



Kevin I.C. Donaldson  
Senior Attorney  
Florida Power & Light Company  
700 Universe Boulevard  
Juno Beach, FL 33408-0420  
(561) 304-5170  
(561) 691-7135 (Facsimile)  
Kevin.Donaldson@fpl.com

September 5, 2018

**-VIA ELECTRONIC FILING-**

Carlotta Stauffer, Director  
Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, FL 32399-0850

**Re: Docket No. 20180000-OT: Staff's Supplemental Data Request #2 (Nos. 1-17) and #3 (No. 1); Florida Power & Light Company's 2018 Ten Year Power Plant Site Plan**

Dear Ms. Stauffer:

Please find enclosed for electronic filing a copy of Florida Power & Light Company's responses to Staff's Supplemental Data Request #2, Question Nos. 1-17 and Data Request #3, Question No. 1.

If there are any questions regarding this transmittal, please contact me at (561)304-5170.

Sincerely,

/s/ Kevin I.C. Donaldson  
Kevin I.C. Donaldson  
Fla. Bar No. 0833401

Enclosure

**QUESTION:**

Please refer to Florida Power & Light Company's (FPL) 2018 Ten-Year Site Plan (TYSP), page 35, and 2017 TYSP, page 37, for the following questions:

- a. Referring to System Summer Peak of 2018 TYSP, please explain why FPL used Florida real per capita income to replace Florida real household disposable income, which had been used in 2017 TYSP, as one of the forecasting model inputs.
- b. Referring to System Summer Peak of 2018 TYSP, please explain why FPL did not include the variable "3-month average Consumer Price Index (CPI)," which had been used in FPL's 2017 TYSP, in its Summer Peak Demand forecasting model.
- c. Referring to 2018 TYSP System Winter Peak, please explain why FPL determined to use dummy variables for "post-2011" and "winter 2008" instead of the 2017 TYSP dummy variables (i.e. "Winter peaks occurring on weekends" and "Winter peaks occurring in February") to build its 2018 TYSP forecasting model.
- d. Referring to 2018 TYSP System Winter Peak, please explain why FPL determined to include a new input variable "Total customers" in its forecasting model.
- e. Referring to 2018 TYSP System Winter Peak, please explain why FPL discontinued the input variable "Housing starts per capita," which had been used in FPL's 2017 TYSP, in its forecasting model.

**RESPONSE:**

- a. After updating the model for 2017 data and removing the Consumer Price Index for Energy (CPIE), as discussed in subpart (b) below, the forecast was evaluated both using Florida real household disposable income and using Florida real per capita income. After comparing these options, Florida real per capita income was chosen because it produced a forecast that was more in line with historical trends and more consistent with prior years forecasts.
- b. In updating our models for the 2018 TYSP forecast, the estimation period was updated to include actual data for 2017. As a result, the Consumer Price Index for Energy (CPIE) variable was no longer statistically significant, therefore it was removed from the model.
- c. Because changing the dependent variable from winter peak per customer to total winter peak, as discussed in subpart (d) below, represents a significant change to the structure of the model, FPL removed all dummy variables and then reassessed whether any were needed. Inspecting the model residuals, we observed a non-random pattern in which the predicted values were consistently greater than the actual values after 2011. To correct for this model bias, we added a dummy variable for years after 2011. On further inspection, we observed a large residual in 2008, which suggested something occurred in that year that was otherwise not explained by the model. To correct for this, an additional dummy was added for 2008.

- d. Prior to developing the 2018 TYSP, FPL's winter peak model had been over-forecasting for a number of years. This can be partly explained by the lack of a typical winter over the last seven years or so. However, even on a weather normalized basis, the variances did not meet FPL's standard for forecast accuracy. So in an attempt to improve the forecast accuracy of the winter peak model, the dependent variable in the regression model was changed from winter peak per customer to total winter peak. The peak per customer model (as used in the 2017 TYSP) accounted for customers by multiplying the forecasted dependent variable by the forecasted number of customers. However, when predicting total level of winter peak as the dependent variable (as done in the 2018 TYSP), the model must include the number of customers as an explanatory variable within the regression itself, in order to account for this important relationship. The revised model specification provided a somewhat lower winter peak forecast in the near term and resulted in a significant improvement in forecasting the 2018 winter peak.
- e. With the new model specification, as discussed in parts c and d above, the "Housing starts per capita" variable was no longer significant and was therefore dropped from the model.

**QUESTION:**

Referring to FPL's 2017 TYSP, page 37, please provide a definition of the P80 monthly peak forecast and why it is used for load forecast in FPL's 2018 TYSP but not in FPL's 2017 TYSP.

**RESPONSE:**

The P80 monthly peak forecast represents the forecast level of the monthly peaks in which, based on the distribution of weather, the actual peak has an 80 percent probability of being at or below this level.

The same methodology to account for forecast uncertainty due to weather was used in FPL's 2017 TYSP as in the 2018 TYSP. The only difference is that in the 2018 TYSP write-up, FPL added a sentence noting that the P80 forecast is provided to FPL's System Operations group. This sentence was added in order to clarify how this P80 forecast is used. While not described in the 2017 TYSP write-up, the P80 forecast is used in the same manner in the 2017 TYSP forecast as it was in the 2018 TYSP forecast.

QUESTION:

With respect to the forecasting methodology, procedures, and models developed associated with FPL's Winter and Summer Peak Demand, please specify all the differences/ modifications/ improvements, if any, between FPL's 2017 TYSP and 2018 TYSPs.

RESPONSE:

The 2018 TYSP forecast included an additional year of actual data in the estimation period. Below is a detailed list of additional changes made to the Winter and Summer Peak Demand models:

- Summer Peak Model
  - Dropped the CPI for Energy variable
  - Dropped the disposable income per household variable
  - Added a real per capita income variable
- Winter Peak Model
  - Changed from peak per customer model to total winter peak model
  - Added customers as an explanatory variable
  - Dropped the housing starts per capita variable
  - Dropped the winter weekend variable
  - Dropped the variable for peaks occurring in February
  - Added a variable for post 2011
  - Added a dummy variable for the year 2008

QUESTION:

For its 2018 TYSP, please identify and explain the measures and/or criteria, if any, FPL used to ensure the models of peak demand adequately explain historical variations and to enhance FPL's forecasting accuracy.

RESPONSE:

To ensure that FPL's peak demand models adequately explain historical variation, FPL reviews the model statistics including the Adjusted  $R^2$  (the percentage of the total variation in the dependent variable explained by the independent variables), residuals, coefficients, and the signs on the coefficients, t-statistics, the MAPE, and the AIC and BIC statistics.

As we do with all of our models, the model statistics for the peak demand models are examined as are the forecasts relative to historical weather normalized peaks. The forecasts are also compared with the previous forecast and the previous forecast's historical forecast errors. These checks have resulted in revisions to both the summer and winter peak models in the 2018 TYSP which have improved the forecast accuracy so far in 2018.

**QUESTION:**

Please identify and explain the new measures, if any, FPL used to address the uncertainty inherent in the process of peak demand forecasting for its 2018 TYSP.

**RESPONSE:**

FPL has not added new measures in the 2018 TYSP to address uncertainty inherent in the peak demand forecasting process. However, FPL has in the past and continues to address forecast uncertainty as described below.

FPL begins addressing uncertainty in the forecasting process by evaluating the underlying assumptions of the forecasts, including input variables, sources of data, and consistency with past forecasts. Next, model statistics are evaluated to ensure a good model fit and that the models adequately explain the historical variation. Next, the forecasts are compared with past forecasts for consistency. This will include examining the previous forecast variances to ensure emerging trends have been properly accounted for. Forecasts are then evaluated with actual values as they become available. An ongoing process of variance analysis is performed. To the extent that the variance analyses identify large unexplained deviations between the forecast and actual values, FPL may consider revisions to the econometric models. FPL also produces probability bands around our forecasts. These are explained in FPL's responses to Staff's Supplemental Data Request #2, Question Nos. 2 and 4.

**QUESTION:**

Please provide the Historical Forecast Accuracy associated with FPL's Winter and Summer Peak Demand for the period 2013 - 2017.

Table 1. Accuracy of FPL's Winter Peak Demand Forecasts

Table 2. Accuracy of FPL's Summer Peak Demand Forecasts

**RESPONSE:**

The forecast error rates used in the following tables are calculated by dividing the actual weather normalized value by the forecast value, then subtracting 1.

$$Forecast\ Error\ Rate\ (\%) = \left[ \left( \frac{WN\ Actual}{Forecast} \right) - 1 \right]$$

A positive forecast error rate represents a higher actual than forecast value; while alternatively a negative forecast error rate denotes a lower actual than forecast value.

**Table 1. Accuracy of FPL's Winter Peak Demand Forecasts**

Forecast Actual	Winter Peak Demand Forecast Error Rate (%)					Average
	Forecasting Period Prior					
	5	4	3	2	1	
	2008 TYSP	2009 TYSP	2010 TYSP	2011 TYSP	2012 TYSP	–
2013	-28.4%	-10.7%	-15.3%	-17.5%	-15.6%	-17.5%
	2009 TYSP	2010 TYSP	2011 TYSP	2012 TYSP	2013TYSP	–
2014	-5.4%	-9.8%	-11.5%	-9.3%	-8.2%	-8.8%
	2010 TYSP	2011 TYSP	2012 TYSP	2013TYSP	2014 TYSP	–
2015	-11.6%	-12.6%	-10.4%	-10.0%	-5.2%	-10.0%
	2011 TYSP	2012 TYSP	2013 TYSP	2014 TYSP	2015 TYSP	–
2016	-9.5%	-7.3%	-7.1%	-3.6%	-3.2%	-6.1%
	2012 TYSP	2013 TYSP	2014 TYSP	2015 TYSP	2016 TYSP	–
2017	-19.2%	-19.2%	-16.4%	-15.6%	-14.2%	-16.9%



**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 2**  
**Question No. 6**  
**Page 2 of 2**

**Table 2. Accuracy of FPL's Summer Peak Demand Forecasts**

Forecast Actual	Summer Peak Demand Forecast Error Rate (%)					Average
	Forecasting Period Prior					
	5	4	3	2	1	
	2008 TYSP	2009 TYSP	2010 TYSP	2011 TYSP	2012 TYSP	–
2013	-12.8%	-0.7%	-1.5%	-0.6%	-0.6%	-3.3%
	2009 TYSP	2010 TYSP	2011 TYSP	2012 TYSP	2013TYSP	–
2014	0.3%	-0.4%	0.6%	0.3%	1.3%	0.4%
	2010 TYSP	2011 TYSP	2012 TYSP	2013TYSP	2014 TYSP	–
2015	-1.3%	-1.5%	-1.3%	0.2%	-0.5%	-0.9%
	2011 TYSP	2012 TYSP	2013 TYSP	2014 TYSP	2015 TYSP	–
2016	-0.7%	-1.0%	1.1%	-0.2%	-0.4%	-0.2%
	2012 TYSP	2013 TYSP	2014 TYSP	2015 TYSP	2016 TYSP	–
2017	-3.7%	-2.4%	-4.1%	-4.4%	-4.9%	-3.9%

**QUESTION:**

Referring to Schedule 3.2, Winter Peak Demand (megawatts (MW)), columns (2) and (10), on page 42 of FPL's 2018 TYSP, please explain why the actual 2017 total and net firm demands are significantly lower than FPL's 2017 TYSP projection.

