



Matthew R. Bernier
Senior Counsel

July 31, 2015

VIA ELECTRONIC FILING

Ms. Carlotta Stauffer, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Cost of Service Load Research Study; Undocketed

Dear Ms. Stauffer:

Pursuant to Rule 25-6.0437(7), F.A.C., please find enclosed for filing Duke Energy Florida, Inc.'s Cost of Service Load Research Study Results for the twelve month period ending March 31, 2015.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Respectfully,

/s/ Matthew R. Bernier

Matthew R. Bernier

MRB/db
Attachment

DUKE ENERGY FLORIDA

**LOAD RESEARCH STUDY RESULTS
APRIL, 2014 THROUGH MARCH, 2015**

SUBMITTED JULY 31, 2015

FPSC RULE 25-6.0437(7), F.A.C.

TABLE OF CONTENTS

Study Background and Objectives	2
Study Period	2
Residential (RS) Rate Class	3
General Service (GS) Rate Class	4
General Service Demand (GSD) Rate Class	5
Interruptible Service (IS) Rate Class	6
Metering of Sample Members	6
Selection of Replacements	6
Statistical Accuracy Achieved	7
RS Results Table	8
GS Results Table	9
GSD Results Table	10
IS Results Table	11

Study Background and Objectives

The purpose of this study is to meet the requirements of the Cost-of-Service Load Research Rule, Docket No. 820491-EU, Order No. 13026, adopted as Rule 25-6.0437 on February 23, 1984, by the Florida Public Service Commission and as amended on January 6, 2004 (“the Rule”).

Section 7 of the Rule requires that all rate classes that account for more than one percent of a utility's annual retail sales be sampled every three years. Pursuant to section 3 of the Rule, the studies must be designed to provide estimates of the average of the 12 monthly coincident peaks for each rate class within plus or minus 10% relative precision at the 90% confidence level. The samples shall also be designed to provide estimates of the summer and winter peak demands for each rate class within plus or minus 10% relative precision at the 90% confidence level, except for the General Service Non-Demand rate class which shall be designed to provide estimates of the summer and winter peak demands within plus or minus 15% relative precision at the 90% confidence interval.

Study Period

The sampling plan for this study was designed in the summer of 2013. The sample plan was submitted to the FPSC staff on July 29, 2013, and approved on September 11, 2013. Interval recording meters were installed in the winter of 2013/2014. Data collection began on April 1, 2014 and continued through March 31, 2015.

Residential (RS) Rate Class

The Residential rate class had almost 1,500,000 customers when data collection commenced. Approximately 400,000 customers were on the load management rate at that time. Due to the large number of residences on load management, independent samples were drawn for both the load management and the standard residential rates. The samples were stratified by summer kWh usage. The RS sample size and stratum allocations are outlined in Table 1 for a total sample size of 325.

Stratum	Load Management Residential Rate	Standard Residential Rate
Summer Low (LM < 1500 kWh; Standard < 1600 kWh)	80	100
Summer High (LM > 1500 kWh; Standard > 1600 kWh)	60	85
Total	140	185

Table 1 – Residential Sample Design

General Service Non-Demand (GS) Rate Class

The General Service Non-Demand rate class had over 131,000 customers when data collection commenced. It was stratified by revenue class – commercial, public authority, and industrial. The commercial GS sample was stratified on Winter and Summer billed kWh. The public authority and industrial GS samples were stratified on Summer billed kWh. The customers with annual kWh greater than 33,000 were included in a census stratum. The General Service Non-Demand sample size and stratum allocations are outlined in Table 2 for a total sample size of 615.

Cell (Stratum)	Sample Size
Commercial - Winter Low (<1600 kWh) / Summer Low (<2000 kWh)	87
Commercial - Winter Low (<1600 kWh) / Summer High (2000 – 33,000 kWh)	31
Commercial - Winter High (1600 – 33,000 kWh) / Summer Low (<2000 kWh)	31
Commercial - Winter High (1600–33,000 kWh) / Summer High (2000-33,000 kWh)	177
Commercial - Census (>33,000 kWh)	21
Public Authority – Summer Low (< 850 kWh)	45
Public Authority – Summer Medium (850-4000 kWh)	37
Public Authority – Summer High (4000-33,000 kWh)	46
Public Authority – Census (> 33,000 kWh)	20
Industrial – Summer Low (<4010 kWh)	54
Industrial – Summer High (4010-33,000 kWh)	58
Industrial – Census (>33,000 kWh)	8
Total	615

