	1		BEFORE THE FLORIDA PUBLIC SERVICE COM	1MISSION		
	2		DIRECT TESTIMONY OF		10	Ð
	3		RUSSELL L. KLEPPER	CO	10 SEP 22 PH 3: 53	RECEIVED-FPSO
	4		ON BEHALF OF FLORIDA AFFIRM	COMMISSION CLERK	22	NED
	5		DOCKET NO. 100001-EI	KOIS	ې ۲	
	6				53	S
	7	Q.	PLEASE STATE YOUR NAME, TITLE, AND BUSINESS	ADDRESS.		
	8					
	9	A.	My name is Russell L. Klepper. I am a Principal of Energy	Services Group, I	.LC, an	l
	10		energy and utility consulting firm that I helped to found. Ou	ır business address	s is 316	į
	11		Maxwell Road, Suite 400, Alpharetta, Georgia 30009.			
	12					
	13	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL AND PR	OFESSIONAL		
	14		EXPERIENCE.			
	15					
	16	A.	I hold a Bachelor of Science in Business Administration with a	major in Economic	es and a	
	17		Master of Business Administration with a major in Finance, bo	oth from the Unive	rsity of	•
	18		Florida, and a Master of Professional Accountancy from Georgi	ia State University.	I have	
	19		over thirty-three years of applicable utility experience, the first	seven of which we	re spent	
	20	_	in the financial areas of Georgia Power Company. During	g my last three y	ears of	•
COM APA			employment by that electric utility, I held the title of Manager of	of Financial Servic	es. For	
ECR		- 2	the past twenty-six years, the preponderance of my time has bee	en spent as an indep	pendent	
GCL RAD	23	-	consultant on utility finance, rates and regulation, and regulator	y transition issues,	as well	
SSC ADM		-	00014	EPL Product - VI	2	
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1 as certain facets of the economics of both regulated utilities and unregulated firms that 2 produce, sell, and distribute energy for consumption by ultimate consumers. I have provided professional services to both investor owned and governmental utilities, to 3 private companies that have significant interests in the energy industry, and to entities 4 5 such as the World Bank, the United States Energy Association, and the Edison Electric Institute. As a consultant, I have developed and presented two national seminars and 6 numerous in-house seminars that focus on different aspects of utility planning and 7 8 decision-making.

9

10 Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

11

12 Α. I am here on behalf of Florida AFFIRM (the "Association For Fairness In Rate Making" or "AFFIRM"), a coalition of quick serve restaurants that have substantially similar 13 electrical usage characteristics. The Members of AFFIRM are the corporations and the 14 corporations' franchisees that own and operate well over 1000 business locations served 15 16 by Florida Power & Light Company ("FPL"), Progress Energy Florida, Inc. ("PEF"), Tampa Electric Company ("TECO"), Gulf Power Company ("Gulf") or Florida Public 17 Utilities Company (FPU") under the following brand names: Waffle House, Wendy's, 18 Arby's, and YUM! Brands, doing business as Pizza Hut, Kentucky Fried Chicken, Taco 19 20 Bell, Long John Silver's, and A&W. For purposes of this direct testimony, FPL, PEF, TECO, Gulf and FPU will be referred to collectively as the "Regulated Electric Utilities". 21 22

23

- 1 Q. PLEASE BRIEFLY SUMMARIZE THE PURPOSE OF YOUR TESTIMONY.
- 2

A. As explained in detail below, the AFFIRM Members are economically disadvantaged in
the purchasing of electric service from the Regulated Electric Utilities because the timeof-use ("TOU") rate components of the Fuel Cost Recovery ("FCR") are structured
inappropriately. This testimony will explain the deficiencies in the structure of the FCR
as applied to time sensitive rates and will recommend a more appropriate FCR rate
structure for consideration by the Florida Public Service Commission (the
"Commission").

10

Q, WHAT IS THE BASIS FOR YOUR ASSERTION THAT THE TOU RATE COMPONENTS OF THE FCR ARE STRUCTURED AND DETERMINED IN AN INAPPROPRIATE MANNER?

14

15 Α. TOU rates have two objectives. The first objective, commonly known as the matching principle, is to place the burden of revenues for electric service on the electric consumers 16 17 who are responsible for causing the related costs of electric service. The second 18 objective is to provide a valid and effective price signal that will act as an incentive for 19 electric consumers to modify their consumption patterns by shaving usage during high 20 cost periods or by shifting usage from periods of higher cost to lower costs. As currently 21 structured, the FCR rates of the Regulated Electric Utilities, when applied to customers 22 using time-sensitive rates, do not accomplish either of the objectives set forth above. In 23 fact, the FCR rates for TOU customers are so badly structured that much of the time, the

rate signal provides an incentive for the TOU electric consumer to act in a manner that is
 exactly opposite to the course of action that would be sought by an electric utility that is
 seeking to increase economic efficiency.

4

5 Q. PLEASE DESCRIBE THE DETERMINATION OF THE FCR RATE 6 COMPONENTS THAT ARE PROPOSED TO BE APPLIED TO ELECTRIC 7 CUSTOMERS USING A TOU RATE.

8

9 A. Consider the situations of FPL and PEF, by far the two largest of the Regulated Electric 10 Utilities. For medium sized business customers, both commercial and industrial, FPL 11 and PEF offer a General Service Demand Rate (GSD-1) and a General Service Time-of-12 Use Rate (GSDT-1). The business customers served under the GSD-1 Rate pay a 13 levelized FCR rate component for all energy consumption during all hours of a subject 14 vear. The business customers served under the GSDT-1 Rate pay FCR rate components 15 that are separately determined for On-Peak and Off-Peak periods, which apply to both 16 Summer Months and Winter Months.

17

18 The determination of On-Peak and Off-Peak periods for use in TOU base rates relies on 19 Commission Order No. 9661 issued November 26, 1980 in Docket No. 790793-EU. This 20 Order applied and continues to apply to the determination of On-Peak and Off-Peak 21 periods for Base Rates, even though the facts and circumstances which led to such 22 determination thirty years ago may no longer be applicable or pertinent.

1 In this regulatory proceeding, the pre-filed testimony of the FPL witnesses states that the 2 proposed 2011 FCR rate components for the GSDT-1 Rate (and similarly structured TOU 3 rates) have been determined under the "Traditional Method", although the traditional 4 method is not explained within the FPL testimony. However, it appears that such TOU 5 FCR On-Peak and Off-Peak rate components are determined on a weighted average 6 basis. Pursuant to a weighted average calculation, the projected aggregate qualifying FCR expenses for all On-Peak Periods during 2011 (both for the Summer Months and the 7 Winter Months) are divided by the aggregate available energy (both generated and 8 9 purchased) for the same On-Peak Periods to determine a rate per kWh for the On-Peak 10 Periods. Correspondingly, the projected aggregate qualifying FCR expenses for all Off-Peak Periods during 2011 (both for the Summer Months and the Winter Months) are 11 divided by the aggregate available energy (both generated and purchased) for the same 12 13 Off-Peak Periods to determine a rate per kWh for the Off-Peak Periods.

14

Q. IS IT APPROPRIATE TO USE THE ON-PEAK AND OFF-PEAK PERIODS AS DEFINED FOR TOU BASE RATE FOR PURPOSES OF THE FCR?

17

A. No, it is not appropriate, for two reasons. First, the On-Peak and Off-Peak Periods, as
defined in the TOU base rates of FPL and PEF, are no longer appropriate, for the simple
reason that the On-Peak Periods in both the Summer Months and the Winter Months are
defined to include many hours in which monthly system peaks are unlikely to occur. The
poorly structured definitions of On-Peak and Off-Peak periods as set forth in the TOU
base rates lead to incorrect pricing signals and a structure that fails to place the burden of

2 deficiencies in the structure of FPL's GSDT-1, specifically the incorrect determination of 3 On-Peak and Off-Peak periods, is addressed more extensively in the Report of AFFIRM 4 that was submitted to the Commission on September 2, 2010, in Docket No. 100358-EI. 5 For the convenience of the participants in this docket, a copy of the Report of AFFIRM in 6 Docket No. 100358-EI is appended hereto as Exhibit RLK-6 and is incorporated herein 7 and adopted as a part of this pre-filed testimony. 8	1		base revenues on the electric customers that are causing the associated costs. The
 that was submitted to the Commission on September 2, 2010, in Docket No. 100358-EI. For the convenience of the participants in this docket, a copy of the Report of AFFIRM in Docket No. 100358-EI is appended hereto as Exhibit RLK-6 and is incorporated herein and adopted as a part of this pre-filed testimony. The second and more important reason that it is inappropriate to use the On-Peak and Off-Peak periods established for TOU base rate purposes for Development of the TOU FCR on-peak and off-peak rate components is that there is no evidence at all submitted by any of the Regulated Electric Utilities of any correlation between hourly fuel costs and the On-Peak and Off-Peak time periods. Q. ARE YOU ABLE TO PROVIDE EVIDENCE OF THE LACK OF CORRELATION BETWEEN HOURLY FUEL COSTS AND THE ON-PEAK AND OFF-PEAK PERIODS? A. Yes. Attached are four exhibits, as described below. The data shown on each exhibit has been filed for each year as a part of FERC Form 714 by FPL or PEF, as appropriate, in Part II - Schedule 6 (page 7a - System Lambda Data) and Part III - Schedule 2 (page 9a - Planning Area Hourly Demand) and has been downloaded by AFFIRM from 	2		deficiencies in the structure of FPL's GSDT-1, specifically the incorrect determination of
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 14 15 Q. ARE YOU ABLE TO PROVIDE EVIDENCE OF THE LACK OF 16 CORRELATION BETWEEN HOURLY FUEL COSTS AND THE ON-PEAK 17 AND OFF-PEAK PERIODS? 18 19 A. Yes. Attached are four exhibits, as described below. The data shown on each exhibit 19 has been filed for each year as a part of FERC Form 714 by FPL or PEF, as appropriate, 21 in Part II – Schedule 6 (page 7a – System Lambda Data) and Part III – Schedule 2 (page 22 9a – Planning Area Hourly Demand) and has been downloaded by AFFIRM from 	12		by any of the Regulated Electric Utilities of any correlation between hourly fuel costs and
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 16 CORRELATION BETWEEN HOURLY FUEL COSTS AND THE ON-PEAK 17 AND OFF-PEAK PERIODS? 18 19 A. Yes. Attached are four exhibits, as described below. The data shown on each exhibit 19 has been filed for each year as a part of FERC Form 714 by FPL or PEF, as appropriate, 20 in Part II – Schedule 6 (page 7a – System Lambda Data) and Part III – Schedule 2 (page 21 9a – Planning Area Hourly Demand) and has been downloaded by AFFIRM from 	14		
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-	
2	Exhibit RLK-1 shows (a) the average system lambdas of FPL by hour of the day,
3	separated by Weekdays versus Weekend Days and Holidays, and (b) the average system
4	lambdas of FPL, separated by Weekdays versus Weekend Days and Holidays, and further
5	separated by Summer Months and Winter Months. On page 2, the average system
6	lambdas are shown by three-hour blocks during the Summer Months, allowing focus on
7	the Summer Month On-Peak Period of the nine hours from noon to 9:00 PM (as defined
8	in the GSDT-1 Rate), and by four-hour blocks during the Winter Months, allowing focus
9	on the Winter Month On-Peak Periods, the four hours from 6:00 AM to 10:00 AM and
10	from 6:00 PM to 10:00 PM (as defined in the GSDT-1 Rate).
11	
12	Exhibit RLK-2 shows (a) the average hourly system loads of FPL, separated in the same
13	manner as described in Exhibit RLK-1, and (b) the average system loads of FPL,
14	separated into the same time blocks as described in Exhibit RLK-1.
15	
16	Exhibit RLK-3 shows (a) the hourly system lambdas of PEF, separated in the same
17	manner as described in Exhibit RLK-1, and (b) the average system lambdas of PEF,
18	separated into the same time blocks as described in Exhibit RLK-1.
19	
20	Exhibit RLK-4 shows (a) the hourly system loads of PEF, separated in the same manner
21	as described in Exhibit RLK-1, and (b) the average system loads of PEF, separated in the
22	same manner as described in Exhibit RLK-1.
23	