**RESPONSE:**

The 2017 winter did not experience cold weather sufficient to generate a winter peak. The lowest temperature experienced during the January 2017- February 2017 time-frame was 45 degrees. We typically expect a minimum temperature of 39 degrees on a normal winter peak day. There were also no days with any material heating buildup, which also contributes to a winter peak. The maximum hourly demand during the 2017 winter occurred on February 28<sup>th</sup> and was not a cold weather peak. These are the reasons why the actual 2017 winter peak was significantly lower than the 2017 winter peak forecast.

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 2**  
**Question No. 8**  
**Page 1 of 1**

**QUESTION:**

Please provide when and explain why the Exelon Generation Company, LLC PPA was executed.

**RESPONSE:**

The Exelon Generation Company, LLC PPA was executed on August 3, 2017. The reason for entering into the five (5) month (May-Sept.) transaction was due to potential capacity needs in the summer of 2018.

**QUESTION:**

Please explain whether or not any planned unit additions are to specifically meet FPL's generation-only reserve margin. If so, please identify the unit additions.

**RESPONSE:**

None of the unit additions presented in FPL's 2018 Ten Year Site Plan are projected solely to meet FPL's generation-only reserve margin. All unit additions are projected to: (i) meet resource needs identified by both FPL's 20% total reserve margin criterion and FPL's 10% generation-only reserve margin, and/or (ii) to lower system costs. Please see FPL's response to Staff's Supplemental Data Request # 2, Question No. 13 below.

**QUESTION:**

Please provide the current status of FPL's Large Scale Storage Pilot Project.

**RESPONSE:**

FPL's Large Scale Storage Pilot Project efforts, described in detail on pages 81 and 82 of FPL's 2018 Ten Year Site Plan, to date have focused on the first three projects to be implemented in this Pilot. Two of these projects, the 10 MW battery at FPL's existing Babcock Ranch Solar Energy Center and the 4 MW battery at FPL's existing Citrus Solar Energy Center, involve pairing battery storage with FPL's universal solar photovoltaic (PV) facilities to enhance their operations. These batteries are now in service, and FPL is gaining operational experience from these facilities. The third project under this pilot is the installation of a 10 MW battery in the Wynwood area close to downtown Miami. Permitting and design efforts for this project are now underway, and battery installation is projected for mid-2019. Applications and sites for the remaining 26 MW of potential battery projects are currently being evaluated.

FPL has been asked to make a presentation regarding its storage efforts at the FPSC's annual Ten Year Site Plan Workshop on October 11, 2018. FPL will provide additional information regarding the Large Scale Storage Pilot Project in that presentation.

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 2**  
**Question No. 11**  
**Page 1 of 1**

**QUESTION:**

Per FPL's 2018-2027 Ten Year Power Plant Site Plan Errata, please provide the updated schedules in Microsoft Excel format.

**RESPONSE:**

The requested information is provided in Attachment 1 to this response.

Florida Power & Light Company  
2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 2  
Question No. 11  
Attachment No. 1  
Tab 1 of 4

Schedule 5  
Fuel Requirements  
(for FPL only)

Fuel Requirements	Units	Actual 1/		Forecasted									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
(1) Nuclear	Trillion BTU	310	307	297	306	306	304	310	306	305	310	306	304
(2) Coal	1,000 TON	2,474	3,752	1,303	1,372	1,064	1,191	1,058	1,236	1,110	1,249	1,169	1,330
(3) Residual (FO6) - Total	1,000 BBL	764	2,061	140	72	2	10	0	2	2	3	5	9
(4) Steam	1,000 BBL	764	2,061	140	72	2	10	0	2	2	3	5	9
(5) Distillate (FO2) - Total	1,000 BBL	403	2,080	44	98	11	9	4	9	13	9	13	24
(6) Steam	1,000 BBL	116	12	0	0	0	0	0	0	0	0	0	0
(7) CC	1,000 BBL	79	954	14	0	0	0	0	0	0	0	0	0
(8) CT	1,000 BBL	208	1,114	30	98	11	9	4	9	13	9	13	24
(9) Natural Gas - Total	1,000 MCF	624,092	633,820	596,218	580,483	570,417	562,174	553,886	550,562	554,868	547,279	553,262	554,771
(10) Steam	1,000 MCF	28,743	42,916	25,657	14,248	4,150	5,180	3,810	3,547	3,144	2,420	3,407	3,860
(11) CC	1,000 MCF	592,178	584,414	565,688	559,612	565,291	555,753	549,439	546,205	551,202	544,454	549,334	550,218
(12) CT	1,000 MCF	3,170	6,490	4,874	6,624	975	1,241	637	811	522	405	521	693

1/ Source: A Schedules.

Note: Solar contributions are provided on Schedules 6.1 and 6.2.

Florida Power & Light Company  
2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 2

Question No. 11  
Attachment No. 1

Tab 2 of 4

Schedule 6.1  
Energy Sources

Energy Sources	Units	Actual <sup>1/</sup>		Forecasted									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
(1) Annual Energy Interchange <sup>2/</sup>	GWH	1,748	1,598	0	0	0	0	0	0	0	0	0	0
(2) Nuclear	GWH	28,033	27,971	27,769	28,578	28,589	28,415	29,006	28,563	28,447	28,993	28,583	28,363
(3) Coal	GWH	4,165	4,057	1,957	2,038	1,534	1,718	1,523	1,801	1,614	1,822	1,720	1,966
(4) Residual(FO6) -Total	GWH	430	184	91	47	1	6	0	1	2	2	3	6
(5) Steam	GWH	430	184	91	47	1	6	0	1	2	2	3	6
(6) Distillate(FO2) -Total	GWH	230	216	27	53	6	5	2	5	7	5	7	13
(7) Steam	GWH	3	1	0	0	0	0	0	0	0	0	0	0
(8) CC	GWH	94	119	10	0	0	0	0	0	0	0	0	0
(9) CT	GWH	132	96	16	53	6	5	2	5	7	5	7	13
(10) Natural Gas -Total	GWH	86,161	86,706	84,724	84,559	84,496	83,114	82,376	82,188	82,668	81,723	82,470	82,601
(11) Steam	GWH	2,135	3,506	2,318	1,297	385	476	350	325	286	222	310	351
(12) CC	GWH	83,713	82,609	81,957	82,657	84,016	82,517	81,964	81,784	82,333	81,461	82,110	82,183
(13) CT	GWH	313	591	449	606	95	121	62	79	49	39	51	67
(14) Solar <sup>3/</sup>	GWH	237	658	1,994	2,679	3,994	5,354	6,032	6,707	7,401	8,052	8,722	9,391
(15) PV	GWH	161	646	1,869	2,554	3,868	5,229	5,907	6,582	7,275	7,927	8,597	9,266
(16) Solar Thermal	GWH	75	12	125	125	126	125	125	125	126	125	125	125
(17) Other <sup>4/</sup>	GWH	616	(642)	1,666	1,721	1,779	1,833	1,890	1,953	2,023	2,083	2,149	2,215
Net Energy For Load <sup>5/</sup>	GWH	121,619	120,747	118,229	119,674	120,398	120,442	120,829	121,219	122,161	122,680	123,654	124,556

- 1/ Source: A Schedules and Actual Data for Next Generation Solar Centers Report
- 2/ The projected figures are based on estimated energy purchases from SJRPP.
- 3/ Represents output from FPL's PV, solar thermal facilities and the new 2017 and 2018 SoBRA sites.
- 4/ Represents a forecast of energy expected to be purchased from Qualifying Facilities, Independent Power Producers, etc., net of Economy and other Power Sales.
- 5/ Net Energy For Load values for the years 2017 - 2026 are also shown in Col. (19) on Schedule 2.3.

Schedule 6.2  
Energy Sources % by Fuel Type

Energy Source	Units	Actual <sup>1/</sup>		Forecasted									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
(1) Annual Energy Interchange <sup>2/</sup>	%	1.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2) Nuclear	%	23.1	23.2	23.5	23.9	23.7	23.6	24.0	23.6	23.3	23.6	23.1	22.8
(3) Coal	%	3.4	3.4	1.7	1.7	1.3	1.4	1.3	1.5	1.3	1.5	1.4	1.6
(4) Residual (FO6) -Total	%	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(5) Steam	%	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(6) Distillate (FO2) -Total	%	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(7) Steam	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(8) CC	%	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(9) CT	%	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(10) Natural Gas -Total	%	70.8	71.8	71.7	70.7	70.2	69.0	68.2	67.8	67.7	66.6	66.7	66.3
(11) Steam	%	1.8	2.9	2.0	1.1	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3
(12) CC	%	68.8	68.4	69.3	69.1	69.8	68.5	67.8	67.5	67.4	66.4	66.4	66.0
(13) CT	%	0.3	0.5	0.4	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
(14) Solar <sup>3/</sup>	%	0.2	0.5	1.6	2.1	3.2	4.3	4.9	5.4	6.0	6.5	7.0	7.4
(15) PV	%	0.1	0.5	1.6	2.1	3.2	4.3	4.9	5.4	6.0	6.5	7.0	7.4
(16) Solar Thermal	%	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(17) Other <sup>4/</sup>	%	0.5	(0.5)	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.8
		100	100	100	100	100	100	100	100	100	100	100	100

- 1/ Source: A Schedules and Actual Data for Next Generation Solar Centers Report
- 2/ The projected figures are based on estimated energy purchases from SJRPP.
- 3/ Represents output from FPL's PV and solar thermal facilities.
- 4/ Represents a forecast of energy expected to be purchased from Qualifying Facilities, etc., Independent Power Producers, net of Economy and other Power Sales.