Table 2 – GS Sample Design

General Service Demand (GSD) Rate Class

The General Service Demand rate class had over 51,000 customers when data collection commenced. The GSD rate class was stratified by revenue class – commercial, public authority, and industrial. Each customer’s third (3rd) highest demand of the last 12 months was used to establish small, medium and large cells. If a customer’s (3rd) highest demand is greater than 1000 kW, then the customer is already equipped with an interval meter for billing, and would be included in a census stratum. The General Service Demand sample size and stratum allocations are outlined in Table 3 for a total sample size of 443.

Cell (Stratum)	Sample Size
Commercial – Low, 3 rd highest kW (<40 kW)	30
Commercial – Medium, 3 rd highest kW (40-175 kW)	30
Commercial – High, 3 rd highest kW (175-1000 kW)	30
Commercial - Census (>1000 kW)	82
Public Authority – Low, 3 rd highest kW (<95 kW)	30
Public Authority – Medium, 3 rd highest kW (95-400 kW)	30
Public Authority – High, 3 rd highest kW (400-1000 kW)	30
Public Authority - Census (>1000 kW)	37
Industrial – Low, 3 rd highest kW (<85 kW)	30
Industrial – Medium, 3 rd highest kW (85-300 kW)	30
Industrial – High, 3 rd highest kW (300-1000 kW)	30
Industrial - Census (>1000 kW)	54
Total	443

Table 3 – GSD Sample Design

Interruptible Service (IS) Rate Class

The Interruptible rate class did not require sampling because each customer in this class has an interval data meter for billing purposes. Data for all IS accounts was used in the analysis. In April 2014, there were 132 customers in the IS rate class.

Metering of Sample Members

Solid state meters with mass memory were used for all of the sample accounts. These meters were configured to record customer energy usage in 15 minute intervals. The data from these meters was collected, processed and validated for accuracy in the Itron MV90xi software package. Monthly extract files of interval data for all sample points were created from the Itron MV90xi system and transferred to the Oracle Load Analysis System. The Oracle Load Analysis System was utilized to run the monthly customer class analysis estimates contained in this report.

Selection of Replacements

Alternates for customers in the sampled rate classes were randomly selected at the time of the sample design. When a replacement was needed, the first available alternate in the same stratum as the original sample point was selected.

Statistical Accuracy Achieved

The winter peak hour occurred on Friday, February 20, 2015 at hour ending 8:00 AM and the summer peak occurred on Thursday, August 21, 2014 at hour ending 5:00 PM. The ratio method was used for expansion to the class level for RS, GS, and GSD rate classes. No expansion was necessary for IS, because all customers were included in the analysis. The target level of statistical accuracy for the summer system peak and average of the 12 coincident peaks was met for all classes. The target level for the winter system peak was met for RS and GSD, but the statistical accuracy for the GS Non-Demand winter system peak was slightly above the 15% target, at 18%.

Tables 4 – 7 contain the estimated class demands for the system peak hour, the class coincident peak hour, and the non-coincident peaks for the Residential, General Service Non-Demand, General Service Demand, and Interruptible Service rate classes. Also included are the 90% confidence intervals around the monthly peak demands and their relative precision in percentage. The averages of the twelve monthly system peaks for all rate classes, their 90% confidence intervals and their relative precision are computed for the study period. The statistics shown in Tables 4-7 were obtained using Oracle's Load Analysis software package.