Q. ARE THE HOURLY SYSTEM LAMBDAS OF AN ELECTRIC UTILITY, AS PRESENTED IN EXHIBIT 1 AND EXHIBIT 3, AN ADEQUATE INDICATOR OF HOURLY FUEL COSTS?

4

5 Α. Hourly system lambdas are a reasonable surrogate for hourly fuel costs in the situation, as 6 exists here, where the utility has not provided evidence of its forecasted hourly fuel costs, 7 either in the aggregate or per kWh. The primary variability in system lambdas is due to 8 changes in fuel costs (including costs of purchased power), but because lambda is a 9 measurement of the incremental cost of producing or acquiring the next kWh of energy, 10 the differences in lambda from hour to hour will be greater than the differences in fuel 11 cost per kWh from hour to hour. However, it is safe to assume that there is a direct 12 correlation between the relative magnitudes of average fuel cost in a given hour and the 13 system lambda in that same hour.

14

Moreover, the use of lambda, instead of fuel costs per kWh, is a better indicator of the potential for economic benefit when a customer reacts to a price signal by shaving consumption or by shifting consumption from a higher cost to a lower cost period.

18

19 Q. WHY DO YOU ASSERT THAT USING A WEIGHTED AVERAGE FUEL 20 EXPENSE FOR BOTH ON-PEAK AND OFF-PEAK PERIODS FAILS TO PLACE 21 THE BURDEN OF REVENUE ON THE ELECTRIC CUSTOMER CAUSING 22 THE COST OF ELECTRIC SERVICE?

1

A. If one examines the FPL data on page 2 of Exhibit RLK-1, it can be seen that for the OnPeak periods during the Winter Months of 2009, the average lambdas for the AM and PM
On-Peak periods are 3.075 cents/kWh and 3.581 cents/kWh, respectively. By contrast,
during the Summer Months of 2009, the average lambdas for the three three-hour blocks
comprising the On–Peak period are 6.775, 6.636, and 5.707 cents/kWh, about twice as
high as the average lambdas in the On-Peak periods for the Winter Months.

9 It should be noted that, under the GSDT-1 Rate, there are seven Summer Months with 10 nine On-Peak Hours per weekday, and five Winter Months with eight On-Peak Hours per 11 weekday. It should be further noted that page 2 of Exhibit RLK-2 shows that the average 12 energy consumption in On-Peak periods in the Summer Months is about 17,000 MWh, 13 while the average energy consumption in On-Peak periods in the Winter Months is about 14 12,000 MWh. Based on FPL's data presented in the prior paragraph, for purposes of 15 discussion, assume that FPL's weighted average cost of fuel for the On-Peak hours of 16 2009 was 5.20 cents/kWh.

17

18 The process of averaging Summer Month On-Peak fuel costs occurring during high load, 19 high cost periods with Winter Month On-Peak fuel costs occurring during low load, low 20 cost periods produces an weighted average fuel cost that may be mathematically correct, 21 but that makes little sense from either an economic or practical standpoint. The 22 Regulated Electric Utilities all use an economic dispatch system whereby generating 23 resources are brought into service in order from the lowest incremental cost available

1 resource to the highest incremental cost available resource. For that reason, average 2 hourly fuel costs per kWh are a direct function of average hourly loads. By way of 3 illustrating that there is no economic rationale to the application of average On-Peak or 4 Off-Peak fuel costs, it should be recognized that, for the four year period from 2006 to 5 2009, FPL's average hourly loads during the Off-Peak periods of the seven Summer 6 Months exceeded FPL's average hourly loads during the On-Peak periods of the five 7 Winter Months. Correspondingly, in 2007, 2008, and 2009, FPL's average hourly 8 lambdas during the Off-Peak periods of the seven Summer Months exceeded the average 9 hourly lambdas during the On-Peak periods of the five Winter Months. As a practical 10 matter, this illustrates that FPL's loads and lambdas during the Summer Off-Peak periods 11 are higher than the loads and lambdas during the Winter On-Peak periods, so any 12 convention by which either On-Peak values or Off-Peak values for both Summer Months 13 and Winter Months are numerically averaged produces a rate that has no economic 14 meaning or usefulness.

15

16 Under the circumstance where FPL derives a weighted average of fuel costs occurring 17 during Summer Months and Winter Months, the FCR application of the On-Peak 18 weighted average charge of 5.20 cents/kWh is unfair, unreasonable and discriminatory 19 because an electric consumer bears the appropriate revenue burden if and only if such 20 customer's load pattern for the entire year is exactly the same as FPL's system as a 21 whole. As can be seen, FPL's hourly loads and associated fuel costs during the Winter 22 Months are materially different from and lower than the hourly loads and associated fuel 23 costs during the Summer Months. Accordingly, any FPL customer that uses a disproportionately higher amount of energy during the Summer Months pays less than its
 fair share of costs, and conversely, any FPL customer that uses a disproportionately
 higher amount of energy during the Winter Months pays more than its fair share of costs.

4

5 It is notable that a review of the PEF loads and related lambdas produces a slightly different result that a review of the FPL loads and lambdas. In each of the four years 6 2006 through 2009, PEF's average hourly loads during the Off-Peak periods of the 7 8 Summer Months exceeded PEF's average hourly loads during the On-Peak periods of the Winter Months. However, unlike FPL, in some years the average lambda during the On-9 10 Peak periods of the Winter Months is higher than the average lambda during the Off-Peak 11 periods of the Summer Month, and conversely, in other years the average lambda during the Off-Peak periods of the Summer Months is higher than the average lambda during the 12 On-Peak periods of the Winter Months. This difference between FPL and PEF illustrates 13 that the loads and related costs are different from utility to utility and the Commission 14 15 should not make a ruling with respect to FCR rate components that would apply acrossthe-board to all five of the Regulated Electric Utilities, but rather than examine each of 16 the five Regulated Electric Utilities and make determinations based on the individual load 17 18 and fuel cost characteristics of each such electric utility.

19

20Q.WHY DO YOU ASSERT THAT USING A WEIGHTED AVERAGE FUEL21EXPENSE FOR BOTH ON-PEAK AND OFF-PEAK PERIODS FAILS TO22PROVIDE AN APPROPRIATE PRICING SIGNAL TO CUSTOMERS?

- A. As set forth above, assume that the On-Peak rate component of the FCR is 5.20
 cents/kWh. Based on the available data, this On-Peak rate component of 5.20 cents/kWh
 could (and should) be disaggregated into a Winter Month component of no more than
 3.20 cents/kwh and a Summer Month component of no more than 6.40 cents per kWh.
- 5

6 The focal issue here is that FPL's customer receives a price signal during the Summer 7 Months that the FCR rate component during an On-Peak Period will be 5.20 cents/kWh, 8 when in fact the incremental price of providing that kWh will be 6.70 cents, a loss of 1.20 9 cents that must be recovered by FPL on sales during the Winter Months. If the customer 10 were to receive a more appropriate price signal, such as 6.40 cents per kWh, a rate that is 11 23% higher, that customer would be more likely to shave consumption or shift 12 consumption to an Off-Peak period.

13

14 This same problem of an incorrect pricing signal is exacerbated during the Winter 15 Months. During an AM On-Peak Period, FPL's customer receives a price signal that the 16 fuel component will be 5.20 cents/kWh, when in fact the cost of fuel during this period 17 will be no more than 3.20 cents/kWh. And here is the really bad part. If FPL's customer 18 acts in a rational manner and shifts its intended consumption to the next Off-Peak Period 19 (from 10:00 AM to 2:00 PM), FPL will recover a lesser fuel cost component (because the 20 Off-Peak FCR rate component is lower than the On-Peak FCR component) and FPL will 21 incur a higher fuel cost to produce the energy that would have been more cost effective to 22 supply during the period from 6:00 AM to 10:00 AM.

1 The deficiencies described above with respect to the weighted average On-Peak FCR rate 2 component are equally applicable to the weighted average Off-Peak FCR component. 3 About 75% of all hours are defined as Off-Peak, and many of these hours are very low 4 load, low cost hours. But there are many Off-Peak hours, particularly the Summer Month 5 daytime hours on Weekend Days and Holidays, when the average loads and associated 6 average fuel costs far exceed the average loads and associated average fuel costs during 7 the Winter Month On-Peak periods.