**Schedule 7.1  
 Forecast of Capacity, Demand, and Scheduled  
 Maintenance At Time Of Summer Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
August of Year	Firm Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	Firm QF MW	Total Firm Capacity Available MW	Total Peak Demand MW	DSM MW	Firm Summer Peak Demand MW	Total Reserve Margin Before Maintenance MW	% of Peak	Scheduled Maintenance MW	Total Reserve Margin After Maintenance MW	% of Peak	Generation Only Reserve Margin After Maintenance MW	% of Peak
2018	26,249	110	0	534	26,892	24,010	1,811	22,199	4,693	21.1	0	4,693	21.1	2,882	12.0
2019	26,538	110	0	434	27,082	24,456	1,892	22,564	4,518	20.0	0	4,518	20.0	2,626	10.7
2020	27,040	165	0	104	27,308	24,713	1,956	22,757	4,552	20.0	0	4,552	20.0	2,595	10.5
2021	27,381	110	0	4	27,494	24,904	2,006	22,897	4,597	20.1	0	4,597	20.1	2,591	10.4
2022	28,705	110	0	4	28,819	25,189	2,053	23,136	5,683	24.6	0	5,683	24.6	3,630	14.4
2023	28,866	110	0	4	28,980	25,546	2,101	23,445	5,534	23.6	0	5,534	23.6	3,434	13.4
2024	29,027	110	0	4	29,140	25,939	2,149	23,789	5,351	22.5	0	5,351	22.5	3,202	12.3
2025	29,177	110	0	4	29,290	26,259	2,198	24,060	5,230	21.7	0	5,230	21.7	3,032	11.5
2026	29,302	110	0	4	29,416	26,672	2,247	24,425	4,990	20.4	0	4,990	20.4	2,744	10.3
2027	29,412	372	0	0	29,784	27,076	2,296	24,780	5,004	20.2	0	5,004	20.2	2,708	10.0

Col. (2) represents capacity additions and changes projected to be in-service by June 1st. These MW are generally considered to be available to meet summer peak loads which are forecasted to occur during August of the year indicated.

Col. (6) = Col.(2) + Col.(3) - Col(4) + Col(5).

Col.(7) reflects the 2018 load forecast without incremental energy efficiency or cumulative load management.

Col.(8) represents cumulative load management capability, plus incremental energy efficiency and load management, from 9/2017-on intended for use with the 2018 load forecast.

Col.(10) = Col.(6) - Col.(9)

Col.(11) = Col.(10) / Col.(9)

Col.(12) indicates the capacity of units projected to be out-of-service for planned maintenance during the summer peak period.

Col.(13) = Col.(10) - Col.(12)

Col.(14) = Col.(13) / Col.(9)

Col.(15) = Col.(6) - Col.(7) - Col.(12)

Col.(16) = Col.(15) / Col.(7)

**Schedule 7.2  
 Forecast of Capacity, Demand, and Scheduled  
 Maintenance At Time Of Winter Peak**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
January of Year	Firm Installed Capacity	Firm Capacity Import	Firm Capacity Export	Firm QF	Total Firm Capacity Available	Total Peak Demand	DSM	Firm Winter Peak Demand	Total Reserve Margin Before Maintenance	% of Peak	Scheduled Maintenance	Total Reserve Margin After Maintenance	% of Peak	Generation Only Reserve Margin After Maintenance	% of Peak
	MW	MW	MW	MW	MW	MW	MW	MW	MW		MW	MW		MW	
2018	27,512	110	0	334	27,956	19,604	1,382	18,222	9,734	53.4	0	9,734	53.4	8,351	42.6
2019	25,033	110	0	404	25,547	19,989	1,418	18,571	6,976	37.6	0	6,976	37.6	5,558	27.8
2020	27,012	110	0	404	27,526	20,182	1,462	18,720	8,806	47.0	0	8,806	47.0	7,344	36.4
2021	27,012	110	0	4	27,125	20,430	1,496	18,934	8,191	43.3	0	8,191	43.3	6,695	32.8
2022	27,024	110	0	4	27,137	20,489	1,523	18,966	8,172	43.1	0	8,172	43.1	6,648	32.4
2023	28,200	110	0	4	28,313	20,774	1,551	19,222	9,091	47.3	0	9,091	47.3	7,540	36.3
2024	28,200	110	0	4	28,313	21,067	1,580	19,486	8,827	45.3	0	8,827	45.3	7,247	34.4
2025	28,200	110	0	4	28,313	21,283	1,610	19,674	8,640	43.9	0	8,640	43.9	7,030	33.0
2026	28,200	110	0	4	28,313	21,579	1,639	19,940	8,373	42.0	0	8,373	42.0	6,734	31.2
2027	28,200	110	0	0	28,310	21,867	1,668	20,199	8,111	40.2	0	8,111	40.2	6,443	29.5

Col. (2) represents capacity additions and changes projected to be in-service by January 1st. These MW are generally considered to be available to meet winter peak loads which are forecasted to occur during January of the year indicated.

Col. (6) = Col.(2) + Col.(3) - Col(4) + Col(5).

Col.(7) reflects the 2018 load forecast without incremental energy efficiency or cumulative load management. The 2018 load is an actual load value.

Col.(8) represents cumulative load management capability, plus incremental energy efficiency and load management, from 9/2017-on intended for use with the 2018 load forecast.

Col.(10) = Col.(6) - Col.(9)

Col.(11) = Col.(10) / Col.(9)

Col.(12) indicates the capacity of units projected to be out-of-service for planned maintenance during the winter peak period.

Col.(13) = Col.(10) - Col.(12)

Col.(14) = Col.(13) / Col.(9)

Col.(15) = Col.(6) - Col.(7) - Col.(12)

Col.(16) = Col.(15) / Col.(7)

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 2**  
**Question No. 12**  
**Page 1 of 1**

**QUESTION:**

Per FPL's second 2018-2027 Ten Year Power Plant Site Plan Errata, please provide the updated Schedule 1 in Microsoft Excel format.

**RESPONSE:**

The requested information is provided in Attachment 1 to this response.

Schedule 1

Existing Generating Facilities  
 As of December 31, 2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Plant Name	Unit No.	Location	Unit Type	Fuel Pri.	Fuel Alt.	Fuel Transport Pri.	Fuel Transport Alt.	Fuel Days Use	Commercial In-Service Month/Year	Actual/Expected Retirement Month/Year	Gen.Max. Nameplate KW	Net Capacity Winter MW	Net Capacity Summer MW
Port Everglades		City of Hollywood 23/50S/42E											
	5		CC	NG	FO2	PL	TK	Unknown	Apr-16	Unknown	1,412,700	1,338	1,237
Riviera Beach		City of Riviera Beach 33/42S/432E											
	5		CC	NG	FO2	PL	TK	Unknown	Apr-14	Unknown	1,295,400	1,350	1,212
Sanford		Volusia County 16/19S/30E											
	4		CC	NG	No	PL	No	Unknown	Oct-03	Unknown	2,377,720	2,269	2,018
	5		CC	NG	No	PL	No	Unknown	Jun-02	Unknown	1,188,860	1,134	1,009
Scherer <sup>2/</sup>		Monroe, GA											
	4		ST	SUB	No	RR	No	Unknown	Jul-89	Unknown	680,368	635	634
Space Coast <sup>3/</sup>		Brevard County 13/23S/36E											
	1		PV	Solar	Solar	N/A	N/A	Unknown	Apr-10	Unknown	10,000	10	10
St. Johns River Power Park <sup>4/</sup>		Duval County 12/15/28E (RPC4)											
	1		ST	BIT	Pet	RR	WA	Unknown	Mar-87	1 <sup>st</sup> Q 2019	271,836	260	254
	2		ST	BIT	Pet	RR	WA	Unknown	May-88	1 <sup>st</sup> Q 2019	135,918	130	127
St. Lucie <sup>5/</sup>		St. Lucie County 16/36S/41E											
	1		ST	Nuc	No	TK	No	Unknown	May-76	Unknown	1,999,128	1,863	1,821
	2		ST	Nuc	No	TK	No	Unknown	Jun-83	Unknown	1,080,000	1,003	981
Turkey Point		Miami Dade County 27/57S/40E											
	3		ST	Nuc	No	TK	No	Unknown	Nov-72	Unknown	2,978,910	2,924	2,819
	4		ST	Nuc	No	TK	No	Unknown	Jun-73	Unknown	877,200	839	811
	5		CC	NG	FO2	PL	TK	Unknown	May-07	Unknown	877,200	848	821
			CC	NG	FO2	PL	TK	Unknown	May-07	Unknown	1,224,510	1,237	1,187
West County		Palm Beach County 29&32/43S/40E											
	1		CC	NG	FO2	PL	TK	Unknown	Aug-09	Unknown	4,100,400	4,008	3,657
	2		CC	NG	FO2	PL	TK	Unknown	Nov-09	Unknown	1,366,800	1,336	1,219
	3		CC	NG	FO2	PL	TK	Unknown	May-11	Unknown	1,366,800	1,336	1,219
<b>Total System Generating Capacity as of December 31, 2017<sup>6/</sup> =</b>												<b>28,031</b>	<b>26,248</b>
<b>System Firm Generating Capacity as of December 31, 2017<sup>7/</sup> =</b>												<b>27,772</b>	<b>26,120</b>

1/ These ratings are peak capability.

2/ These ratings relate to FPL's 76.36% share of Plant Scherer Unit 4 operated by Georgia Power, and represent FPL's 73.923% ownership share available at point of interchange.

3/ Approximately 32% of the 10 MW (Nameplate, AC) PV facility at Space Coast is considered as firm generating capacity for Summer reserve margin purposes and 0% is considered as firm capacity for Winter reserve margin purposes.