**DUKE ENERGY FLORIDA
LOAD RESEARCH DATA
APRIL 2014 - MARCH 2015**

RESIDENTIAL SERVICE (RS) CLASS

Month	KWH Sales	Class Coincident Peak 90%					Coincident with System Peak 90%					Non-Coincident Peak 90%		
		Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)
Apr-14	1,295,912,375	3,847.0	158.5	4.12	04/28/14	17:00	3,847.0	158.5	4.12	04/28/14	17:00	8,924.4	243.6	2.73
May-14	1,696,670,876	4,390.0	155.0	3.53	05/23/14	18:00	4,259.5	146.1	3.43	05/23/14	17:00	9,267.3	230.8	2.49
Jun-14	1,845,400,454	4,669.0	152.2	3.26	06/29/14	16:00	4,496.9	134.5	2.99	06/25/14	17:00	9,059.6	200.2	2.21
Jul-14	2,081,968,925	4,796.7	138.1	2.88	07/27/14	18:00	4,524.1	145.7	3.22	07/21/14	17:00	9,529.9	205.8	2.16
Aug-14	2,148,265,653	4,990.0	135.7	2.72	08/24/14	16:00	4,641.6	129.0	2.78	08/21/14	17:00	9,474.9	220.8	2.33
Sep-14	1,784,121,484	4,872.5	144.7	2.97	09/01/14	16:00	4,867.6	149.4	3.07	09/01/14	17:00	9,036.3	197.0	2.18
Oct-14	1,473,443,810	4,053.2	144.7	3.57	10/12/14	17:00	3,957.8	133.8	3.38	10/03/14	17:00	8,775.9	212.4	2.42
Nov-14	1,248,085,805	3,761.1	261.4	6.95	11/19/14	8:00	3,761.1	261.4	6.95	11/19/14	8:00	10,036.1	316.1	3.15
Dec-14	1,380,859,366	4,039.6	264.6	6.55	12/13/14	8:00	3,588.8	196.7	5.48	12/15/14	8:00	10,107.4	302.2	2.99
Jan-15	1,446,224,988	4,049.0	216.6	5.35	01/29/15	8:00	4,022.7	253.4	6.30	01/08/15	9:00	10,776.7	345.9	3.21
Feb-15	1,357,214,352	5,459.1	254.9	4.67	02/20/15	8:00	5,459.1	254.9	4.67	02/20/15	8:00	10,729.4	309.0	2.88
Mar-15	1,396,299,725	3,694.1	147.4	3.99	03/15/15	17:00	3,235.7	127.2	3.93	03/20/15	17:00	9,708.7	252.4	2.60
Twelve Coincident Peak Statistics:							4221.8	91.1	2.16					

Table 4 - RS Class Results

**DUKE ENERGY FLORIDA
LOAD RESEARCH DATA
APRIL 2014 - MARCH 2015**

GENERAL SERVICE (GS) CLASS

Month	KWH Sales	Class Coincident Peak 90%					Coincident with System Peak 90%					Non-Coincident Peak 90%		
		Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)
Apr-14	121,856,470	318.9	58.9	18.48	04/30/14	14:00	313.8	59.8	19.06	04/28/14	17:00	782.4	78.2	10.00
May-14	148,690,212	365.6	57.4	15.70	05/27/14	13:00	297.6	20.9	7.01	05/23/14	17:00	853.6	77.1	9.03
Jun-14	160,284,531	382.1	43.8	11.46	06/25/14	14:00	345.8	20.5	5.94	06/25/14	17:00	913.8	77.9	8.52
Jul-14	169,902,602	406.4	56.4	13.88	07/30/14	15:00	338.6	23.3	6.88	07/21/14	17:00	855.3	71.2	8.33
Aug-14	183,117,958	413.5	22.4	5.41	08/21/14	15:00	373.1	20.7	5.54	08/21/14	17:00	912.0	75.1	8.23
Sep-14	170,438,732	415.6	57.2	13.76	09/02/14	12:00	261.9	17.8	6.81	09/01/14	17:00	957.7	76.3	7.97
Oct-14	158,405,351	366.8	54.2	14.78	10/10/14	13:00	312.3	20.0	6.41	10/03/14	17:00	876.5	70.2	8.01
Nov-14	136,182,583	375.8	33.6	8.95	11/06/14	19:00	255.1	31.6	12.37	11/19/14	8:00	959.2	70.9	7.39
Dec-14	138,870,118	319.4	35.4	11.08	12/04/14	19:00	246.8	23.1	9.36	12/15/14	8:00	884.3	75.1	8.49
Jan-15	123,178,592	300.4	59.4	19.78	01/29/15	10:00	252.2	26.3	10.42	01/08/15	9:00	798.3	83.1	10.41
Feb-15	125,412,414	331.1	27.7	8.37	02/20/15	10:00	325.4	59.2	18.19	02/20/15	8:00	893.1	78.0	8.73
Mar-15	152,607,052	369.8	44.7	12.08	03/05/15	20:00	272.8	19.8	7.27	03/20/15	17:00	916.0	71.3	7.78
Twelve Coincident Peak Statistics:							299.6	16.0	5.33					