8

9 Q. THE DISCUSSION PRESENTED ABOVE FOCUSES ON LOAD AND FUEL 10 COST DATA FOR THE YEAR 2009. WOULD A SIMILAR DISCUSSION OF 11 THE FPL DATA FOR THE YEARS 2006, 2007 AND 2008 PRODUCE THE SAME 12 CONCLUSIONS?

13

14 A. Yes. All of the subject data for the four years from 2006 to 2009 is shown on Exhibits 1 15 and 2. The load and lambda data for the On-Peak Periods during the Summer Months 16 and the Winter Months have been highlighted. A review of these Exhibits will show that 17 in each year, the On-Peak loads and lambdas during the Summer Months are significantly 18 higher than the On-Peak loads and lambdas during the Winter Months, and the Off-Peak 19 loads and lambdas during the Summer Month daytime hours of the Weekend Days and 20 Holidays are also significantly higher than the On-Peak loads and lambdas during the 21 Winter Months.

1Q.DOES FPL SUPPORT THE CONCEPT THAT RATES SHOULD PROVIDE2APPROPRIATE PRICE SIGNALS TO CUSTOMERS?

3

A. It appears that FPL has mixed feeling as to the usefulness of price signals. In its
submission to the Commission in Docket No. 100358-EI (regarding a modification to
FPL's GSDT-1 Rate or the development of an new TOU rate), FPL argued that price
signals are of little value because FPL's customers do not react to price signals. Of
course, this position is contrary to classical economic theory, and is also contrary to the
fact that numerous electric utilities across the United States have had success with
properly structured price signals under TOU rates.

11

By contrast to its position in the docket cited in the prior paragraph, the direct testimony of FPL Witness Deaton in Docket No 080677-EI, at page 6, line 9, states in relevant part that "The Commission should approve FPL's rate proposals and continuation of the GBRA mechanism as presented in this testimony <u>because they are reasonable, cost-based</u> and send the appropriate price signals to customers (emphasis added)".

17

AFFIRM fully supports the ratemaking objectives set out by Witness Deaton in Docket No. 080677-EI, and agrees that the rates approved by the Commission in the instant ratemaking proceeding should be reasonable, cost-based and send the appropriate price signals to customers. Unfortunately, the development of TOU FCR rate components that are based on arithmetic averages of fuel costs in uncorrelated time periods does not satisfy any of the criteria that FPL sets forth above as desirable for ratemaking purposes. 1

2 Q. ARE YOU ABLE TO CITE ADDITIONAL AUTHORITY PROVIDING FOR THE 3 DEVELOPMENT AND IMPLEMENTATION OF PROPERLY STRUCTURED 4 TIME OF USE FCR RATE COMPONENTS?

5

A. Yes, I am. The Energy Policy Act of 2005 ("EPAct") was enacted by Congress and
became federal law on August 8, 2005. Section 1252 of the EPAct, "Smart Metering",
amended Section 111(d) of the Public Utilities Regulatory Policy Act of 1978 by adding
the following:

10 "(14) TIME BASED METERING AND COMMUNICATIONS. - (A) Not later than 18 11 months after the date of enactment of this paragraph, each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a time-12 13 based rate schedule under which the rate charged by the electric utility varies during 14 different time periods and reflects the variance, if any, in the utility's cost of generation 15 and purchasing electricity at the wholesale level. The time-based rate schedule shall 16 enable the electric consumer to manage energy use and cost through advanced metering 17 and communications technology."

18

AFFIRM acknowledges that the Commission declined to adopt the above cited provision of the EPAct, but the reasoning for the Commission's failure to adopt such provision was based on the fact that certain of the Regulated Electric Utilities argued that their operations were already in substantial compliance with the above cited provision of EPAct. 2 The Commission should note and acknowledge that the primary cause for variances in utilities' wholesale cost of generating or purchasing energy, especially in Florida, is 3 variances in fuel costs (including costs of purchased power). The spirit and intention of 4 5 the EPAct was and continues to be to seek efficiency in electric operations by causing electric utilities to establish time-sensitive rates for customers that would track periodic 6 changes in the cost of electric energy. The "traditional method" for the determination of 7 FCR rate components, as implemented by both FPL and PEF, does not come close to 8 9 meeting either the spirit or intent of the EPAct.

10

1

By submission of this direct testimony in this proceeding, the Members of AFFIRM hereby request that the Commission direct the Regulated Electric Utilities to develop, within the context of this proceeding, newly developed time of use FCR rate components that will satisfy the above cited objective set forth in the Energy Policy Act of 2005.

15

16 Q. DOES AFFIRM HAVE A SPECIFIC RECOMMENDATION AS TO THE 17 STRUCTURE OF THE TOU FCR RATE COMPONENTS THAT SHOULD BE 18 IMPLEMENTED BY FPL?

19

A. Yes, it does. Attached as Exhibit RLK-5 is AFFIRM's proposal for the implementation
by FPL of TOU FCR rate components that would recover the projected 2011 FCR
amount of \$4,295,887,115, as set forth on line 1 of FPL's Appendix II, Schedule E-1D.
Unlike FPL's proposal, which is subdivided only into On-Peak and Off-Peak Hours, the

1		AFFIRM TOU FCR proposal disaggregates the FCR rate components into five separate
2		rate periods: an On-Peak component and an Off-Peak component for the Winter Months
3		(based on the volume of loads and associated costs during the Winter Months) and an
4		On-Peak component, Shoulder component, and Off-Peak component for the Summer
5		Months (based on the volume of loads and associated costs during the Summer Months).
6		
7		The five separate rate periods under AFFIRM's TOU FCR proposal are set forth on
8		Exhibit RLK-5, and are based on an examination and analysis of the relationship between
9		FPL's hourly fuel costs and hourly loads for the past four years.
10		
11		The difference between FPL's proposal using the "traditional method" and AFFIRM's
12		TOU FCR proposal is that AFFIRM's methodology would satisfy the two objectives of
13		TOU rates by aligning the burden of FCR revenues more closely on the customers
14		causing the related fuel costs, and by providing valid and useful price signals that will
15		result in an incentive for TOU customers either to shave loads during relatively higher
16		cost periods or to shift loads from higher cost periods to lower cost periods.
17		
18	Q.	DOES AFFIRM CONTEND THAT THE STRUCTURE OF TOU FCR RATE
19		COMPONENTS THAT IS RECOMMENDED BY AFFIRM FOR
20		IMPLEMENTATION BY FPL SHOULD BE SIMILARLY IMPLEMENTED FOR
21		THE OTHER REGULATED ELECTRIC UTILITIES?
22		

No, because there is not a single structure of TOU FCR rate components that would be 1 Α. appropriate for all five Regulated Electric Utilities, for the reason that each of the five 2 Regulated Electric Utilities has different customer bases, different load shapes, and a 3 different mix of generating resources. Given these differences, there is no correlation 4 across the five Regulated Electric Utilities of hourly fuel costs or system lambdas. 5 6 The structure of TOU FCR rate components should not be the same for each Regulated 7 Electric Utility, but rather the same principles of appropriate rate design should be 8 9 consistently applied and should govern the structure of the TOU FCR rate components 10 for each Regulated Electric Utility. Application of these principles will require that the 11 loads and associated fuel costs be examined on an hour by hour basis for each Regulated Electric Utility, and a discrete structure of TOU FCR rate components should be crafted 12 in a manner that (1) places the revenue burden for recoverable fuel costs on the customers 13 14 causing such costs, and (2) provides an appropriate price signal to which customers can respond in an effort to reduce their electric costs by shaving load or by shifting load to a 15 16 period with lower fuel costs. 17

- Q. DOES AFFIRM WISH TO ADDRESS ANY OTHER ISSUES RELATED TO THE
 DETERMINATION AND APPLICATION OF FCR RATES FOR THE
- 21

20

A. Yes, it does. Regardless of whether the Commission adopts the AFFIRM TOU FCR
proposal set forth above (or a substantially similar structure for TOU FCR rate

REGULATED ELECTRIC UTILITIES?

components), AFFIRM asks the Commission to recognize and correct an embedded flaw
 in FPL's use of the "traditional method" to determine FCR rates. This embedded flaw
 will not be corrected even if the Commission were to adopt AFFIRM's TOU FCR
 proposal. Importantly, this flaw results at all times in an over-collection of qualifying
 fuel expenses from all FPL's customers served on TOU rates.

6

This flaw exists because FPL fails to recognize that FPL's TOU customers have load 7 patterns that are more favorable in the aggregate than FPL's total jurisdictional load 8 9 pattern. (Assuming rational behavior, if a customer did not have a more favorable load 10 pattern than FPL as a whole, that customer would pay more under a TOU rate than under 11 a non-TOU rate, and thus would not elect to be served under a TOU rate.) If FPL's TOU 12 customers have an aggregate load shape that is more favorable than FPL as a whole, then 13 FPL's non-TOU customers must have an aggregate load pattern than is less favorable 14 than FPL as a whole,

15

16 However, instead of developing an FCR rate that reflects the fact that the non-TOU 17 customers have a less favorable load pattern, FPL's FCR rate for non-TOU customers 18 assumes that non-TOU customers have an aggregate load pattern identical to FPL as a 19 whole. By its failure to recognize that non-TOU customers have a less favorable load 20 pattern, the FCR rate fails to recover the proper amount of qualifying fuel expense from 21 the non-TOU customers. Then, upon the inevitable under-recovery of fuel expense 22 arising from FPL's flawed methodology, FPL adds an additional FCR factor to all 23 customers (including the TOU customers) to recover the under-recovered fuel expenses

1		that are entirely attributable to non-TOU customers. Accordingly, the Commission
2		should require FPL and any other Regulated Electric Utility using this same "traditional
3		method" to modify its calculations to recognize that the non-TOU customers do not have
4		an average load pattern, but rather have an aggregate load pattern that is less favorable
5		than FPL as a whole.
6		
7	Q,	DOES THIS CONCLUDE YOUR TESTIMONY?
8		
9	A.	Yes, it does.
10		
11		