4/ The net capability ratings represent Florida Power & Light Company's share of St. Johns River Park Units 1 and 2, excluding the Jacksonville Electric Authority (JEA) share of 80%. Both SJRPP units were retired in January of 2018.

5/ Total capability of St. Lucie 1 is 981/1,003 MW. FPL's share of St. Lucie 2 is 840/860. FPL's ownership share of St. Lucie Units 1 and 2 is 100% and 85%, respectively, as shown above. FPL's share of the deliverable capacity from each unit is approx. 92.5% and exclude the Orlando Utilities Commission (OUC) and Florida Municipal Power Agency (FMPA) combined portion of approximately 7.448% per unit.

6/ The Total System Generating Capacity value shown includes FPL-owned firm and non-firm generating capacity.

7/ The System Firm Generating Capacity value shown includes only firm generating capacity.

**QUESTION:**

Please explain why FPL plans to add 298 MW of solar additions in 2022 although it is not necessary to meet FPL's reserve margin requirements.

**RESPONSE:**

The Ten Year Site Plan is a planning document based on a dynamic set of assumptions. FPL's projection in its 2018 Ten Year Site Plan of adding 298 MW of PV in 2022 for resource planning purposes is based on an assumption that this solar addition may be cost-effective for FPL's customers based both on savings in system variable costs (fuel, etc.) and on deferring future capacity additions. Further economic analysis would be needed before reaching a decision to proceed with this addition.

**QUESTION:**

Please identify which units' combustion turbine components will be upgraded to help account for the retirement of Martin Units 1 & 2, and provide the amount of additional capacity (MW) expected from each of these upgrades.

- a. Provide any additional sources of capacity that FPL anticipates acquiring to help account for the retirement of Martin Units 1 & 2.

**RESPONSE:**

The GE 7FA combustion turbines at Fort Myers Combined Cycle, Sanford Unit 4, Sanford Unit 5, Martin Unit 8, Manatee Unit 3 and Turkey Point Unit 5 will be upgraded to increase the generating capability for summer peak to partially account for the retirement of Martin Units 1 and 2. The following table lists the generating site and expected MW increase listed in the Ten Year Site Plan. Of the 855 MW total, all but 40 MW was used to help account for the retirement of Martin Units 1 and 2.

<b>Site</b>	<b>MW Increase</b>
Fort Myers Combined Cycle	288
Sanford Unit 4	162
Sanford Unit 5	162
Martin Unit 8	101
Manatee Unit 3	116
Turkey Point Unit 5	26
<b>Total</b>	<b>855</b>

- a. The cost-effective SoBRA solar additions planned for 2019 and 2020 assist in replacing capacity that will be lost by the retirement of the Martin units. However, definitive plans regarding later generation additions have not yet been made.

**QUESTION:**

Please explain whether or not Martin Units 1 & 2 can be repowered to improve the efficiency of the units.

**RESPONSE:**

Martin Units 1 & 2 could be repowered which would improve their efficiency. Repowering denotes first retiring, then removing the existing generating units, followed by building new generating capacity on the same site that the existing units had occupied. At Martin, there is sufficient land so that new combined cycle capacity could be built without first retiring the existing units. Once the new generating capacity was in place, the existing Martin Units 1 & 2 could be retired and removed. FPL evaluated this scenario and found it to be less economic.

**QUESTION:**

Please refer to FPL's responses to staff's Supplemental Data Request #1, No. 36. Please indicate whether or not FPL plans to pursue any of these projects. If so, please identify which and provide the status of these proposed projects.

**RESPONSE:**

FPL has not yet made a determination on whether it plans to pursue any of these projects.



QUESTION:

Please explain how FPL calculates solar degradation.

- a. Please discuss whether or not FPL accounts for solar degradation in cost effectiveness evaluations.
- b. Please identify the possible causes of solar degradation.

RESPONSE:

Using industry standard modeling protocols, FPL determines solar facility annual generation at the point of interconnection. That value is then adjusted to account for one time, initial PV module power output reductions associated with known phenomena, such as light induced degradation (LID). FPL then calculates the first full year's expected generation by reducing this value by half the annual degradation rate associated with the particular PV module installed at the facility. For each subsequent year of operation, the generation is determined by reducing the prior year's generation by the full annual PV module degradation rate. For example, if the initial annual generation is determined to be 100,000 MWH and the initial degradation including LID is 2% and the PV module degradation rate is 0.3% per year, the first year's generation will be 98,000 MWH  $[(100,000 \times 0.998) \times (1 - 0.3/2)]$ , the second year's generation will be 97,853MWH  $[(97,955 \times (1 - 0.3))]$ , and so on for each subsequent year.

- a. FPL accounts for solar degradation in economic analyses both in regard to firm capacity (MW) and annual energy (MWh) values. In its resource planning work that is discussed in the 2018 Ten Year Site Plan, FPL assumed a degradation rate for solar of 0.3% (or 0.003) per year.
- b. Degradation of solar PV modules results from either a mechanical failure of one or more module components and, additionally for thin-film modules, variability of the composition or thickness of the semiconductor material that may occur during the deposition process. Triggers for mechanical failures include thermal cycling, damp heat, humidity freeze, and UV exposure. Thermal cycling may cause solder bond failures and cracks in solar cells. Damp heat has been associated with delamination of encapsulants and corrosion of cells. Humidity freezing can cause junction box adhesion to fail. UV exposure contributes to discoloration and backsheet degradation. The rate of degradation can be minimized by the use of high-quality materials, managing the statistical stability and capability of manufacturing processes, including in-line inspection and testing programs, the use of proper packaging and shipping procedures and the implementation of on-site handling, storage and installation protocols.

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Page 1 of 1**

**QUESTION:**

Please provide an electronic copy (in Excel format) of Schedule 3.1 "History and Forecast of Summer Peak Demand (MW)" and Schedule 3.2 "History and Forecast Winter Peak Demand (MW)" contained in the utility's 1999 through 2010 TYSPs.

**RESPONSE:**

Please see FPL's response contained in the attachments to this request, in Excel format for FPL's TYSPs for the years 2001 through 2010. For the years 1999 and 2000, FPL only has Schedules 3.1 and 3.2 in pdf format, which are provided in the attached responses.

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1; Attachment No. 1; Page 1 of 2**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1989	13,425	267	13,158	0	29	76	85	18	13,311
1990	13,754	290	13,464	0	85	110	127	30	13,542
1991	14,123	281	13,842	0	160	129	177	38	13,786
1992	14,661	223	14,438	0	234	151	248	51	14,179
1993	15,266	397	14,869	0	311	182	320	79	14,635
1994	15,179	409	14,770	0	392	220	354	125	14,433
1995	16,172	435	15,737	0	466	259	391	193	15,315
1996	16,064	364	15,700	0	531	339	414	296	15,119
1997	16,613	380	16,233	0	615	440	432	341	15,566
1998	17,897	426	17,471	0	656	480	441	359	15,961
1999	17,371	145	17,226	0	727	76	417	57	16,094
2000	17,670	148	17,523	0	775	116	433	88	16,258
2001	17,865	148	17,717	0	799	150	456	111	16,349
2002	18,129	152	17,977	0	808	191	467	129	16,534
2003	18,469	152	18,317	0	814	233	477	148	16,797
2004	18,818	152	18,666	0	820	272	487	171	17,068
2005	19,170	152	19,018	0	826	318	497	188	17,341
2006	19,532	152	19,380	0	831	364	505	208	17,624
2007	19,901	152	19,749	0	836	407	514	228	17,916
2008	20,245	152	20,093	0	841	452	522	248	18,182

34

**Historical Values (1989 - 1998):**

Cols. (2) - (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and MAY incorporate the effects of load control IF load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes CILC and GS-LC.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: (10) = (2) - (6) - (8).

**Projected Values (1999 - 2008):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 1997 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values in are projected August values and are based on projections with a 1/97 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: (10) = (2) - (5) - (6) - (7) - (8) - (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1; Attachment No. 1; Page 2 of 2**

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1988/89	12,876	417	12,459	0	9	68	68	17	12,799
1989/90	13,988	648	13,340	0	35	101	94	29	13,859
1990/91	11,868	328	11,540	0	102	135	144	32	11,622
1991/92	13,319	105	13,214	0	174	170	193	38	12,952
1992/93	12,964	102	12,862	0	242	195	275	48	12,447
1993/94	12,594	278	12,316	0	317	231	342	67	11,935
1994/95	16,563	635	15,928	0	393	265	360	93	15,810
1995/96	18,096	698	18,096	0	459	310	406	143	17,231
1996/97	16,490	626	15,864	0	731	368	418	154	15,341
1997/98	13,060	239	12,821	0	823	403	429	168	11,236
1998/99	17,777	122	17,655	0	1,209	26	415	7	16,120
1999/00	18,191	124	18,067	0	1,293	47	432	12	16,407
2000/01	18,615	124	18,491	0	1,366	68	450	17	16,714
2001/02	19,025	127	18,899	0	1,394	90	456	25	17,060
2002/03	19,426	127	19,299	0	1,404	114	462	32	17,414
2003/04	19,816	127	19,690	0	1,415	136	468	40	17,757
2004/05	20,204	127	20,077	0	1,426	159	474	48	18,097
2005/06	20,579	127	20,452	0	1,437	181	479	58	18,424
2006/07	20,953	127	20,826	0	1,446	203	484	67	18,753
2007/08	21,328	127	21,201	0	1,455	225	489	76	19,083

35

**Historical Values (1989 - 1998):**

Cols. (2) - (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and MAY incorporate the effects of load control IF load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes CILC and GS - LC.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: (10) = (2) - (6) - (8).

**Projected Values (1999-2008):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 1997 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values in are projected August values and are based on projections with a 1/97 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: (10) = (2) - (5) - (6) - (7) - (8) - (9).