Table 5 - GS Class Results

**DUKE ENERGY FLORIDA
LOAD RESEARCH DATA
APRIL 2014 - MARCH 2015**

GENERAL SERVICE DEMAND (GSD) CLASS

Month	KWH Sales	Class Coincident Peak 90%					Coincident with System Peak 90%					Non-Coincident Peak 90%		
		Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	Relative Precision (%)
Apr-14	1,072,147,068	2,299.8	69.2	3.01	04/29/14	15:00	2,203.5	67.9	3.08	04/28/14	17:00	2,836.5	76.3	2.69
May-14	1,242,517,618	2,421.2	60.9	2.52	05/29/14	15:00	2,340.2	55.7	2.38	05/23/14	17:00	3,060.1	70.7	2.31
Jun-14	1,292,595,446	2,598.5	59.0	2.27	06/26/14	15:00	2,515.3	58.9	2.34	06/25/14	17:00	3,173.9	71.4	2.25
Jul-14	1,331,167,539	2,488.5	63.3	2.54	07/28/14	15:00	2,381.1	65.0	2.73	07/21/14	17:00	3,077.2	70.8	2.30
Aug-14	1,407,354,350	2,693.0	62.3	2.31	08/21/14	14:00	2,610.3	60.3	2.31	08/21/14	17:00	3,263.3	74.7	2.29
Sep-14	1,229,082,123	2,496.6	66.3	2.66	09/03/14	15:00	1,887.0	47.0	2.49	09/01/14	17:00	3,063.9	78.1	2.55
Oct-14	1,172,129,991	2,392.6	64.1	2.68	10/03/14	15:00	2,291.4	59.8	2.61	10/03/14	17:00	2,914.3	74.9	2.57
Nov-14	1,058,002,456	2,232.9	67.0	3.00	11/06/14	15:00	1,781.3	65.2	3.66	11/19/14	8:00	3,019.9	89.7	2.97
Dec-14	1,190,354,555	2,356.5	60.0	2.55	12/04/14	15:00	1,904.0	65.7	3.45	12/15/14	8:00	3,204.4	87.8	2.74
Jan-15	994,040,904	1,862.1	54.3	2.92	01/23/15	14:00	1,755.6	77.1	4.39	01/08/15	9:00	2,650.8	83.2	3.14
Feb-15	938,468,760	2,062.7	99.1	4.80	02/20/15	9:00	1,937.8	87.0	4.49	02/20/15	8:00	2,823.4	92.9	3.29
Mar-15	1,088,557,823	2,133.3	60.4	2.83	03/11/15	15:00	2,037.8	54.4	2.67	03/20/15	17:00	2,784.6	77.4	2.78
Twelve Coincident Peak Statistics:							2,137.1	49.3	2.31					

Table 6 - GSD Class Results

**DUKE ENERGY FLORIDA
LOAD RESEARCH DATA
APRIL 2014 - MARCH 2015**

INTERRUPTIBLE (IS) CLASS

Month	KWH Sales	Class Coincident Peak * 90%					Coincident with System Peak * 90%					Non-Coincident Peak * 90%		
		Estimated Peak (MW)	Confidence Interval (MW)	* Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	* Relative Precision (%)	Date	Time	Estimated Peak (MW)	Confidence Interval (MW)	* Relative Precision (%)
Apr-14	166,806,112	306.5	N/A	N/A	04/02/14	20:00	192.6	N/A	N/A	04/28/14	17:00	471.6	N/A	N/A
May-14	184,086,849	320.0	N/A	N/A	05/09/14	9:00	250.4	N/A	N/A	05/23/14	17:00	480.4	N/A	N/A
Jun-14	179,861,121	314.7	N/A	N/A	06/06/14	23:00	204.5	N/A	N/A	06/25/14	17:00	483.0	N/A	N/A
Jul-14	156,465,694	272.7	N/A	N/A	07/22/14	10:00	214.7	N/A	N/A	07/21/14	17:00	404.2	N/A	N/A
Aug-14	169,368,479	282.7	N/A	N/A	08/07/14	22:00	223.6	N/A	N/A	08/21/14	17:00	405.9	N/A	N/A
Sep-14	160,529,843	280.7	N/A	N/A	09/04/14	13:00	210.3	N/A	N/A	09/01/14	17:00	389.9	N/A	N/A
Oct-14	165,401,544	273.0	N/A	N/A	10/23/14	10:00	247.2	N/A	N/A	10/03/14	17:00	402.9	N/A	N/A
Nov-14	164,121,311	287.8	N/A	N/A	11/13/14	14:00	256.9	N/A	N/A	11/19/14	8:00	391.4	N/A	N/A
Dec-14	157,076,928	274.6	N/A	N/A	12/18/14	23:00	173.7	N/A	N/A	12/15/14	8:00	394.6	N/A	N/A
Jan-15	146,288,971	256.2	N/A	N/A	01/22/15	15:00	210.0	N/A	N/A	01/08/15	9:00	394.9	N/A	N/A
Feb-15	162,047,667	318.4	N/A	N/A	02/25/15	18:00	260.5	N/A	N/A	02/20/15	8:00	446.2	N/A	N/A
Mar-15	178,349,648	321.6	N/A	N/A	03/02/15	13:00	256.8	N/A	N/A	03/20/15	17:00	465.7	N/A	N/A
Twelve Coincident Peak Statistics:							225.1							