Exhibit Cover Page

Docket No. 100001-EI FPL Average Hourly System Lambda Exhibit RLK-1

44.00 35.05 29.43 25.24

FPL System Lambda Average Lambda by Hour (\$/MWH)

Average Lambda by Hour (\$/MWH) on Weekdays (excludes Saturdays, Sundays and Holidays)

Hour

Ending 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 17:00 12:00 13:00 14:00 15:00 16:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 Summer Months (April - October) 2006 43.39 40.72 38.04 37.37 41.19 46.84 47.58 55.96 65.32 71.17 73.99 75.35 76.75 80.38 81.98 78.52 80.37 76.55 74.05 79.01 74.45 66.33 58.09 48.81 2007 44.58 41.74 39.56 36.84 42.29 48.69 50.11 54.95 67.30 73.33 78.47 80.79 84.80 86.76 87.50 90.24 87.69 84.96 83.57 86.21 82.60 75.99 65.65 50.07 2008 60.55 57.82 52.16 48.46 52.27 62.89 62.61 68.09 81.56 100.1 108.8 117.5 122.9 127.3 126.4 127.1 124.9 121.4 116.5 118.9 113.6 97.51 80.29 66.2 2009 24.24 23.05 22.34 21.57 22.24 24.01 24.24 26.24 34.24 43.66 51.96 58.25 64.23 67.89 71.12 70.68 68.75 59.64 55.33 59.63 56.25 44.85 32.87 25.43

Winter Months (November - March)

2006 44.52 43.33 41.25 39.09 42.16 45.3 52.48 52.38 53.8 55.74 58.74 59.13 58.85 59.03 59.18 58.23 57.19 57.22 62.59 64.64 63.65 56.49 52.09 48 2007 41.25 40.63 36.96 35.9 37.99 42.32 48.83 49.59 50.16 53.31 56.98 58.52 61.49 61.18 61.63 60.97 57.67 56 64.23 66.88 63.95 57.88 51.24 47.09 2008 44.26 43.76 37.69 39.61 42.27 47.6 49.86 53.83 55.82 59.41 60.08 61.58 65.36 64.18 60.29 60.17 59.21 61.11 63.14 68.97 65.37 60.14 54.39 50.51 2009 28.19 26.82 26.19 25.32 24.87 26.72 29.35 30.9 30.43 32.33 33.14 33.88 34.43 36.87 35.32 35.59 34.56 35.02 36.98 39.11 34.84 32.31 31.49 29.86

Average Lambda by Hour (\$/MWH) on Weekend Days and Holidays

Hour

Ending 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 Summer Months (April - October) 2006 42.79 40.47 39.91 36.46 37.45 39.20 39.87 46.37 59.66 66.63 70.28 71.43 74.53 75.15 74.09 78.17 71.91 67.36 70.92 74.09 70.49 62.80 53.24 46.52 2007 46.70 44.85 42.35 41.94 41.70 41.71 42.18 48.34 60.05 73.42 79.67 84.04 86.13 88.25 86.65 85.42 83.53 81.32 79.40 82.11 80.05 69.83 59.68 49.60 2008 65.71 62.50 57.84 52.16 54.09 53.44 50.95 65.12 75.08 93.04 109.10 121.93 125.91 130.35 129.25 130.50 128.41 119.38 115.42 116.90 110.77 98.18 82.97 69.50 2009 24.17 22.61 22.16 21.48 21.32 21.40 21.25 23.53 27.88 37.77 43.11 50.60 59.26 59.60 57.60 62.45 59.77 49.70 44.93 51.66

Winter Months (November - March)

2006 46.2 44.16 42.2 43.32 42.09 44.68 43.72 45.14 50.45 56.11 58.28 62.02 61.42 59.42 58.46 56.95 53.27 53.29 60.83 64.35 58.69 54.25 50.16 47.73 2007 43.75 42.03 41.43 39.41 39.08 40.94 40.57 40.9 47.15 49.42 55.02 57.16 62.15 58.7 58.55 57.18 53.67 54.49 60.58 61.04 59.55 51.79 47.75 46.65 2008 45.1 43.93 40.87 38.36 40.24 39.36 40.17 40.77 49.13 53.83 55.36 58.6 61.54 58.87 63.69 59.97 58.31 54.78 56.41 59.92 59.22 55.44 50.24 46.72 2009 27.1 26.15 25.28 24.58 24.37 24.89 24.56 25.69 28.29 29.48 31.65 31.56 32.39 33.14 33.08 31.06 30.15 30.19 30.92 31.94 31.06 31.02 29.77 27.94

FPL System Lambda

Average Lambda by Selected Block Periods (\$/MWH)

Average Lambda (in \$/MWH) for selected block periods on Weekdays (excludes Saturdays, Sundays and Holidays)

Summer Months (April - October) Average Lambda by 3-hour blocks

Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21.00	22.00	22:00	0.00
2006		40.72			41.80			56.29	0.00	10.00	73.50	12.00	10.00	78.55	15.00	10.00	79.63	10.00	19.00	75.84	21.00	22.00	57.74	0:00
2007		41.96		ATT CLOSE AND A	42.61			57.45			77.53			86.35			87.63			84.13			63.90	
2008		56.84			54.54			70.75			108.79			125.49			124.48			116.34			81.33	
2009		23.21			22.61			28.24			51.29			67.75			66.36			57.07			34.38	

Winter Months (November - March)

Hour																								
Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21.00	22.00	22.00	0:00
2006	46.	99		40.	86			53.				58.			10.00	57.		10.00	10.00	61.8		22.00		
2007	45.	05						COLUMN A REAL PROPERTY.	STATISTICS.				and approximation to resource as										se	the second s
			41.85					50.4	+/			59.	54			59.	07			63.2	24		blo	ck
2008	48.	23	53.95					54.7	73			62	.8			60	2			64.4	1		end	ina
2009	29.0	09		25.	78			30.7	75			34.	EO			A REAL PROPERTY AND A REAL PROPERTY AND A								•
1				E0.				00.7	3			04.	00			35.	12			35.8			@ 2	:00

Average Lambda (in \$/MWH) for selected block periods on Weekend Days and Holidays

	Summ	er Mont	ths (Ap	ril - Oct	tober)																			
Hour																								
Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22.00	23:00	0:00
2006		41.06			37.70			48.63			69.45			74.59			72.48			71.83	21100	22.00	54.19	0.00
2007		44.63			41.78			50.19			79.04			87.01			83.42			80.52			59.70	
2008		62.02			53.23			63.72			108.02		ti 1 d'altra d'Aran an inclusion de	128.50			126.10			114.36			83.55	
2009		22.98			21.40	1		24.22		(43.83			58.82			57.31			46.86			29.91	-

Winter Months (November - March)

Hour																								
Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22.00	23.00	0:00
2006	47.	06		38.	26			48.8	36			60.				55.		10.00	10.00	59.5		22.00		
2007	AF	OF					and the second second second													59.5	53		SE	e
2007	45.0	05	41.93					44.	51			58.	26			55.	97			58.2	24		blo	ck
2008	46.	.5		54	38			45.9	28			58.	50			50	10							
0000	and the second second	Contractor of the local division of the loca	54.38									50.	59			59.	19			57.7	5		end	ing
2009	27.	/4		24.	78			27.0	01			32.	19			31.	12			31.2	24		@ 2	2:00

Notes:

1. Average lambda shown above represents the hourly average (in \$/MWh) for selected three hour blocks in Summer and four hour blocks in Winter.

2. Rose fill indicates defined On-Peak Periods for FPL system during Summer months.

3. Pale blue fill indicates defined On-Peak Periods for FPL system during Winter months.

Exhibit Cover Page

Docket No. 100001-EI FPL FPL Average Hourly System Load Exhibit RLK-2 FPL System Load Average Load by Hour (MW)

Average Load by Hour (MW) on Weekdays (excludes Saturdays, Sundays and Holidays)

Summer Months (April - October)

Endina 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 2006 11633 10743 10175 9757 10240 11352 12076 12965 14162 15293 16248 16969 17508 17853 18049 18129 17954 17485 16942 16629 15808 14512 13028 9834 2007 11721 10864 10297 9906 10366 11443 12160 13023 14231 15410 16351 17049 17594 17936 18148 18194 17950 17445 16927 16686 15863 14559 13114 9968 2008 11299 10467 9945 9650 9608 10062 11115 11847 12672 13825 14936 15822 16473 16957 17214 17344 17356 17110 16631 16171 15975 15189 13924 12557 2009 10593 10051 9732 9665 10073 11058 11768 12679 13917 15132 16135 16881 17415 17694 17844 17852 17564 17015 16508 16283 15457 14164 12756 11526

Winter Months (November - March)

Hour

Hour

Endina 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 1:00 2:00 3:00 4:00 5:00 6:00 9892 8787 10328 11229 11636 12076 12430 12630 12757 12823 12845 12869 12877 13101 13821 13783 13158 12279 11156 2006 8786 8224 7953 7862 8012 2007 8943 8334 8020 7899 8021 8744 10180 11050 11500 12070 12585 12883 13114 13253 13316 13356 13307 13459 14053 13908 13389 12485 11395 10110 9938 10821 11252 11744 12174 12407 12564 12635 12656 12673 12671 12872 13490 13359 12888 12044 10980 2008 8671 8094 7804 7705 7844 8538 9783 2009 8727 8219 7978 7930 8157 8949 10260 11029 11487 11938 12298 12488 12635 12651 12642 12625 12580 12791 13482 13421 12821 11953 10873 9743

Average Load by Hour (MW) on Weekend Days & Holidays

Summer Months (April - October)

Hour

Ending 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9735 10198 11639 13309 14683 15704 16469 16922 17186 17276 17236 17009 16478 15964 15743 15035 13919 12660 2006 11766 10787 10181 9786 9554 9543 2007 11874 11018 10423 10033 9854 9857 10058 10499 11878 13524 14915 15971 16753 17235 17439 17436 17291 16981 16421 15928 15744 15087 14007 12779 9867 9854 10265 11643 13281 14653 15707 16521 17027 17277 17359 17274 16978 16393 15846 15665 15000 13886 12678 2008 11705 10853 10249 9667 9674 2009 10635 10056 9681 9479 9666 10070 11439 13054 14454 15535 16381 16915 17169 17250 17145 16837 16216 15669 15433 14749 13663 12437 11308 9489