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1990	13,754	290	13,464	0	85	110	127	30	13,542
1991	14,123	281	13,842	0	160	129	177	38	13,786
1992	14,661	223	14,438	0	234	151	248	51	14,179
1993	15,266	397	14,869	0	311	182	320	79	14,635
1994	15,179	409	14,770	0	392	220	354	125	14,433
1995	16,172	435	15,737	0	466	259	391	193	15,315
1996	16,064	364	15,700	0	531	339	414	296	15,119
1997	16,613	380	16,233	0	615	440	432	341	15,566
1998	17,897	426	17,471	0	656	480	441	359	15,961
1999	17,615	169	17,446	0	714	524	450	381	15,546
2000	17,690	145	17,544	0	757	91	467	54	16,321
2001	17,926	146	17,781	0	782	130	480	76	16,458
2002	18,282	224	18,058	0	791	171	490	95	16,735
2003	18,658	228	18,430	0	797	213	501	115	17,032
2004	19,037	233	18,804	0	803	254	510	135	17,335
2005	19,446	233	19,213	0	809	297	521	155	17,664
2006	20,124	233	19,890	0	814	341	529	175	18,265
2007	20,565	233	20,332	0	819	386	537	195	18,628
2008	20,941	158	20,783	0	824	432	545	215	18,925
2009	21,366	158	21,208	0	828	479	550	234	19,275

**Historical Values (1990 - 1999):**

Cols. (2) - (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and MAY incorporate the effects of load control IF load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand. Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes CILC and GS-LC.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: (10) = (2) - (6) - (8).

**Projected Values (2000 - 2009):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 1999 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values are projected August values and are based on projections with a 1/99 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: (10) = (2) - (5) - (6) - (7) - (8) - (9).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1990/91	11,868	328	11,540	0	102	135	144	32	11,622
1991/92	13,319	105	13,214	0	174	170	193	38	12,952
1992/93	12,964	102	12,862	0	242	195	275	48	12,447
1993/94	12,594	278	12,316	0	317	231	342	67	11,935
1994/95	16,563	635	15,928	0	393	265	360	93	15,810
1995/96	18,096	698	18,096	0	459	310	406	143	17,231
1996/97	16,490	626	15,864	0	731	368	418	154	15,341
1997/98	13,060	239	12,821	0	823	403	429	168	11,236
1998/99	16,802	149	16,653	0	1,218	404	417	169	14,594
1999/00	17,057	142	16,915	0	1,296	426	441	179	14,715
2000/01	18,585	119	18,466	0	1,371	46	455	20	16,693
2001/02	18,983	122	18,861	0	1,398	72	461	26	17,026
2002/03	19,432	200	19,232	0	1,409	99	467	33	17,424
2003/04	19,839	204	19,635	0	1,420	124	473	41	17,781
2004/05	20,251	204	20,047	0	1,430	148	478	49	18,146
2005/06	20,666	204	20,462	0	1,441	173	484	59	18,509
2006/07	21,088	204	20,884	0	1,450	196	489	68	18,885
2007/08	21,439	129	21,310	0	1,459	220	494	76	19,190
2008/09	21,860	129	21,731	0	1,468	243	499	85	19,565

37

**Historical Values (1990 - 1999):**

Cols. (2) - (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and MAY incorporate the effects of load control IF load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand. Cols. (5) - (9) represent actual DSM capabilities starting from January 1988. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes CILC and GS - LC. Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: (10) = (2) - (6) - (8).

**Projected Values (2000-2009):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 1999 are incorporated into the forecast. Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values in are projected January values and are based on projections with a 1/99 starting point. Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: (10) = (2) - (5) - (6) - (7) - (8) - (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 3**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1991	14,123	281	13,842	0	160	129	177	38	13,786
1992	14,661	223	14,438	0	234	151	248	51	14,179
1993	15,266	397	14,869	0	311	182	320	79	14,635
1994	15,179	409	14,770	0	392	220	354	125	14,433
1995	16,172	435	15,737	0	466	259	391	193	15,315
1996	16,064	364	15,700	0	531	339	414	296	15,119
1997	16,613	380	16,233	0	615	440	432	341	15,566
1998	17,897	426	17,471	0	656	480	441	359	16,800
1999	17,615	169	17,446	0	722	565	450	397	16,443
2000	17,808	161	17,647	0	767	626	456	432	16,585
2001	18,150	148	18,003	0	784	87	480	55	16,744
2002	18,801	225	18,576	0	793	128	490	74	17,316
2003	19,507	227	19,280	0	799	169	499	93	17,947
2004	19,964	229	19,735	0	805	211	510	113	18,325
2005	20,433	231	20,201	0	811	254	519	134	18,715
2006	20,918	231	20,687	0	817	298	527	154	19,122
2007	21,392	231	21,160	0	822	343	535	174	19,518
2008	21,788	156	21,632	0	827	389	543	193	19,836
2009	22,220	156	22,063	0	831	436	549	212	20,192
2010	22,722	156	22,565	0	832	451	550	219	20,670

**Historical Values (1991 - 2000):**

Cols. (2) - (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and MAY incorporate the effects of load control IF load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand. Cols. (5) - (9) represent actual DSM capabilities starting from January 1988. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes CILC and GS-LC. Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2001 - 2010):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2000 are incorporated into the forecast. Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values are projected August values and are based on projections with a 1/2000 starting point. Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2  
History and Forecast of Winter Peak Demand:Base Case**

(1) Year	(2) Total	(3) Firm Wholesale	(4) Retail	(5) Interruptible	(6) Res. Load Management	(7) Residential Conservation	(8) C/I Load Management	(9) C/I Conservation	(10) Net Firm Demand
1991/92	13,319	105	13,214	0	174	170	193	38	12,952
1992/93	12,964	102	12,862	0	242	195	275	48	12,447
1993/94	12,594	278	12,316	0	317	231	342	67	11,935
1994/95	16,563	635	15,928	0	393	265	360	93	15,810
1995/96	18,096	698	17,398	0	459	310	406	143	17,231
1996/97	16,490	626	15,864	0	731	368	418	154	15,341
1997/98	13,060	239	12,821	0	823	403	429	168	11,807
1998/99	16,802	149	16,653	0	1,218	438	417	182	15,167
1999/00	17,057	142	16,915	0	1,296	469	441	193	15,320
2000/01	18,219	150	18,069	0	972	493	448	201	16,799
2001/02	19,333	130	19,203	0	1,403	81	459	26	17,364
2002/03	20,122	206	19,915	0	1,414	107	465	33	18,103
2003/04	20,555	208	20,347	0	1,425	132	471	41	18,486
2004/05	20,986	210	20,776	0	1,436	156	477	50	18,867
2005/06	21,413	210	21,203	0	1,446	181	483	59	19,244
2006/07	21,841	210	21,631	0	1,455	205	487	68	19,626
2007/08	22,186	135	22,051	0	1,464	228	492	77	19,925
2008/09	22,586	135	22,451	0	1,473	251	497	86	20,279
2009/10	22,978	135	22,843	0	1,480	272	500	93	20,633

**Historical Values (1991/92 - 2000/01):**

Cols. (2) - (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and MAY incorporate the effects of load control IF load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes CILC and GS - LC.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col.(10) = Col.(2) - Col.(6) - Col.(8).

**Projected Values (2001/02-2009/10):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 1997 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values in are projected August values and are based on projections with a 1/2000 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col.(10) = Col.(2) - Col.(5) - Col.(6) - Col.(7) - Col.(8) - Col.(9).

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col.(10) = Col.(2) - Col.(5) - Col.(6) - Col. (7) - Col.(8) - Col.(9).



**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 4**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1992	14,661	223	14,438	0	234	151	248	51	14,179
1993	15,266	397	14,869	0	311	182	320	79	14,635
1994	15,179	409	14,770	0	392	220	354	125	14,433
1995	16,172	435	15,737	0	466	259	391	193	15,315
1996	16,064	364	15,700	0	531	339	414	296	15,119
1997	16,613	380	16,233	0	615	440	432	341	15,566
1998	17,897	426	17,471	0	656	480	441	359	16,800
1999	17,615	169	17,446	0	722	565	450	397	16,443
2000	17,808	161	17,647	0	767	626	456	432	16,585
2001	18,754	169	18,585	0	798	673	483	463	17,473
2002	19,131	146	18,985	0	805	83	487	39	17,717
2003	19,765	223	19,542	0	810	125	497	59	18,274
2004	20,226	225	20,002	0	817	167	507	79	18,656
2005	20,719	227	20,493	0	824	211	517	99	19,068
2006	21,186	227	20,959	0	829	255	525	120	19,457
2007	21,556	227	21,329	0	834	300	533	140	19,749
2008	21,870	152	21,718	0	839	347	541	159	19,984
2009	22,271	152	22,119	0	842	394	547	179	20,309
2010	22,687	152	22,535	0	844	410	548	185	20,700
2011	23,106	152	22,954	0	844	410	548	185	21,119

**Historical Values (1992 - 2001):** 22,511

Cols. (2) - (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand. Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes GS-LC, CDR and GSD-LC. Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: (10) = (2) - (6) - (8).

**Projected Values (2002 - 2011):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2001 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values are projected August values and are based on projections with a 1/2001 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: (10) = (2) - (5) - (6) - (7) - (8) - (9).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1992/93	12,964	102	12,862	0	242	195	275	48	12,447
1993/94	12,594	278	12,316	0	317	231	342	67	11,935
1994/95	16,563	635	15,928	0	393	265	360	93	15,810
1995/96	18,096	698	17,398	0	459	310	406	143	17,231
1996/97	16,490	626	15,864	0	731	368	418	154	15,341
1997/98	13,060	239	12,821	0	823	403	429	168	11,807
1998/99	16,802	149	16,653	0	1,218	438	417	182	15,167
1999/00	17,057	142	16,915	0	1,296	469	441	193	15,320
2000/01	18,199	150	18,049	0	972	493	448	201	16,779
2001/02	17,597	145	17,452	0	1,081	534	489	242	16,028
2002/03	19,551	121	19,430	0	1,085	78	458	22	17,908
2003/04	19,976	198	19,779	0	1,093	104	464	30	18,285
2004/05	20,418	199	20,218	0	1,102	128	470	38	18,680
2005/06	20,854	199	20,654	0	1,109	153	476	48	19,068
2006/07	21,204	199	21,005	0	1,116	177	481	57	19,373
2007/08	21,538	124	21,414	0	1,123	200	486	66	19,663
2008/09	21,966	124	21,841	0	1,129	223	491	75	20,048
2009/10	22,366	124	22,242	0	1,134	245	494	82	20,411
2010/11	22,785	124	22,661	0	1,134	245	494	82	20,830

**Historical Values (1992/93 - 2001/02):**

Cols. (2) - (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand. Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes GS-LC, CDR and GSD - LC. Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: (10) = (2) - (6) - (8).