* All accounts were used for the IS analysis, so the confidence interval and relative precision do not apply.

Table 7 - IS Class Results

APPENDIX

Development of Load Factors

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

Historical Test Year Ended 03/31/15
 Projected Test Year Ended ___/___/___
 Prior Year Ended ___/___/___

Rate Schedule	Month and Year	Estimated Coincident Peak	90% Confidence Interval	Estimated Noncoincident Peak	90% Confidence Interval	Estimated Customer Maximum Demand	90% Confidence Interval
Residential Service							
	Apr-14	3,847.0	158.5	3,847.0	158.5	8924.4	243.6
	May-14	4,259.5	146.1	4,390.0	155.0	9267.3	230.8
	Jun-14	4,496.9	134.5	4,669.0	152.2	9059.6	200.2
	Jul-14	4,524.1	145.7	4,796.7	138.1	9529.9	205.8
	Aug-14	4,641.6	129.0	4,990.0	135.7	9474.9	220.8
	Sep-14	4,867.6	149.4	4,872.5	144.7	9036.3	197.0
	Oct-14	3,957.8	133.8	4,053.2	144.7	8775.9	212.4
	Nov-14	3,761.1	261.4	3,761.1	261.4	10036.1	316.1
	Dec-14	3,588.8	196.7	4,039.6	264.6	10107.4	302.2
	Jan-15	4,022.7	253.4	4,049.0	216.6	10776.7	345.9
	Feb-15	5,459.1	254.9	5,459.1	254.9	10729.4	309.0
	Mar-15	3,235.7	127.2	3,694.1	147.4	9708.7	252.4

Annual Peak: 5,459 MW

Annual KWH: 19,154,467,812

12 Month Coincident Peak Average: 4,222 MW

12 CP Load Factor: 0.518

90% Confidence Interval: 91 MW

Class (NCP) Load Factor: 0.401

Sum of individual customer annual max demand 13,713 MW

Customer (Billing or Maximum Demand) Load Factor: 0.159

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

Historical Test Year Ended 03/31/15
 Projected Test Year Ended ___/___/___
 Prior Year Ended ___/___/___

Rate Schedule	Month and Year	Estimated Coincident Peak	90% Confidence Interval	Estimated Noncoincident Peak	90% Confidence Interval	Estimated Customer Maximum Demand	90% Confidence Interval
General Service Non-Demand							
	Apr-14	313.8	59.8	318.9	58.9	782.4	78.2
	May-14	297.6	20.9	365.6	57.4	853.6	77.1
	Jun-14	345.8	20.5	382.1	43.8	913.8	77.9
	Jul-14	338.6	23.3	406.4	56.4	855.3	71.2
	Aug-14	373.1	20.7	413.5	22.4	912.0	75.1
	Sep-14	261.9	17.8	415.6	57.2	957.7	76.3
	Oct-14	312.3	20.0	366.8	54.2	876.5	70.2
	Nov-14	255.1	31.6	375.8	33.6	959.2	70.9
	Dec-14	246.8	23.1	319.4	35.4	884.3	75.1
	Jan-15	252.2	26.3	300.4	59.4	798.3	83.1
	Feb-15	325.4	59.2	331.1	27.7	893.1	78.0
	Mar-15	272.8	19.8	369.8	44.7	916.0	71.3
Annual Peak:	416 MW			Annual KWH:	1,788,946,614		
12 Month Coincident Peak Average:	300 MW			12 CP Load Factor:	0.682		
90% Confidence Interval:	16 MW			Class (NCP) Load Factor:	0.491		
Sum of individual customer annual max demand	1211 MW			Customer (Billing or Maximum Demand) Load Factor:	0.169		

