	307	1.5%
1986	21,394	0	0.0%
1987	21,694	300	1.4%
1988	21,910	216	1.0%
1989	22,828	918	4.2%
1990	22,486	-342	-1.5%
1991	22,675	189	0.8%
1992	22,277	-398	-1.8%
1993	22,580	303	1.4%
1994	23,487	907	4.0%
1995	24,066	579	2.5%
1996	23,937	-129	-0.5%
1997	24,022	86	0.4%
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	25,921	916	3.7%
2003	26,327	405	1.6%
2004	25,587	-740	-2.8%
2005	25,753	166	0.6%
2006	25,657	-96	-0.4%
2007	25,423	-235	-0.9%

FORECAST

		Growth	
	Forecast	Absolute	%
2008	26,005	582	2.3%
2009	26,320	315	1.2%
2010	26,750	430	1.6%
2011	27,270	520	1.9%
2012	27,816	546	2.0%
2013	28,278	461	1.7%
2014	28,574	296	1.0%
2015	28,828	254	0.9%
2016	29,097	269	0.9%
2017	29,351	254	0.9%

LEE COUNTY ELECTRIC COOPERATIVE - NET ENERGY FOR LOAD

	GWh
2010	1,033
2011	1,056
2012	1,076
2013	1,094
2014	4,740
2015	4,883
2016	5,038
2017	5,167
2018	5,309
2019	5,451
2020	5,608

NET ENERGY FOR LOAD (GWh)

AVERAGE ANNUAL GROWTH

HISTORY (1980 to 2007)	2,439	3.2%
FORECAST (2008 to 2017)	4,654	3.4%

HISTORY

		Absolute	Growth	%
1980	48,449	3,107		6.9%
1981	50,022	1,573		3.2%
1982	50,532	510		1.0%
1983	52,500	1,968		3.9%
1984	53,148	648		1.2%
1985	55,998	2,850		5.4%
1986	58,267	2,269		4.1%
1987	61,616	3,349		5.7%
1988	64,716	3,100		5.0%
1989	69,956	5,240		8.1%
1990	71,029	1,073		1.5%
1991	73,160	2,132		3.0%
1992	73,097	-63		-0.1%
1993	75,774	2,677		3.7%
1994	80,376	4,601		6.1%
1995	83,961	3,585		4.5%
1996	84,993	1,032		1.2%
1997	86,852	1,859		2.2%
1998	92,663	5,811		6.7%
1999	91,460	-1,203		-1.3%
2000	95,989	4,529		5.0%
2001	98,404	2,415		2.5%
2002	104,199	5,795		5.9%
2003	108,393	4,194		4.0%
2004	108,093	-300		-0.3%
2005	111,301	3,207		3.0%
2006	113,137	1,837		1.7%
2007	114,315	1,177		1.0%

FORECAST

	Forecast	Absolute	Growth	%
2008	118,357	4,042		3.5%
2009	121,852	3,495		3.0%
2010	127,004	5,152		4.2%
2011	131,862	4,859		3.8%
2012	136,871	5,009		3.8%
2013	141,374	4,503		3.3%
2014	148,752	7,378		5.2%
2015	152,495	3,743		2.5%
2016	156,384	3,888		2.5%
2017	160,246	3,862		2.5%