**Projected Values (2002/03 - 2010/11):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2001 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values are projected August values and are based on projections with a 1/2001 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: (10) = (2) - (5) - (6) - (7) - (8) - (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 5**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1993	15,266	397	14,869	0	311	182	320	79	14,635
1994	15,179	409	14,770	0	392	220	354	125	14,433
1995	16,172	435	15,737	0	466	259	391	193	15,315
1996	16,064	364	15,700	0	531	339	414	296	15,119
1997	16,613	380	16,233	0	615	440	432	341	15,566
1998	17,897	426	17,471	0	656	480	441	359	16,800
1999	17,615	169	17,446	0	722	565	450	397	16,443
2000	17,808	161	17,647	0	767	626	456	432	16,585
2001	18,754	169	18,585	0	798	673	483	463	17,473
2002	19,219	261	18,958	0	826	733	484	499	17,909
2003	19,773	225	19,548	0	796	43	569	22	18,343
2004	20,297	227	20,070	0	802	84	582	42	18,787
2005	20,799	230	20,569	0	809	126	592	62	19,210
2006	21,331	231	21,100	0	814	170	600	83	19,664
2007	21,851	234	21,617	0	819	214	608	103	20,107
2008	22,289	159	22,130	0	824	259	616	122	20,468
2009	22,784	159	22,625	0	828	306	622	141	20,888
2010	23,294	159	23,135	0	830	321	623	148	21,372
2011	23,783	159	23,624	0	830	321	623	148	21,861
2012	24,279	159	24,120	0	830	321	623	148	22,357

**Historical Values (1993 - 2002):**

Cols. (2) - (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes GS-LC, CDR and GSD-LC.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2003 - 2012):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2002 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values are projected August values and are based on projections with a 1/2002 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1993/94	12,594	278	12,316	0	317	231	342	67	11,935
1994/95	16,563	635	15,928	0	393	265	360	93	15,810
1995/96	18,096	698	17,398	0	459	310	406	143	17,231
1996/97	16,490	626	15,864	0	731	368	418	154	15,341
1997/98	13,060	239	12,821	0	823	403	429	168	11,807
1998/99	16,802	149	16,653	0	1,218	438	417	182	15,167
1999/00	17,057	142	16,915	0	1,296	469	441	193	15,320
2000/01	18,199	150	18,049	0	972	493	448	201	16,779
2001/02	17,597	145	17,452	0	1,081	534	457	242	16,060
2002/03	20,190	246	19,944	0	1,116	581	453	288	18,621
2003/04	20,081	206	19,875	0	932	80	534	15	18,520
2004/05	20,583	208	20,375	0	939	114	540	22	18,968
2005/06	21,100	209	20,891	0	946	149	546	29	19,430
2006/07	21,605	212	21,393	0	952	183	551	37	19,882
2007/08	22,046	137	21,909	0	958	218	556	44	20,270
2008/09	22,539	137	22,402	0	964	252	561	51	20,712
2009/10	23,026	137	22,889	0	968	284	564	57	21,153
2010/11	23,522	137	23,385	0	968	284	564	57	21,649
2011/12	24,024	137	23,887	0	968	284	564	57	22,151
2012/13	24,535	137	24,398	0	968	284	564	57	22,663

**Historical Values (1993/94 - 2002/03):**

Cols. (2) - (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Cols. (7&9)), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Cols. (5) - (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes GS-LC, CDR and GSD - LC.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2003/04 - 2012/13):**

Cols. (2) - (4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2002 are incorporated into the forecast.

Cols. (5) - (9) represent all incremental conservation and cumulative load control. These values are projected January values and are based on projections with a 1/2002 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 6**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1994	15,179	409	14,770	0	392	220	354	125	14,433
1995	16,172	435	15,737	0	466	259	391	193	15,315
1996	16,064	364	15,700	0	531	339	414	296	15,119
1997	16,613	380	16,233	0	615	440	432	341	15,566
1998	17,897	426	17,471	0	656	480	441	359	16,800
1999	17,615	169	17,446	0	722	565	450	397	16,443
2000	17,808	161	17,647	0	767	626	456	432	16,585
2001	18,754	169	18,585	0	798	673	483	463	17,473
2002	19,219	261	18,958	0	826	733	484	499	17,909
2003	19,668	253	19,415	0	839	775	568	535	18,261
2004	20,297	227	20,070	0	802	84	582	42	18,787
2005	20,799	230	20,569	0	809	126	592	62	19,210
2006	21,331	231	21,100	0	814	170	600	83	19,664
2007	21,851	234	21,617	0	819	214	608	103	20,107
2008	22,289	159	22,130	0	824	259	616	122	20,468
2009	22,784	159	22,625	0	828	306	622	141	20,888
2010	23,294	159	23,135	0	830	321	623	148	21,372
2011	23,783	159	23,624	0	830	321	623	148	21,861
2012	24,279	159	24,120	0	830	321	623	148	22,357
2013	24,784	159	24,625	0	830	321	623	148	22,862

**Historical Values (1994 - 2003):**

Col. (2) - Col.(4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) -Col. (9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business on Call (BOC) and Commercial Demand Reduction (CDR).

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col.(2) - Col.(6) - Col.(8).

**Projected Values (2004 - 2013):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2003 are incorporated into the forecast.

Col. (5) - Col. (9) represent all incremental conservation and cumulative load control. These values are projected August values and are based on projections with a 1/2003 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2  
History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1994/95	16,563	635	15,928	0	393	265	360	93	15,810
1995/96	18,096	698	17,398	0	459	310	406	143	17,231
1996/97	16,490	626	15,864	0	731	368	418	154	15,341
1997/98	13,060	239	12,821	0	823	403	429	168	11,807
1998/99	16,802	149	16,653	0	1,218	438	417	182	15,167
1999/00	17,057	142	16,915	0	1,296	469	441	193	15,320
2000/01	18,199	150	18,049	0	972	493	448	201	16,779
2001/02	17,597	145	17,452	0	1,081	534	457	242	16,060
2002/03	20,190	246	19,944	0	1,116	581	453	288	18,621
2003/04	14,752	211	14,541	0	938	601	534	309	13,280
2004/05	20,583	208	20,375	0	939	114	540	22	18,968
2005/06	21,100	209	20,891	0	946	149	546	29	19,430
2006/07	21,605	212	21,393	0	952	183	551	37	19,882
2007/08	22,046	137	21,909	0	958	218	556	44	20,270
2008/09	22,539	137	22,402	0	964	252	561	51	20,712
2009/10	23,026	137	22,889	0	968	284	564	57	21,153
2010/11	23,522	137	23,385	0	968	284	564	57	21,649
2011/12	24,024	137	23,887	0	968	284	564	57	22,151
2012/13	24,535	137	24,398	0	968	284	564	57	22,663
2013/14	25,057	137	24,920	0	968	284	564	57	23,184

**Historical Values (1994/95 - 2003/04):**

Col. (2) - Col.(4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(9) represent actual DSM capabilities starting from January 1988.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business on Call (BOC) and Commercial Demand Reduction (CDR).

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2004/05- 2013/14):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2003 are incorporated into the forecast.

Col. (5) - Col.(9) represent all incremental conservation and cumulative load control. These values are projected January values and are based on projections with a 1/2003 starting point.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 7**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1995	16,172	435	15,737	0	465	260	406	195	15,301
1996	16,064	364	15,700	0	525	339	422	297	15,117
1997	16,613	380	16,233	0	582	440	435	343	15,596
1998	17,897	426	17,471	0	628	526	458	385	16,811
1999	17,615	169	17,446	0	673	592	452	420	16,490
2000	17,808	161	17,647	0	719	645	467	451	16,622
2001	18,754	169	18,585	0	737	697	488	481	17,529
2002	19,219	261	18,958	0	770	755	489	517	17,960
2003	19,668	253	19,415	0	781	799	577	554	18,310
2004	20,545	258	20,287	0	782	828	580	569	19,183
2005	20,614	264	20,351	0	788	87	592	40	19,108
2006	21,178	266	20,912	0	796	128	603	55	19,596
2007	21,769	269	21,500	0	807	170	615	67	20,111
2008	22,306	197	22,109	0	820	214	627	79	20,566
2009	22,884	197	22,687	0	836	261	639	90	21,058
2010	23,424	197	23,227	0	853	310	650	102	21,510
2011	23,964	197	23,767	0	871	361	662	112	21,958
2012	24,516	197	24,319	0	891	413	674	123	22,416
2013	25,059	197	24,862	0	912	467	686	133	22,861
2014	25,633	197	25,436	0	936	523	698	143	23,333

**Historical Values (1995 - 2004):**

Col. (2) - Col. (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (9) for 1995 through 2003 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial /Industrial Demand Reduction (CDR). Col.(5) - Col.(9) for year 2004 are "estimated actuals" and are August values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col.(2) - Col.(6) - Col.(8).

**Projected Values (2005 - 2014):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col. (9) represent all incremental conservation and cumulative load control. These values are projected August values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1995/96	18,096	698	17,398	0	512	266	406	89	17,178
1996/97	16,490	626	15,864	0	578	311	417	139	15,495
1997/98	13,060	239	12,821	0	641	369	426	151	11,993
1998/99	16,802	149	16,653	0	692	404	446	164	15,664
1999/00	17,057	142	16,915	0	741	434	438	176	15,878
2000/01	18,199	150	18,049	0	791	459	448	183	16,960
2001/02	17,597	145	17,452	0	811	500	457	196	16,329
2002/03	20,190	246	19,944	0	847	546	453	206	18,890
2003/04	14,752	211	14,541	0	857	570	532	230	13,363
2004/05	18,108	225	17,884	0	864	38	539	28	16,705
2005/06	21,336	252	21,083	0	871	60	545	35	19,825
2006/07	21,898	255	21,644	0	881	82	552	40	20,344
2007/08	22,369	182	22,187	0	894	105	559	44	20,768
2008/09	22,916	182	22,734	0	910	130	566	48	21,262
2009/10	23,466	182	23,284	0	928	156	573	52	21,758
2010/11	24,035	182	23,853	0	947	183	579	57	22,270
2011/12	24,608	182	24,426	0	968	210	586	61	22,783
2012/13	25,197	182	25,015	0	990	238	593	66	23,309
2013/14	25,798	182	25,616	0	1,014	266	600	72	23,846

**Historical Values (1995/96 - 2004/05):**

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(9) for 1995/96 through 2003/04 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial/Industrial Demand Reduction (CDR).Col.(5) - Col.(9) for year 2004/05 are "estimated actuals" and are January values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2005/06- 2013/14):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col.(9) represent all incremental conservation and cumulative load control. These values are projected January values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).