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

 X Historical Test Year Ended 03/31/15
 Projected Test Year Ended __/__/__
 Prior Year Ended __/__/__

Rate Schedule	Month and Year	Estimated Coincident Peak	90% Confidence Interval	Estimated Noncoincident Peak	90% Confidence Interval	Estimated Customer Maximum Demand	90% Confidence Interval
General Service Demand							
	Apr-14	2,203.5	67.9	2,299.8	69.2	2836.5	76.3
	May-14	2,340.2	55.7	2,421.2	60.9	3060.1	70.7
	Jun-14	2,515.3	58.9	2,598.5	59.0	3173.9	71.4
	Jul-14	2,381.1	65.0	2,488.5	63.3	3077.2	70.8
	Aug-14	2,610.3	60.3	2,693.0	62.3	3263.3	74.7
	Sep-14	1,887.0	47.0	2,496.6	66.3	3063.9	78.1
	Oct-14	2,291.4	59.8	2,392.6	64.1	2914.3	74.9
	Nov-14	1,781.3	65.2	2,232.9	67.0	3019.9	89.7
	Dec-14	1,904.0	65.7	2,356.5	60.0	3204.4	87.8
	Jan-15	1,755.6	77.1	1,862.1	54.3	2650.8	83.2
	Feb-15	1,937.8	87.0	2,062.7	99.1	2823.4	92.9
	Mar-15	2,037.8	54.4	2,133.3	60.4	2784.6	77.4
Annual Peak:	2,693 MW			Annual KWH:	14,016,418,633		
12 Month Coincident Peak Average:	2,137 MW			12 CP Load Factor:	0.749		
90% Confidence Interval:	49 MW			Class (NCP) Load Factor:	0.594		
Sum of individual customer annual max demand	3,630 MW			Customer (Billing or Maximum Demand) Load Factor:	0.441		

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

Historical Test Year Ended 03/31/15
 Projected Test Year Ended ___/___/___
 Prior Year Ended ___/___/___

Rate Schedule	Month and Year	Actual Coincident Peak	90% Confidence Interval	Actual Noncoincident Peak	90% Confidence Interval	Actual Customer Maximum Demand	90% Confidence Interval
Curtable Service							
	Apr-14	19.3	N/A	22.6	N/A	23.6	N/A
	May-14	7.3	N/A	19.7	N/A	20.2	N/A
	Jun-14	12.9	N/A	23.5	N/A	24.7	N/A
	Jul-14	1.5	N/A	7.4	N/A	23.5	N/A
	Aug-14	4.8	N/A	17.5	N/A	19.2	N/A
	Sep-14	16.7	N/A	24.1	N/A	21.1	N/A
	Oct-14	5.2	N/A	20.1	N/A	21.0	N/A
	Nov-14	6.8	N/A	25.0	N/A	20.1	N/A
	Dec-14	3.4	N/A	13.1	N/A	20.9	N/A
	Jan-15	10.6	N/A	19.0	N/A	20.5	N/A
	Feb-15	9.1	N/A	24.9	N/A	20.1	N/A
	Mar-15	7.2	N/A	19.5	N/A	20.7	N/A
Annual Peak:	25.0 MW			Annual KWH:	99,848,988		
12 Month Coincident Peak Average:	8.7 MW			12 CP Load Factor:	1.305		
90% Confidence Interval:	N/A			Class (NCP) Load Factor:	0.456		
Sum of individual customer annual max demand	25.5 MW			Customer (Billing or Maximum Demand) Load Factor:	0.446		

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

 X Historical Test Year Ended 03/31/15
 Projected Test Year Ended / /
 Prior Year Ended / /