Winter Months (November - March)

Hour

Ending 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 1:00 2:00 3:00 4:00 6:00 7:00 8:00 5:00 9314 10543 11545 12132 12406 12502 12466 12393 12291 12164 12347 13020 12849 12404 11677 10814 9802 2006 9004 8396 8043 7875 7868 8079 8544 9861 2007 9235 8611 8210 7987 7940 8098 8515 9151 10359 11451 12174 12591 12835 12916 12914 12842 12680 12735 13228 13020 12570 11847 10952 2008 9028 8230 7855 7661 7629 7794 8187 8789 9901 10935 11623 12010 12269 12357 12356 12296 12186 12288 12726 12541 12123 11407 10518 9502 2009 8728 8219 7930 7811 7853 8094 8552 9248 10315 11128 11591 11814 11931 11919 11876 11796 11677 11863 12417 12304 11774 11053 10172 9217 FPL System Load Average Load by Selected Block Periods (MWH)

Average Load (in MWH) for selected block periods on Weekdays (excludes Saturdays, Sundays and Holidays) Summer Months (April - October) Average Load by 3-hour blocks

	Summer Months (April - October) Average Load by 3-ho	ur I
Hour	··· · • •	

Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006		10,850			9,944			12,131			15,234			17,443			18,044			17,019			14,449	
2007		10,961			10,080			12,209			15,331			17,526			18,097			17,019			14,512	
2008		10,570			9,773			1,878			14,861			16,881			17,270			16,259			13,890	
2009		10,125			10,265			12,788			16,049			17,651		•	17,477			16,083			12,815	

Winter Months (November - March)

Hour Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006	9,51	5		8,15	54			11,3	17			12,6	60			12,9	23			13,2	60		se	e
2007	9,69	6		8,17	'1			11,2	00			12,9	59			13,3	60			13,4	59		blo	ck
2008	9,38	2		7,97	'3			10,9	39			12,4	45			12,7	18			12,9	45		endi	ng
2009	9,39	1		8,25	i4			11,1	79			12,5	18			12,6	60			12,9	19		@ 2	:00

Average Load (in MWH) for selected block periods on Weekend Days and Holidays

1	Summe	r Month	ns (Apr	il - Oct	ober)																			
Hour			• •		-																			
Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006		10,911			9,628			10,524			14,565			16,859			17,174			16,062			13,871	
2007		11,105			9,915		Ĩ	10,812			14,803			17,142			17,236			16,031			13,958	
2008		10,936			9,736			10,587			14,547			16,942			17,204			15,968			13,855	
2009		10,124			9,545		•	11,521			15,457			17,111			16,733			15,284			12,469	

Winter Months (November - March)

Hour Ending	1:00	2:00	` 3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006	9,50	4		7,96	5 6			9,98	37			12,3	77			12,2	99			12,4	88		See)
2007	9,66	5		8,05	59			9,86	9			12,6	29			12,7	93			12,6	66		bloc	k
2008	9,32	0		7,7	35			9,45	53			12,0	65			12,2	82			12,1	99		endi	ng
2009	9,08	4		7,92	22			9 ,81	1			11,8	14			11,8	03			11,8	87		@ 2:	00

Notes:

1. Average load shown above represents the hourty average (in MWh) for selected three hour blocks in Summer and four blocks in Winter.

2. Rose fill Indicates defined On-Peak Periods for FPL system during Summer months.

3. Pale blue fill indicates defined On-Peak Periods for FPL system during Winter months.

Exhibit Cover Page

Docket No. 100001-EI PEF Average Hourly System Lambda Exhibit RLK-3 PEF System Lambda Average Lambda by Hour (\$/MWH)

Average Lambda by Hour (\$/MWH) on Weekdays (excludes Saturdays, Sundays and Holidays)

Hour

Endino 18:00 19:00 20:00 21:00 22:00 23:00 0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 Summer Months (April - October) 62.31 59.66 54.30 45.61 39.35 2006 36.24 35.97 36.41 41.63 46.77 48.59 56.88 64.05 64.12 64.82 68.71 73.33 73.92 78.76 79.12 72.56 66.09 66.34 67.98 88.89 83.97 80.39 61.91 46.45 2007 36.43 31.36 30.08 32.99 44.36 56.01 58.08 71.50 82.45 80.87 84.03 90.16 92.32 97.29 98.57 95.21 92.44 91.90 89.61 2008 55.75 51.99 51.46 51.83 60.76 67.97 72.90 87.14 101.55 105.07 111.21 117.21 123.75 128.16 130.88 129.53 125.10 115.43 111.87 110.52 97.82 95.20 72.12 60.91 2009 24.27 23.03 22.48 22.16 22.47 25.01 26.09 25.92 28.98 40.14 44.99 50.54 54.84 57.43 54.99 49.45 42.04 40.34 39.58 35.95 31.65 26.73 34.13 33.61

Winter Months (November - March)

2006 38.82 37.34 38.31 37.84 40.44 47.78 58.75 59.46 57.67 53.62 57.10 59.80 58.96 57.08 57.43 52.07 63.78 71.20 66.92 64.48 59.24 50.91 40.91 58.15 2007 31.28 30.25 30.50 31.86 37.08 44.54 56.31 57.76 74.73 80.07 75.76 66.01 59.96 47.15 35.71 54.10 55.93 54.73 61.12 65.17 64.43 62.89 59.63 53.38 2008 42.36 41.64 42.66 43.43 47.98 55.99 66.15 64.61 65.90 82.73 72.79 61.93 53.03 43.90 66.52 63.74 63.85 60.45 71.37 86.91 61.47 61.64 60.45 66.98 2009 31.20 31.67 32.02 32.20 33.09 36.57 43.93 42.05 39.56 39.97 38.20 39.04 41.39 40.67 40.01 39.35 39.75 45.77 51.02 49.12 45.43 40.05 37.06 33.26

Average Lambda by Hour (\$/MWH) on Weekend Days and Holidays

Hour

Endina 1:00 2:00 3:00 4:00 5:00 6:00 7:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 8:00 9:00 10:00 Summer Months (April - October) 2006 35.08 33.87 33.79 35.43 36.07 38.52 46.81 59.79 64.24 67.38 68.39 61.19 56.19 50.96 41.58 36.21 64.80 66.67 67.83 67.57 70.03 76.48 74.47 66.62 97.08 94.10 86.74 85.87 85.83 79.46 56.36 40.08 2007 36.06 30.64 30.22 29.73 30.85 33.15 39.72 58.47 82.61 82,58 87.06 91.81 95.35 114.53 104.93 102.95 2008 54.83 52.58 51.75 51.27 51.58 51.61 58.26 76.02 101.85 113.06 117.62 120.91 125.13 125.35 135.17 134.47 126.33 114.08 108.23 107.24 97.30 99.50 71.07 61.02 2009 23.59 22.71 22.23 21.86 21.80 22.13 22.14 23.53 27.00 31.48 29.97 34.41 38.12 42.27 47.34 53.94 49.12 44.60 36.96 35.00 34.22 32.76 27.69 25.60

Winter Months (November - March)

2006 39.04 37.36 36.44 37.62 39.04 39.93 42.77 49.04 52.30 61.24 67.55 64.28 58.94 56.21 47.86 41.94 52.96 57.69 55.52 59.60 59.23 58.58 55.91 54.56 2007 32.41 31.29 32.36 34.62 35.57 35.40 41.49 49.83 51.18 56.76 54.50 64.32 69.65 63.76 60.87 59.18 49.01 72.12 75.27 66.95 60.21 54.09 40.72 32.46 58.87 73.42 65.64 2008 37.54 37.62 37.56 37.99 38.17 41.34 44.41 50.06 54.04 57.33 54.01 57.76 64.27 61.20 58.07 56.87 53.79 59.03 54.23 47.74 41.06 2009 32.10 30.86 31.39 31.62 32.17 32.24 36.46 40.08 41.31 38.73 36.75 38.42 38.97 39.67 39.87 39.10 39.31 43.60 46.38 45.10 41.67 38.80 34.41 31.76

Notes:

PEF System Lambda Average Lambda by Selected Block Periods (\$/MWH)

Average Lambda (in \$/MWH) for selected block periods on Weekdays (excludes Saturdays, Sundays and Holidays)