**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 8**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1996	16,064	364	15,700	0	525	339	422	297	15,117
1997	16,613	380	16,233	0	582	440	435	343	15,596
1998	17,897	426	17,471	0	628	526	458	385	16,811
1999	17,615	169	17,446	0	673	592	452	420	16,490
2000	17,808	161	17,647	0	719	645	467	451	16,622
2001	18,754	169	18,585	0	737	697	488	481	17,529
2002	19,219	261	18,958	0	770	755	489	517	17,960
2003	19,668	253	19,415	0	781	799	577	554	18,310
2004	20,545	258	20,287	0	783	847	588	578	19,174
2005	22,361	263	22,098	0	790	895	600	611	19,465
2006	21,916	268	21,648	0	799	87	619	49	20,361
2007	22,543	271	22,272	0	926	128	688	79	20,722
2008	23,179	201	22,978	0	962	172	724	105	21,216
2009	23,782	206	23,576	0	984	218	744	122	21,714
2010	24,375	211	24,164	0	1001	267	756	133	22,218
2011	24,915	211	24,704	0	1,020	318	767	144	22,665
2012	25,474	211	25,263	0	1,040	371	779	154	23,130
2013	26,079	211	25,868	0	1,062	425	791	164	23,637
2014	26,642	211	26,431	0	1,086	481	803	174	24,098
2015	27,263	211	27,052	0	1,095	500	807	178	24,684

**Historical Values (1996 - 2005):**

Col. (2) - Col. (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (9) for 1996 through 2005 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial /Industrial Demand Reduction (CDR). Col.(5) - Col.(9) for year 2004 are "estimated actuals" and are August values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col.(2) - Col.(6) - Col.(8).

**Projected Values (2006 - 2015):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col. (9) represent all incremental conservation and cumulative load control. These values are projected August values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1996/97	16,490	626	15,864	0	578	311	417	139	15,495
1997/98	13,060	239	12,821	0	641	369	426	151	11,993
1998/99	16,802	149	16,653	0	692	404	446	164	15,664
1999/00	17,057	142	16,915	0	741	434	438	176	15,878
2000/01	18,199	150	18,049	0	791	459	448	183	16,960
2001/02	17,597	145	17,452	0	811	500	457	196	16,329
2002/03	20,190	246	19,944	0	847	546	453	206	18,890
2003/04	14,752	211	14,541	0	857	570	532	230	13,363
2004/05	18,108	225	17,883	0	862	583	542	233	16,704
2005/06	19,683	225	19,458	0	870	600	550	240	17,424
2006/07	22,294	228	22,066	0	964	58	605	20	20,647
2007/08	22,753	231	22,522	0	1,001	85	631	28	21,007
2008/09	23,245	161	23,084	0	1,042	113	656	38	21,395
2009/10	23,714	166	23,548	0	1,062	139	663	42	21,807
2010/11	24,155	171	23,984	0	1,084	167	669	47	22,188
2011/12	24,597	171	24,426	0	1,107	194	676	52	22,568
2012/13	25,061	171	24,890	0	1,133	222	683	57	22,967
2013/14	25,561	171	25,390	0	1,160	249	690	62	23,400
2014/15	26,244	171	26,073	0	1,189	275	696	67	24,017

**Historical Values (1996/97 - 2005/06):**

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(9) for 1996/97 through 2005/06 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial/Industrial Demand Reduction (CDR).Col.(5) - Col.(9) for year 2004/05 are "estimated actuals" and are January values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2006/07- 2014/15):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col.(9) represent all incremental conservation and cumulative load control. These values are projected January values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 9**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1997	16,613	380	16,233	0	582	440	435	343	15,596
1998	17,897	426	17,471	0	628	526	458	385	16,811
1999	17,615	169	17,446	0	673	592	452	420	16,490
2000	17,808	161	17,647	0	719	645	467	451	16,622
2001	18,754	169	18,585	0	737	697	488	481	17,529
2002	19,219	261	18,958	0	770	755	489	517	17,960
2003	19,668	253	19,415	0	781	799	577	554	18,310
2004	20,545	258	20,287	0	783	847	588	578	19,174
2005	22,361	264	22,097	0	790	895	600	611	20,971
2006	21,819	256	21,563	0	809	948	635	640	18,787
2007	22,259	230	22,029	0	932	85	701	50	20,491
2008	22,770	155	22,615	0	966	129	738	75	20,862
2009	23,435	155	23,280	0	997	174	760	103	21,401
2010	24,003	155	23,848	0	1016	221	776	133	21,857
2011	24,612	155	24,457	0	1037	270	791	166	22,348
2012	25,115	155	24,960	0	1,059	322	806	201	22,727
2013	25,590	110	25,480	0	1,083	375	822	236	23,074
2014	26,100	110	25,990	0	1,110	430	837	274	23,449
2015	26,772	110	26,662	0	1,139	486	852	312	23,982
2016	27,410	110	27,300	0	1,175	505	884	347	24,499

**Historical Values (1997 - 2006):**

Col. (2) - Col. (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (9) for 1997 through 2006 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial /Industrial Demand Reduction (CDR). Col.(5) - Col.(9) for year 2004 are "estimated actuals" and are August values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col.(2) - Col.(6) - Col.(8).

**Projected Values (2007 - 2016):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col. (9) represent all incremental conservation and cumulative load control. These values are projected August values and the conservation values are based on projections with a 1/2006 starting point for use with the 2006 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2  
History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1997/98	13,060	239	12,821	0	641	369	426	151	11,993
1998/99	16,802	149	16,653	0	692	404	446	164	15,664
1999/00	17,057	142	16,915	0	741	434	438	176	15,878
2000/01	18,199	150	18,049	0	791	459	448	183	16,960
2001/02	17,597	145	17,452	0	811	500	457	196	16,329
2002/03	20,190	246	19,944	0	847	546	453	206	18,890
2003/04	14,752	211	14,541	0	857	570	532	230	13,363
2004/05	18,108	225	17,883	0	862	583	542	233	16,704
2005/06	19,683	225	19,458	0	870	600	550	240	18,263
2006/07	16,815	223	16,592	0	894	620	577	249	15,344
2007/08	22,627	230	22,397	0	902	27	618	8	21,072
2008/09	23,115	155	22,960	0	935	54	644	17	21,466
2009/10	23,587	155	23,432	0	972	82	670	27	21,837
2010/11	24,047	155	23,892	0	989	109	678	38	22,233
2011/12	24,498	155	24,343	0	1,009	137	686	51	22,615
2012/13	24,952	155	24,797	0	1,030	166	694	65	22,998
2013/14	25,416	155	25,261	0	1,052	194	702	79	23,388
2014/15	26,048	110	25,938	0	1,077	224	711	95	23,942
2015/16	26,692	110	26,582	0	1,105	253	719	112	24,504
2016/17	27,342	110	27,232	0	1,131	280	726	127	25,078

**Historical Values (1997 - 2006):**

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(9) for 1996/97 through 2005/06 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial/Industrial Demand Reduction (CDR).Col.(5) - Col.(9) for year 2004/05 are "estimated actuals" and are January values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2007/08- 2015/16):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col.(9) represent all incremental conservation and cumulative load control. These values are projected January values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 10**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1998	17,897	426	17,471	0	628	526	458	385	16,811
1999	17,615	169	17,446	0	673	592	452	420	16,490
2000	17,808	161	17,647	0	719	645	467	451	16,622
2001	18,754	169	18,585	0	737	697	488	481	17,529
2002	19,219	261	18,958	0	770	755	489	517	17,960
2003	19,668	253	19,415	0	781	799	577	554	18,310
2004	20,545	258	20,287	0	783	847	588	578	19,174
2005	22,361	264	22,097	0	790	895	600	611	20,971
2006	21,819	256	21,563	0	809	948	635	640	18,787
2007	21,962	261	21,701	0	954	982	715	683	18,628
2008	22,356	162	22,195	0	966	129	738	75	20,448
2009	22,792	162	22,630	0	997	174	760	103	20,758
2010	23,554	361	23,193	0	1016	221	776	133	21,408
2011	24,191	368	23,823	0	1037	270	791	166	21,927
2012	24,837	373	24,463	0	1,059	322	806	201	22,449
2013	25,414	380	25,034	0	1,083	375	822	236	22,898
2014	26,576	1,076	25,500	0	1,110	430	837	274	23,925
2015	27,241	1,106	26,136	0	1,139	486	852	312	24,452
2016	27,932	1,135	26,797	0	1,164	535	867	345	25,021
2017	28,621	1,165	27,456	0	1,189	583	880	378	25,591

**Historical Values (1998 - 2007):**

Col. (2) - Col. (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (9) for 1997 through 2006 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial /Industrial Demand Reduction (CDR). Col.(5) - Col.(9) for year 2004 are "estimated actuals" and are August values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col.(2) - Col.(6) - Col.(8).