Rate Schedule	Month and Year	Actual Coincident Peak	90% Confidence Interval	Actual Noncoincident Peak	90% Confidence Interval	Actual Customer Maximum Demand	90% Confidence Interval
Interruptible Service							
	Apr-14	192.6	N/A	306.5	N/A	471.6	N/A
	May-14	250.4	N/A	320.0	N/A	480.4	N/A
	Jun-14	204.5	N/A	314.7	N/A	483.0	N/A
	Jul-14	214.7	N/A	272.7	N/A	404.2	N/A
	Aug-14	223.6	N/A	282.7	N/A	405.9	N/A
	Sep-14	210.3	N/A	280.7	N/A	389.9	N/A
	Oct-14	247.2	N/A	273.0	N/A	402.9	N/A
	Nov-14	256.9	N/A	287.8	N/A	391.4	N/A
	Dec-14	173.7	N/A	274.6	N/A	394.6	N/A
	Jan-15	210.0	N/A	256.2	N/A	394.9	N/A
	Feb-15	260.5	N/A	318.4	N/A	446.2	N/A
	Mar-15	256.8	N/A	321.6	N/A	465.7	N/A
Annual Peak:	322 MW			Annual KWH:	1,990,404,167		
12 Month Coincident Peak Average:	225 MW			12 CP Load Factor:	1.009		
90% Confidence Interval:	N/A			Class (NCP) Load Factor:	0.707		
Sum of individual customer annual max demand	546 MW			Customer (Billing or Maximum Demand) Load Factor:	0.416		

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

X Historical Test Year Ended 03/31/15
 ___ Projected Test Year Ended ___/___/___
 ___ Prior Year Ended ___/___/___

Rate Schedule	Month and Year	Actual Coincident Peak	90% Confidence Interval	Actual Noncoincident Peak	90% Confidence Interval	Actual Customer Maximum Demand	90% Confidence Interval
Firm Standby Service							
SS-1	Apr-14	2.8	N/A	7.0	N/A	18.2	N/A
	May-14	0.0	N/A	6.3	N/A	17.3	N/A
	Jun-14	0.0	N/A	6.2	N/A	18.1	N/A
	Jul-14	0.2	N/A	4.8	N/A	13.0	N/A
	Aug-14	1.6	N/A	5.0	N/A	18.0	N/A
	Sep-14	0.0	N/A	3.6	N/A	12.4	N/A
	Oct-14	0.7	N/A	4.8	N/A	11.2	N/A
	Nov-14	1.6	N/A	4.6	N/A	13.8	N/A
	Dec-14	1.4	N/A	8.0	N/A	17.7	N/A
	Jan-15	1.4	N/A	7.2	N/A	17.7	N/A
	Feb-15	1.4	N/A	7.1	N/A	15.8	N/A
	Mar-15	2.9	N/A	14.6	N/A	23.0	N/A
Annual Peak:	14.6 MW			Annual KWH:	11,915,088		
12 Month Coincident Peak Average:	1.2 MW			12 CP Load Factor:	1.166		
90% Confidence Interval:	N/A			Class (NCP) Load Factor:	0.093		
Sum of individual customer annual max demand:	29.4 MW			Customer (Billing or Maximum Demand) Load Factor:	0.046		

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

X Historical Test Year Ended 03/31/15
 ___ Projected Test Year Ended ___/___/___
 ___ Prior Year Ended ___/___/___

Rate Schedule	Month and Year	Actual Coincident Peak	90% Confidence Interval	Actual Noncoincident Peak	90% Confidence Interval	Actual Customer Maximum Demand	90% Confidence Interval
Interruptible Standby Service							
SS-2	Apr-14	24.3	N/A	36.5	N/A	48.1	N/A
	May-14	19.7	N/A	39.7	N/A	47.6	N/A
	Jun-14	34.9	N/A	37.6	N/A	47.2	N/A
	Jul-14	36.9	N/A	37.3	N/A	45.0	N/A
	Aug-14	17.1	N/A	29.2	N/A	39.9	N/A
	Sep-14	23.3	N/A	27.9	N/A	30.6	N/A
	Oct-14	8.8	N/A	23.9	N/A	31.7	N/A
	Nov-14	10.7	N/A	31.7	N/A	27.8	N/A
	Dec-14	17.8	N/A	23.1	N/A	28.9	N/A
	Jan-15	2.4	N/A	22.5	N/A	27.2	N/A
	Feb-15	3.7	N/A	23.5	N/A	30.3	N/A
	Mar-15	8.5	N/A	26.6	N/A	28.9	N/A