Hour	Summ	er morn	ше (лфл	rii - Od	toper)																			
Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006		36.21			45.66			61.68			68.95			77.27			68.33			63.32			46.42	
2007		32.62			44.45			70.68			85.02			96.06			93.18			87.49			62.92	
2008		53.07			60.19			87.20			111.16			127.60			123.35			106.74			76.08	
2009		23.26			23.21			27.00			35.96			50.12			53.96			40.65			31.44	
Hour	Winter	Months	s (Nove	mber	- March))																		
Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006	42.		0.00		.09	0.00		58		, 0.00	11100	57.		,	10100	57.				65.4			se	e
2007	36.				.00				.03			61.				62.				70.4	45		blo	ck
2008	45.	23			.52			63				64.				64.	85			76.(09		endi	ing
2009	33.	30		22	.47			A 4	.38			39.	93			41.	22			46.4	£1		@2	.00
				33	.47			41				39.	00			41.	<i></i>			-0,-				
			1 \$/MV			cted b	lock I			eeken	d Davs			'S			<u></u>						÷.	
Average	Lam			VH) fo	or sele	cted b	lock ş			eeken	d Days			'S		41.	<i></i>						ę	
Average Hour	Lam	bda (ir		VH) fo	or sele	cted b	lock ;			eeken	d Days			'S		41.	<u>~</u>						-	
Average Hour Ending	Lam	bda (ir		VH) fo	or selea tober)	cted b 6:00	lock ; 7:00			' eeken 10:00	-			14:00	15:00	16:00	17:00	18:00	19:00	20:00		22:00	23:00	0:00
Average Hour Ending 2006	Lam Summe	bda (ir er Mont 2:00 34.25	hs (Apr	VH) fo il - Oc	5: 00 36.67		-	period	s on W		11:00 67.36	and H	oliday	14:00 73.66	15:00		17:00 66.08	18:00	19:00	20:00 61.92		22:00	23:00 42.92	
Average Hour Ending 2006 2007	Lam Summe	bda (ir er Monti 2:00 34.25 32.31	hs (Apr	VH) fo il - Oc	5:00 36.67 31.24		-	8:00 57.13 60.27	s on W		11:00 67.36 87.15	and H	oliday	14:00 73.66 104.94	15:00		17:00 66.08 98.04	18:00	19:00	20:00 61.92 86.15		22:00	23:00 42.92 58.63	
Average Hour Ending 2006 2007 2008	Lam Summe	bda (ir er Mont 2:00 34.25 32.31 53.05	hs (Apr	VH) fo il - Oc	5: 00 36.67		-	8:00 57.13	s on W		11:00 67.36	and H	oliday	14:00 73.66 104.94 128.55	15:00		17:00 66.08 98.04 124.96	18:00	19:00	20:00 61.92 86.15 104.26		22:00	23:00 42.92 58.63 77.20	
Average Hour Ending 2006 2007	Lam Summe	bda (ir er Monti 2:00 34.25 32.31	hs (Apr	VH) fo il - Oc	5:00 36.67 31.24		-	8:00 57.13 60.27	s on W		11:00 67.36 87.15	and H	oliday	14:00 73.66 104.94	15:00		17:00 66.08 98.04	18:00	19:00	20:00 61.92 86.15		22:00	23:00 42.92 58.63	
Average Hour Ending 2006 2007 2008 2009	2 Lam Summo 1:00	bda (ir 2:00 34.25 32.31 53.05 22.84	hs (Apr 3:00	VH) fc il - Oc 4:00	5:00 5:00 36.67 31.24 51.49	6:00	-	8:00 57.13 60.27 78.71	s on W		11:00 67.36 87.15 117.20	and H	oliday	14:00 73.66 104.94 128.55	15:00		17:00 66.08 98.04 124.96	18:00	19:00	20:00 61.92 86.15 104.26		22:00	23:00 42.92 58.63 77.20	
Average Hour Ending 2006 2007 2008 2009	2 Lam Summo 1:00	bda (ir 2:00 34.25 32.31 53.05 22.84	hs (Apr 3:00	VH) fc il - Oc 4:00	5:00 36.67 31.24 51.49 21.93	6:00	-	8:00 57.13 60.27 78.71	s on W		11:00 67.36 87.15 117.20 31.95	and H	oliday	14:00 73.66 104.94 128.55	15:00		17:00 66.08 98.04 124.96	18:00	19:00	20:00 61.92 86.15 104.26	21:00		23:00 42.92 58.63 77.20	

1.00	£.00	0.00	4.00	0.00	0.00	1.00	0.00	0.00	10.00	11.00	12.00	10.00	1.4.00	10.00	10.00	17.00	10.00	10104				-0.00	
41.5	5		38.	26			50.0	62			58.	23			56.	00			61.7	'5		see	•
34.2	22 34.49					49.4	82			63.	06			60.	30			64.1	3		bloc	ĸ	
40.9	19		38.	77			51.4	46			59.	31			56.	90			63.0	8		endir	ng
32.2	:8					39.	15			38.	45			40.	47			42.9	9		@ 2:0	00	
	41.5 34.2 40.9	41.55 34.22 40.99 32.28	41.55 34.22 40.99	41.55 38. 34.22 34. 40.99 38.	41.55 38.26 34.22 34.49 40.99 38.77	41.55 38.26 34.22 34.49 40.99 38.77	41.55 38.26 34.22 34.49 40.99 38.77	41.55 38.26 50. 34.22 34.49 49. 40.99 38.77 51.	41.5538.2650.6234.2234.4949.8240.9938.7751.46	41.5538.2650.6234.2234.4949.8240.9938.7751.46	41.55 38.26 50.62 34.22 34.49 49.82 40.99 38.77 51.46	41.5538.2650.6258.334.2234.4949.8263.040.9938.7751.4659.0	41.5538.2650.6258.2334.2234.4949.8263.0640.9938.7751.4659.31	41.5538.2650.6258.2334.2234.4949.8263.0640.9938.7751.4659.31	41.5538.2650.6258.2334.2234.4949.8263.0640.9938.7751.4659.31	41.5538.2650.6258.2356.034.2234.4949.8263.0660.340.9938.7751.4659.3156.9	41.5538.2650.6258.2356.0034.2234.4949.8263.0660.3040.9938.7751.4659.3156.90	41.5538.2650.6258.2356.0034.2234.4949.8263.0660.3040.9938.7751.4659.3156.90	41.5538.2650.6258.2356.0034.2234.4949.8263.0660.3040.9938.7751.4659.3156.90	41.5538.2650.6258.2356.0061.734.2234.4949.8263.0660.3064.140.9938.7751.4659.3156.9063.06	41.5538.2650.6258.2356.0061.7534.2234.4949.8263.0660.3064.1340.9938.7751.4659.3156.9063.08	41.5538.2650.6258.2356.0061.7534.2234.4949.8263.0660.3064.1340.9938.7751.4659.3156.9063.08	41.5538.2650.6258.2356.0061.75see34.2234.4949.8263.0660.3064.13bloc40.9938.7751.4659.3156.9063.08endition

Notes:

1. Average lambda shown above represents the hourly average (in \$/MWh) for selected three hour blocks in Summer and four blocks in Winter.

2. Rose fill indicates defined On-Peak Periods for PEF system during Summer months.

3. Pale blue fill indicates defined On-Peak Periods for PEF system during Winter months.

Exhibit Cover Page

Docket No. 100001-EI PEF FPL Average Hourly System Load Exhibit RLK-4 PEF System Load Average Load by Hour (MW)

Average Load by Hour (MW) on Weekdays (excludes Saturdays, Sundays and Holidays)

Summer Months (April - October)

 Ending
 1:00
 2:00
 3:00
 4:00
 5:00
 6:00
 7:00
 8:00
 9:00
 10:00
 11:00
 12:00
 13:00
 14:00
 15:00
 16:00
 17:00
 18:00
 19:00
 20:00
 21:00
 22:00
 23:00
 0:00

 2006
 4,510
 4,134
 3,908
 3,773
 3,761
 4,004
 4,526
 4,830
 5,135
 5,593
 6,101
 6,532
 6,925
 7,270
 7,514
 7,662
 7,718
 7,637
 7,413
 7,084
 6,852
 6,441
 5,793
 5,116

 2007
 4,657
 4,240
 3,981
 3,842
 3,835
 4,107
 4,668
 5,064
 5,387
 5,895
 6,452
 6,906
 7,285
 7,615
 7,839
 7,968
 8,004
 7,896
 7,642
 7,331
 7,130
 6,746
 6,063
 5,317

 2008
 4,587
 4,157
 3,909
 3,786
 3,793
 4,074
 4,676
 5,046
 5,373
 5,846
 6,366
 6,802
 7,159
 7,675
 7,800
 7,842
 7,748
 7,500

Winter Months (November - March)

Hour

Hour

Ending 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 **2006** 3,609 3,436 3,374 3,386 3,518 3,978 4,740 5,071 5,059 4,982 4,944 4,949 4,940 4,930 4,919 4,941 4,984 5,156 5,514 5,562 5,344 5,004 4,526 4,011 **2007** 3,589 3,390 3,312 3,315 3,450 3,908 4,696 5,078 5,103 5,092 5,135 5,148 5,172 5,182 5,199 5,227 5,278 5,454 5,813 5,805 5,599 5,197 4,659 4,992 **2008** 3,680 3,493 3,423 3,445 3,589 4,066 4,860 5,258 5,261 5,196 5,192 5,154 5,119 5,094 5,076 5,088 5,145 5,376 5,763 5,770 5,588 5,203 4,682 4,156 **2009** 3,396 3,250 3,194 3,202 3,317 3,665 4,279 4,614 4,627 4,585 4,581 4,573 4,561 4,538 4,520 4,520 4,549 4,696 4,981 4,985 4,866 4,575 4,190 3,784

Average Load by Hour (MW) on Weekend Days & Holidays

Summer Months (April - October)

Hour

Ending 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 **2006** 4,602 4,216 3,964 3,800 3,719 3,740 3,845 4,046 4,603 5,305 5,925 6,423 6,857 7,194 7,410 7,534 7,558 7,449 7,153 6,799 6,574 6,174 5,597 5,007 **2007** 4,711 4,273 3,990 3,822 3,747 3,780 3,913 4,220 4,830 5,583 6,236 6,745 7,158 7,457 7,630 7,701 7,669 7,541 7,274 6,988 6,796 6,453 5,825 5,168 **2008** 4,770 4,294 3,989 3,825 3,740 3,766 3,886 4,136 4,816 5,595 6,273 6,797 7,209 7,499 7,687 7,786 7,808 7,712 7,435 7,089 6,874 6,517 5,917 5,280 **2009** 4,157 3,818 3,592 3,456 3,376 3,390 3,477 3,654 4,172 4,783 5,317 5,768 6,130 6,400 6,591 6,702 6,753 6,674 6,400 6,115 5,935 5,600 5,087 4,571

Winter Months (November - March)

Hour

Ending 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 2006 3,659 3,459 3,366 3,351 3,393 3,550 3,846 4,189 4,600 4,836 4,902 4,910 4,905 4,856 4,794 4,768 4,758 4,913 5,251 5,266 5,077 4,764 4,379 3,970 2007 3,640 3,405 3,299 3,257 3,298 3,446 3,713 4,068 4,515 4,825 4,967 5,021 5,057 5,041 5,018 5,013 5,018 5,151 5,457 5,401 5,205 4,860 4,415 3,940 2008 3,611 3,387 3,292 3,260 3,305 3,452 3,747 4,116 4,536 4,809 4,925 4,929 4,932 4,905 4,865 4,851 4,863 5,009 5,290 5,270 5,105 4,771 4,343 3,911 2009 3,462 3,303 3,231 3,218 3,259 3,384 3,627 3,929 4,236 4,349 4,349 4,333 4,322 4,268 4,229 4,208 4,221 4,353 4,589 4,556 4,450 4,199 3,875 3,538 PEF System Load Average Load by Selected Block Periods (MWH)