**Projected Values (2008 - 2017):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col. (9) represent all incremental conservation and cumulative load control. These values are projected August values and the conservation values are based on projections with a 1/2006 starting point for use with the 2006 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1998/99	16,802	149	16,653	0	692	404	446	164	15,664
1999/00	17,057	142	16,915	0	741	434	438	176	15,878
2000/01	18,199	150	18,049	0	791	459	448	183	16,960
2001/02	17,597	145	17,452	0	811	500	457	196	16,329
2002/03	20,190	246	19,944	0	847	546	453	206	18,890
2003/04	14,752	211	14,541	0	857	570	532	230	13,363
2004/05	18,108	225	17,883	0	862	583	542	233	16,704
2005/06	19,683	225	19,458	0	870	600	550	240	18,263
2006/07	16,815	223	16,592	0	894	620	577	249	15,344
2007/08	18,055	225	17,830	0	879	644	635	279	15,618
2008/09	22,755	137	22,617	0	935	54	644	17	21,105
2009/10	23,454	138	23,316	0	972	82	670	27	21,704
2010/11	23,971	374	23,597	0	989	109	678	38	22,157
2011/12	24,487	381	24,105	0	1,009	137	686	51	22,604
2012/13	24,976	387	24,588	0	1,030	166	694	65	23,022
2013/14	26,290	394	25,895	0	1,052	194	702	79	24,262
2014/15	26,979	1,226	25,753	0	1,077	224	711	95	24,873
2015/16	27,690	1,260	26,430	0	1,105	253	719	112	25,502
2016/17	28,418	1,296	27,122	0	1,131	280	726	127	26,154
2017/18	29,178	1,332	27,846	0	1,154	305	733	141	26,844

**Historical Values (1998 - 2007):**

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(9) for 1996/97 through 2005/06 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial/Industrial Demand Reduction (CDR).Col.(5) - Col.(9) for year 2004/05 are "estimated actuals" and are January values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2008 - 2017):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col.(9) represent all incremental conservation and cumulative load control. These values are projected January values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 11**  
**Tab 1 of 1**

**Schedule 3.1**  
**History and Forecast of Summer Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
August of Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	Small Business Load Management	C/I Conservation	Net Firm Demand
1999	17,615	169	17,446	0	673	592	438	15	420	16,490
2000	17,808	161	17,647	0	719	645	448	19	451	16,622
2001	18,754	169	18,585	0	737	697	449	40	481	17,529
2002	19,219	261	18,958	0	770	755	441	49	517	17,960
2003	19,668	253	19,415	0	781	799	516	61	554	18,310
2004	20,545	258	20,287	0	783	847	517	71	578	19,174
2005	22,361	264	22,097	0	790	895	516	84	611	20,971
2006	21,819	256	21,563	0	809	948	516	120	640	20,375
2007	21,962	261	21,701	0	954	982	515	200	683	20,293
2008	21,060	181	20,879	0	974	1042	538	221	705	19,327
2009	21,124	241	20,882	0	1,016	76	753	86	65	19,128
2010	21,147	381	20,765	0	1,034	122	772	93	98	19,028
2011	21,368	385	20,983	0	1,053	171	780	100	132	19,132
2012	21,933	393	21,540	0	1,073	222	788	107	167	19,576
2013	22,249	354	21,895	0	1,095	275	796	114	203	19,766
2014	23,533	1,184	22,349	0	1,120	329	804	121	240	20,919
2015	24,142	1,205	22,937	0	1,146	385	812	128	278	21,393
2016	24,772	1,229	23,543	0	1,172	440	820	136	316	21,888
2017	25,401	1,256	24,145	0	1,198	496	828	143	353	22,383
2018	26,143	1,284	24,860	0	1,207	514	831	145	366	23,080

**Historical Values (1999 - 2008):**

Col. (2) - Col. (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 10), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (10) for 1999 through 2008 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial /Industrial Demand Reduction (CDR).

Col (9) represents FPL's Business On Call program.

Col. (11) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (11) is derived by the formula: Col. (11) = Col.(2) - Col.(6) - Col.(8)- Col. (9).

**Projected Values (2009 - 2018):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col. (10) represent all incremental conservation, current load management and incremental load management. These values are projected August values and the conservation values are based on projections with a 1/2008 starting point designed for use with the 2008 load forecast.

Col (9) represents FPL's Business On Call program.

Col. (11) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (11) is derived by using the formula: Col. (11) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9)-Col (10).

**Schedule 3.2**  
**History and Forecast of Winter Peak Demand:Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
January of Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	Small Business Load Management	C/I Conservation	Net Firm Demand
2000	17,057	142	16,915	0	741	434	438	0	176	15,878
2001	18,199	150	18,049	0	791	459	448	0	183	16,960
2002	17,597	145	17,452	0	811	500	457	0	196	16,329
2003	20,190	246	19,944	0	847	546	453	0	206	18,890
2004	14,752	211	14,541	0	857	570	532	0	230	13,363
2005	18,108	225	17,883	0	862	583	542	0	233	16,704
2006	19,683	225	19,458	0	870	600	550	0	240	18,263
2007	16,815	223	16,592	0	894	620	577	0	249	15,344
2008	18,055	163	17,892	0	879	644	635	0	279	16,541
2009	20,031	216	19,815	0	922	48	729	0	31	18,380
2010	18,790	329	18,461	0	938	73	767	0	41	16,971
2011	19,120	334	18,786	0	955	105	775	0	53	17,232
2012	19,710	340	19,370	0	973	138	783	0	67	17,749
2013	20,098	346	19,752	0	992	171	791	0	81	18,063
2014	21,154	878	20,276	0	1,012	205	799	0	97	19,041
2015	21,882	1,100	20,783	0	1,036	239	807	0	113	19,687
2016	22,396	1,123	21,273	0	1,060	273	815	0	130	20,118
2017	22,912	1,148	21,764	0	1,084	307	823	0	146	20,552
2018	23,466	1,173	22,293	0	1,106	338	831	0	161	21,030

**Historical Values (1999 - 2008):**

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 10), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(10) for 2000 through 2008 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial/Industrial Demand Reduction (CDR).

Col (9) represents FPL's Business On Call program.

Col. (11) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (11) is derived by the formula: Col. (11) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2009 - 2018):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col.(10) represent all incremental conservation and cumulative load control. These values are projected January values and the conservation values are based on projections with a 1/2008 starting point designed for use with the 2008 load forecast.

Col (9) represents FPL's Business On Call program.

Col. (11) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (11) is derived by using the formula: Col. (11) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9) - Col.(10).



**Florida Power & Light Company**  
**2018 Ten-Year Site Plan - Staff's Supplemental Data Request # 3**  
**Question No. 1**  
**Attachment No. 12**  
**Tab 1 of 1**

Rev: 09-30-10

Schedule 3.1  
History and Forecast of Summer Peak Demand: Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
August of Year	Total	Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
2000	17,808	161	17,647	0	719	645	467	451	16,622
2001	18,754	169	18,585	0	737	697	488	481	17,529
2002	19,219	261	18,958	0	770	755	489	517	17,960
2003	19,668	253	19,415	0	781	799	577	554	18,310
2004	20,545	258	20,287	0	783	847	588	578	19,174
2005	22,361	264	22,097	0	790	895	600	611	20,971
2006	21,819	256	21,563	0	809	948	635	640	20,375
2007	21,962	261	21,701	0	954	982	715	683	20,293
2008	21,060	181	20,879	0	974	1035	735	708	19,351
2009	22,351	212	22,139	0	985	1084	793	734	20,573
2010	21,922	381	21,541	0	1,030	130	866	93	19,804
2011	21,788	386	21,402	0	1,043	200	886	120	19,539
2012	22,139	391	21,748	0	1,059	284	910	154	19,731
2013	22,332	352	21,980	0	1,077	377	938	191	19,749
2014	23,575	1,178	22,397	0	1,095	474	966	230	20,810
2015	23,924	1,200	22,724	0	1,113	568	993	268	20,983
2016	24,344	1,225	23,119	0	1,129	653	1,018	302	21,242
2017	24,774	1,253	23,521	0	1,144	731	1,040	333	21,526
2018	25,328	1,283	24,045	0	1,158	801	1,061	361	21,948
2019	25,785	1,314	24,470	0	1,170	866	1,080	387	22,282

Historical Values (2000 - 2009):

Col. (2) - Col. (4) are actual values for historical summer peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (9) for 2000 through 2009 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values except for 2009 values which are August values.

Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC), CILC and Commercial /Industrial Demand Reduction (CDR).

Col. (11) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (11) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

Projected Values (2010 - 2019):

Col. (2) - Col. (4) represent FPL's forecasted peak w/o incremental conservation, cumulative load management, or incremental load management.

Col. (5) - Col. (9) represent cumulative load management, and incremental conservation and load management. All values are projected August values. The 2010 values are based on IRP projections through the end of 2009 and FPL's new DSM Goals for 2010. In the projections for 2011 through 2019, FPL used cumulative values from the new DSM Goals with estimated breakouts into the residential, C/I, load management, and conservation categories.

Col (8) represents FPL's Business On Call, CDR, CILC, and Curtailable programs/rates.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

Schedule 3.2  
History and Forecast of Winter Peak Demand:Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
January of Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
2000	17,057	142	16,915	0	741	434	438	176	15,878
2001	18,199	150	18,049	0	791	459	448	183	16,960
2002	17,597	145	17,452	0	811	500	457	196	16,329
2003	20,190	246	19,944	0	847	546	453	206	18,890
2004	14,752	211	14,541	0	857	570	532	230	13,363
2005	18,108	225	17,883	0	862	583	542	233	16,704
2006	19,683	225	19,458	0	870	600	550	240	18,263
2007	16,815	223	16,592	0	894	620	577	249	15,344
2008	18,055	163	17,892	0	879	644	635	279	16,541
2009	20,081	162	19,919	0	951	678	764	295	18,366
2010	20,550	376	20,174	0	937	72	767	41	18,733
2011	20,647	381	20,266	0	943	87	774	55	18,788
2012	20,861	386	20,475	0	949	107	783	72	18,949
2013	21,138	392	20,746	0	957	131	793	93	19,163
2014	22,152	1,060	21,092	0	966	157	805	116	20,108
2015	22,745	1,284	21,461	0	975	185	817	141	20,627
2016	23,118	1,311	21,807	0	984	212	829	164	20,929
2017	23,488	1,341	22,147	0	993	237	840	186	21,232
2018	23,889	1,374	22,514	0	1,000	260	850	206	21,573
2019	24,293	1,409	22,884	0	1,007	281	859	225	21,921

Historical Values (2000 - 2009):

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col. (9) for 2000 through 2009 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC), CILC and Commercial /Industrial Demand Reduction (CDR).

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (11) is derived by the formula: Col. (10) = Col.(2) - Col.(6) - Col.(8) - Col.(9).

Projected Values (2010 - 2019):

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2010 are incorporated into the load forecast.

Col. (5) - Col. (9) represent cumulative load management, and incremental conservation and load management. All values are projected August values. The 2010 values are based on IRP projections through the end of 2009 and FPL's new DSM Goals for 2010. In the projections for 2011 through 2019, FPL used cumulative values from the new DSM Goals with estimated breakouts into the residential, C/I, load management, and conservation categories.

Col (8) represents FPL's Business On Call, CDR,CILC, and Curtailable programs/rates.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).