Annual Peak: 39.7 MW

Annual KWH: 132,108,786

12 Month Coincident Peak Average: 17.3 MW

12 CP Load Factor: 0.870

90% Confidence Interval: N/A

Class (NCP) Load Factor: 0.380

Sum of individual customer annual max demand: 50.6 MW

Customer (Billing or Maximum Demand) Load Factor: 0.298

Supporting Schedules:

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: Duke Energy Florida

EXPLANATION: For each rate class that is not 100% interval metered, provide the estimated historic value and 90% confidence interval by month from the latest load research for (1) contribution to monthly system peaks (coincident), (2) monthly noncoincident peak (class peaks) and (3) monthly customer maximum demand (billing demand for demand classes). For classes, 100% metered with interval meters provide actual monthly values for the aforementioned demands and identify such as actual values. Also, provide the annual KWH as well as the 12 CP Load Factor, Class NCP Load Factor and the Customer Load Factor for each class.

Type of Data Shown:

__X__ Historical Test Year Ended 03/31/15
 ___ Projected Test Year Ended __/__/__
 ___ Prior Year Ended __/__/__

Rate Schedule	Month and Year	Actual Coincident Peak	90% Confidence Interval	Actual Noncoincident Peak	90% Confidence Interval	Actual Customer Maximum Demand	90% Confidence Interval
Curtable Standby Service							
SS-3	Apr-14	0.0	N/A	5.9	N/A	5.9	N/A
	May-14	0.0	N/A	6.6	N/A	6.6	N/A
	Jun-14	0.0	N/A	10.1	N/A	10.1	N/A
	Jul-14	0.0	N/A	7.8	N/A	7.8	N/A
	Aug-14	0.0	N/A	2.1	N/A	2.1	N/A
	Sep-14	0.0	N/A	7.4	N/A	7.4	N/A
	Oct-14	0.0	N/A	10.4	N/A	10.4	N/A
	Nov-14	0.0	N/A	9.7	N/A	9.7	N/A
	Dec-14	0.0	N/A	7.4	N/A	7.4	N/A
	Jan-15	0.0	N/A	14.8	N/A	14.8	N/A
	Feb-15	15.0	N/A	17.5	N/A	17.5	N/A
	Mar-15	15.3	N/A	19.1	N/A	19.1	N/A
Annual Peak:	19.1 MW			Annual KWH:	12,889,136		
12 Month Coincident Peak Average:	2.5 MW			12 CP Load Factor:	0.583		
90% Confidence Interval:	N/A			Class (NCP) Load Factor:	0.077		
Sum of individual customer annual max demand	19.1 MW			Customer (Billing or Maximum Demand) Load Factor:	0.077		

Supporting Schedules:

DOCKET NO.:

DUKE ENERGY FLORIDA
 ANALYSIS OF COINCIDENT LOADING FOR THE LIGHTING CLASS
 FOR THE TEN YEARS ENDED DECEMBER 31, 2014

RATE SCHEDULE
 LIGHTING - LS

Percentage of Lighting Load Occurring at Time of Monthly System Peak

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	TEN YR AVG % LIGHT LOAD
JAN	25%	20%	15%	25%	30%	25%	23%	27%	28%	28%	24.67%
FEB	10%	10%	5%	-	10%	4%	10%	14%	15%	11%	8.85%
MAR	100%	100%	-	-	-	-	-	0%	0%	0%	20.00%
APR	-	-	-	-	-	-	-	0%	0%	0%	0.00%
MAY	-	-	-	-	-	-	-	0%	0%	0%	0.00%
JUN	-	-	-	-	-	-	-	0%	0%	0%	0.00%
JUL	-	-	-	-	-	-	-	0%	0%	0%	0.00%
AUG	-	-	-	-	-	-	-	0%	0%	0%	0.00%
SEP	-	-	-	-	-	-	-	0%	0%	0%	0.00%
OCT	-	-	-	-	-	-	-	0%	0%	0%	0.00%
NOV	-	100%	-	-	-	-	-	0%	0%	0%	10.00%
DEC	25%	100%	25%	25%	-	30%	100%	1%	97%	2%	<u>40.55%</u>

104.07%

===

AVG MONTHLY COINCIDENCE = 8.7%

ANNUAL BURNING HOURS = 4,200

LOAD FACTOR:

BASED ON AVG. 12 CP = 5.506

BASED ON CLASS ANNUAL MAX DEMAND = 0.479