Average Load (in MWH) for selected block periods on Weekdays (excludes Saturdays, Sundays and Holidays)

:00 2:01				~ ~ ^				10.00		10.00			15.00		47.00	40.00	10-00	00.00	04.00	00.00	00.00	0.00
		4:00		6:00	7:00		9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
4,184	•		3,846			4,830			6,075			7,236			7,672			7,116			5,783	
4,293	}		3,928			5,040			6,418			7,580			7,956			7,368			6,042	
4,218	;		3,884			5,032			6,338			7,430			7,797			7,236			5,960	
3,829)		3,537			4,381			5,573			6,561			6,831			6,264			5,164	
ter Mont	hs (Nove	mber -	March)																			
:00 2:00) 3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
3,896		3,5	64			4,96	53			4,94	11			5,0	00			5,35	6		see	;
3,933		3,4	96			4,99	92			5,15	59			5.2	90			5,60	4		bloc	:k
4,003		3,6	31											-							endir	ng
3,655		3,3	45			-								-				-				-
:0 3 3 4	4,293 4,218 3,829 ter Monti 00 2:00 3,896 3,933 4,003	00 2:00 3:00 3,896 3,933 4,003	4,293 4,218 3,829 ter Months (November - 00 2:00 3:00 4:00 3,896 3,5 3,933 3,4 4,003 3,6	4,293 3,928 4,218 3,884 3,829 3,537 ter Months (November - March) 00 2:00 3:00 4:00 5:00 3,896 3,564 3,933 3,496 4,003 3,631	4,293 3,928 4,218 3,884 3,829 3,537 ter Months (November - March) 00 2:00 3:00 4:00 5:00 6:00 3,896 3,564 3,933 3,496 4,003 3,631	4,293 3,928 4,218 3,884 3,829 3,537 ter Months (November - March) 00 2:00 3:00 4:00 5:00 6:00 7:00 3,896 3,564 3,496 3,631	4,293 3,928 5,040 4,218 3,884 5,032 3,829 3,537 4,381 ter Months (November - March) 00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 3,896 3,564 4,96 3,933 3,496 4,95 4,003 3,631 5,14	4,293 3,928 5,040 4,218 3,884 5,032 3,829 3,537 4,381 ter Months (November - March) 00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 3,896 3,564 4,963 3,933 3,496 4,992 4,003 3,631 5,144	4,293 3,928 5,040 4,218 3,884 5,032 3,829 3,537 4,381 ter Months (November - March) 00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 3,896 3,564 4,963 3,933 3,496 4,992 4,003 3,631 5,144	4,293 3,928 5,040 6,418 4,218 3,884 5,032 6,338 3,829 3,537 4,381 5,573 ter Months (November - 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Summer Months (April - October) Hour Ending 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 0:00 2006 4,261 3,753 4,165 5,884 7.154 7,514 6.842 5,593 2007 4,325 3.783 4,321 6,188 7,415 7,637 7,019 5,815 2008 4,351 3,777 4,279 6,222 7,769 7,133 5,905 7,465 2009 3,856 3,768 6,150 5,086 3,407 5,289 6,374 6,710

Winter Months (November - March)

Hour Ending	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
2006	3,867	7		3,41	15			4,3€	8			4,89	93			4,80	8			5,09	0		Se	e
2007	3,850)		3,32	25			4,28	30			5,02	22			5,05	0			5,23	1		blo	ck
2008	3,813	3		3,32	27			4,30	2			4,92	23			4,89	7			5,10	9		endi	ing
2009	3,545	5		3,27	73			4,03	5			4,31	18			4,25	3			4,44	9		@ 2	:00

Notes:

1. Average load shown above represents the hourty average (in MWh) for selected three hour blocks in Summer and four blocks in Winter.

2. Rose fill indicates defined On-Peak Periods for PEF system during Summer months.

3. Pale blue fill indicates defined On-Peak Periods for PEF system during Winter months.

Exhibit Cover Page

Docket No. 100001-EI PEF Determination of Fuel Cost Recovery Factor – Time of Use Rate Schedules Exhibit RLK-5 Florida Power & Light Company Determination of Fuel Cost Recovery Factor Time of Use Rate Schedules January 2011 to December 2011

	Net Energy for Load (%)	Fuel Cost (%)
On Peak	31.48%	36.17%
Off Peak	68.52%	63.83%

	Fuel Recov	very Calculation	
	Total	On-Peak	Off-Peak
1. Total Fuel + Net Power Trans	\$4,295,887,115	\$1,553,822,243	\$2,742,064,872
2. MWH Sales	103,260,777	32,508,973	70,751,804
Cost per kWh Sold (¢)	4.1602	4.7797	3.8756

AFFIRM Recommendation

	Net Energy for Load (%)	Fuel Cost (%)
Winter On-Peak	10.95%	12.31%
Winter Off-Peak	25.05%	22.01%
Total Winter	36.00%	34.32%
Summer On-Peak	18.28%	27.37%
Summer Shoulder	7.65%	9.86%
Summer Off-Peak	38.07%	28.45%
Total Summer	64.00%	65.68%

Winter Months On-Peak = Weekdays excluding holidays HE (Hour Ending) 1300 to 2100 Winter Months Off-Peak = All other hours in Winter Months

Summer Months On-Peak = Weekdays excluding holidays HE 1300 to 2000 Summer Months Shoulder = Weekend Days and Holidays HE 1300 to 2000 Summer Months Off-Peak = All other hours in Summer Months

AFFIRM Determination of Fuel Cost Recovery Factor for Florida Power & Light Company - Time of Use Rate Schedules January 2011 to December 2011

			Winter	Winter		Summer On-	Summer	Summer
	Total	Winter Total	On-Peak	Off-Peak	Summer Total	Peak	Shoulder	Off-Peak
1. Total Fuel + Net Power Trans	\$42,295,887,115	\$1,474,312,612	\$528,630,800	\$945,681,811	\$2,821,574,503	\$1,175,809,585	\$423,544,734	\$1,222,220,180
2. MWH Sales	103,206,777	37,178,573	11,304,894	25,873,679	66,082,204	18,869,687	7,901,639	39,310,878
Cost per kWh Sold (¢)	4.1602	3.9655	4.6761	3.6550	4.2698	6.2312	5.3602	3.1091

Winter Months On-Peak = Weekdays excluding holidays HE (Hour Ending) 1300 to 2100 Winter Months Off-Peak = All other hours in Winter Months

Summer Months On-Peak = Weekdays excluding holidays HE 1300 to 2000 Summer Months Shoulder = Weekend Days and Holidays HE 1300 to 2000 Summer Months Off-Peak = All other hours in Summer Months

Exhibit Cover Page

Docket No. 100001-EI AFFIRM TOU Response In Docket 1000358-EI Exhibit RLK-6

Docket No. 100001-EI AFFIRM Response in Docket No. 100358-EI Exhibit RLK-6, Page 1 of 20

Response of the Association for Fairness in Rate Making

to

FPL Study Report Review and Analysis of a Potential Multi-Period Time-of-Use Rate for Commercial & Industrial Customers

Docket No. 100358-E1

September 2, 2010

Background and Introduction

In Order No. PSC-10-0153-FOF-EI dated March 17, 2010 (the "Order"), the Florida Public Service Commission (the "Commission") directed Florida Power & Light Company ("FPL") to work with the Association for Fairness in Rate Making ("AFFIRM") and any other interested parties to explore multiperiod commercial time-of-use ("TOU") rates that would address concerns raised by AFFIRM in FPL's 2009 petition for an increase in rates (Docket No. 080677-EI). FPL was instructed to report back to the Commission by August 1, 2010. Because August 1, 2010 was a Sunday, FPL timely complied with the Commission's Order by filing a report and associated attachments consisting of 72 pages (the "FPL Report") on August 2, 2010.

Although FPL and AFFIRM were unable to reach agreement on the issue of multi-period commercial TOU rates, FPL did engage in discussions with AFFIRM and other interested parties, including members of the Commission's staff.

Prior to the filing of the FPL Report, a separate Commission proceeding (Docket No. 100358-EI) was established with respect to the issue of multi-period commercial TOU rates.

This report (the "AFFIRM Report") is submitted to the Commission to set forth the position of AFFIRM with respect to multi-period commercial TOU rates. For purposes of this AFFIRM Report, the terms Summer Months, Winter Months, On-Peak Period (or Hours) and Off-Peak Period (or Hours) shall have the meanings set forth in FPL's GSDT-1 Rate. In addition, as much of the discussion with this AFFIRM Report will address the hours in which peaks occur or energy is being used, in order to avoid confusion between AM and PM hours, the AFFIRM Report will use the convention adopted by the Federal Energy Regulatory Commission ("FERC"), which is to state time periods in military time. As an example, the hour ending 5:00 PM will be stated as Hour Ending 1700, or more simply, as the HE 1700.

AFFIRM respectfully requests that upon an evaluation of the AFFIRM Report, the Commission should issue an Order directing FPL to develop and immediately implement and offer a new appropriately structured and priced time of use rate for medium sized business customers, substantially in the form described herein. In the alternative, the Commission should issue an Order directing FPL to modify its existing GSDT-1 rate, substantially in the form described herein. Upon a filing of a new or revised TOU rate by FPL in response to any such Commission Order, AFFIRM should be afforded adequate opportunity to respond to the Commission with respect to the structure and pricing of such new or revised TOU rate.

Executive Summary

The FPL Report contends that the assertions made by AFFIRM as to the necessity or usefulness of multi-period commercial TOU rates are wrong. FPL states that it offers several TOU rate plans to medium sized (20 kW to 499 kW) commercial and industrial customers. On the basis of its analyses, FPL contends that there is no need to implement a new multi-period commercial TOU rate plan.

This report (the "AFFIRM Report") is filed on behalf of AFFIRM to contend and amply demonstrate that the menu of TOU rates currently offered by FPL to its medium sized business customers is highly ineffective, discriminatory, and in need of revision. The FPL TOU rates are unfair and discriminatory because such rates fail to satisfy the basic objective of properly and effectively placing the burden of cost of electric service on the customer that is responsible for causing the related cost of electric service.

From AFFIRM's perspective, the discussions between FPL and AFFIRM were unproductive, as the two parties were unable to find agreement on even the smallest of issues. FPL believes its existing GSDT-1 and other time sensitive rates for medium sized commercial customers to be appropriately structured and offering adequate opportunity for cost reduction. FPL further believes that the loads of QSRs and similarly situated customers are not differentiated from the load of the medium sized commercial customer class as a whole, and accordingly, it is not appropriate to develop a new or different rate for QSRs or other customers with similar load characteristics.

By contrast, AFFIRM takes the position that the existing rates promulgated by FPL are badly structured in that such rates make little attempt to correlate electric service pricing with cost causation. FPL attempts to justify its existing rate structures by performing analyses that consider only the existing On-Peak and Off-Peak Periods as a whole, thereby avoiding more focused analyses that would reveal important hour-by-hour differentials that exist within the On-Peak Periods. FPL has made no attempt to provide an economic justification for its determination of the appropriate hours that comprise the On-Peaks. (It is important to note that the Commission itself shares in the culpability for the inappropriate determination of On-Peak and Off-Peaks Periods. The Commission continues to rely on Order No. 9661, issued November 26, 1980 in Docket No.790793-EU, for the determination of On-Peak and Off Periods for TOU rates, even though the facts and circumstances which led to such determination thirty years ago may no longer be applicable or pertinent. It should be noted that the Commission has previously approved TOU rates offered by Gulf Power Company with four separate pricing components, a departure from the Commission's 1981 Order.)

The analyses discussed and submitted by FPL in this investigation of multi-period time of use rates are inappropriate and inapplicable for the reason that FPL has performed general analyses of the peaks and loads for the entirety of each defined On-Peak and Off-Peak Period, but has not performed the more focused analyses that would reveal hour by hour differences within the defined On-Peak and Off-Peak Periods. Accordingly, FPL's conclusions are wrong. FPL prepared its analyses with the intention of supporting its pre-ordained conclusion that FPL's rates are appropriate and should not be changed. However, the appropriate analyses in this investigation, which FPL did not present, should be those that examine whether FPL's existing rates can be improved such that there is a better correlation between the revenue burden and the associated causation of costs. Upon appropriate analyses of FPL's existing rates, it can be seen that there is an opportunity to create multi-period commercial TOU rates that will

Docket No. 100001-EI AFFIRM Response in Docket No. 100358-EI Exhibit RLK-6, Page 4 of 20 better allocate costs to the cost causers and that will provide corresponding benefits to FPL in the form of better control over demand related costs.

Appropriate Application of Ratemaking Principles

The "Electric Utility Cost Allocation Manual", published in January 1992 by the National Association of Regulatory Utility Commissioners ("NARUC"), states in relevant part at page 12:

"Cost of service studies are among the basic tools of ratemaking. While opinions vary on the appropriate methodologies to be used to perform cost studies, few analysts seriously question the standard that service should be provided at cost. Non-cost concepts and principles often modify the cost of service standard, but it remains the primary criterion for the reasonableness of rates.

The cost principle applies not only to the overall level of rates, but to the rates set for individual services, classes of customers, and segments of the utility's business. Cost studies are therefore used by regulators for the following purposes:

- To attribute costs to different categories of customers based on how those customers cause costs to be incurred.
- To determine how costs will be recovered from customers within each customer class."

Under the heading of "Peak Demand Methods," the Electric Utility Cost Allocation Manual states in relevant part at page 41:¹

"Cost of service methods that utilize a peak demand approach are characterized by two features: First, all production plant costs are classified as demand-related. Second, these costs are allocated among the rate classes on factors that measure the class contribution to system peak A customer or class of customers contributes to the system maximum peak to the extent that it is imposing demand at the time of --coincident with - the system peak. The customer's demand at the time of the system peak is that customer's "coincident" peak. The variations in the methods are generally around the number of system peak hours analyzed, which inturn (sic) depends on the utility's annual load shape and on system planning considerations (emphasis added)".

The discussion in the Electric Utility Cost Allocation Manual that follows the cited language above focuses on different methods to allocate demand-related costs based on peak demands, including the Single Coincident Peak Method (1-CP), the Summer and Winter Peak Method, and the Sum of the Twelve Monthly Coincident Peaks Method (12-CP).

The substance of the above cited language from NARUC's Cost Allocation Manual is that each customer should be responsible for paying revenues that are as closely aligned as possible with the costs that are caused by that customer, as calculated by each customer's coincident contribution to the system

¹ Interestingly, the preface to the Electric Utility Cost Allocation Manual indicated that Joe Jenkins from the Florida PSC headed up the Embedded Cost Working Group that authored the section on Peak Demand Methods.

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peak. The optimal methodology to determine the coincident contribution of a customer or a customer class to the system peak is to examine and determine for each monthly peak hour the contribution of each customer or customer class to the load in that peak hour.

It is a widely accepted principle that a customer's contribution to a system peak is the demand of that customer at a time coincident with the system peak. However, FPL's zealous defense of its existing rate structure blithely disregards the principle of matching revenues with associated costs for purposes of maintaining the structure of FPL's time sensitive business rates.

The Cost of Service Study submitted by FPL and approved by the Commission in Docket No. 080677-EI used the 12 CP and 1/13th Method for allocation of demand-related costs.² In order to provide for consistency and reasonableness in rate making, the use of the 12 CP method to allocate demand-related costs correspondingly requires that rates be established based upon FPL's twelve monthly system peaks, rather than based solely upon FPL's summer one hour peak and FPL's winter one hour peak. If FPL's demand-related costs are allocated using a 12 CP method, FPL's use of any other method to allocate the burden of cost would be inconsistent and inappropriate.

FPL submitted to the Commission two graphs, one reflecting FPL's summer peak hour and the other FPL's winter peak hour, for each year 2006 through 2009. The argument made by FPL is that for rate making purposes, the summer TOU hours should be determined in accordance with FPL's summer peak hour, and the winter TOU hours should be determined in accordance with FPL's winter peak hour. The use of these graphs is inappropriate, inapplicable and just flat-out wrong because it is inconsistent for FPL to use one method (12-CP) to allocate costs that will be borne by each customer class, and then for FPL to use a different method (the Summer and Winter Peak method) to allocate the burden of such costs among the customers.

Among other issues, the submission of a graph showing only FPL's Winter Peak Day implies that electric service in the other Winter Months follows a similar pattern. As discussed below, nothing could be further from the truth.

Quick Service Restaurants (QSRs) and Similarly Situated Customers

FPL asserts that AFFIRM requested the creation of a new TOU rate only for QSRs. That assertion is not true. At all times, AFFIRM has requested the development of a new TOU that would be appropriately designed to reflect the beneficial electric service characteristics of AFFIRM's QSR members, as well as QSRs that are not its members and other similarly situated FPL customers. AFFIRM recognizes that other types of medium sized electric customers have electric service characteristics that are similar to QSRs and that are beneficial to a regulated electric utility. These similar characteristics include, but are not limited to, operating on weekends and holidays for extended hours on each day that a location is open for business.

QSRs are not a completely homogeneous group when it comes to electric service. Most QSRs share certain common electric characteristics, such as significant refrigeration and outdoor lighting loads, as well as air-conditioning loads. But QSRs and their electric load patterns are dissimilar to the extent that

 $^{^2}$ It should not be construed that AFFIRM agrees with the use of this method as the best means by which to allocate demand-related costs.

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they have different modes and hours of operation. Among the AFFIRM Members, Waffle House operates twenty four hours per day every day of the year but the other AFFIRM Members do not operate around the clock. Among YUM! Brands (KFC, Pizza Hut, Taco Bell, A&W and Long John Silver's) and the Wendy's/Arby's Group, there is only limited breakfast service.

There are numerous other differences in the operation of some QSRs. Pizza Hut has many locations that have no seating and provide only "to go" service, while other locations provide both table service and "to go" service. Some QSRs cook primarily with electricity, even when natural gas service is available. Some QSRs, such as sandwich shops, perform little or no cooking on premises. Some brands are not open for business on Sundays. Many QSRs offer an extensive breakfast menu, while others do not. As a result of the varied operations of different QSRs, a "typical" load pattern for QSRs does not exist. However, despite the lack of a typical QSR load pattern, QSRs do share the traits of extensive refrigeration and outdoor lighting that result in use of a disproportionate share of energy during off-peak periods, at least in the service territories of electric utilities that have appropriately defined off-peak periods.

Initially, without conferring with AFFIRM, FPL indicated its intention to perform extensive research in order to determine whether the load shapes of QSRs vary from the load shape of the medium sized commercial class as a whole. On the basis of limited available data, FPL indicated and continues to contend that the load shapes of its QSR customers are no different that the load shapes of the remainder of its medium sized business class. FPL reached this erroneous conclusion because FPL only examined summarized loads during the entire duration of each On-Peak or Off-Peak Period. FPL did not examine the differences in hourly loads within any given On-Peak or Off-Peak Period.

The following sections explain AFFIRM's position that FPL's existing time-sensitive rates are improperly structured and result in a discriminatory apportionment of the revenue burden.

Summer Months

During the Summer Months of April through October, the On-Peak Period is defined in the GSDT-1 Rate as the nine hour period from noon until 9:00 PM. All hours during the Summer Months that are outside the On-Peak Period are designated as Off-Peak.

Any determination of On-Peak hours for the Summer Months that relies on the summer peak hour is inconsistent with the use of a 12 CP Method to allocate demand related costs. When a 12 CP Method has been used to allocate costs, an appropriate analysis requires an examination of the peak hour in each month of each year.

Attachment 1 to this AFFIRM Report is a table that provides monthly system peak load data during the seven Summer Months for each year from 1994 to 2009, a period of sixteen years. The subject data was reported by FPL on Page 401b of FPL's FERC Form No. 1 for each subject year. Upon the request of the Commission or any other party to this proceeding, copies of the source documents can be made available.

Given seven Summer Months per year for sixteen years, we determined from the date the hour in which each of the 112 monthly peaks during the Summer Months has occurred. Importantly, 111 of the 112 monthly peaks during the Summer Months occurred during the three hour period from the HE 1600 to

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the HE 1800, with a distribution of 15 monthly peaks (13.4%) in the HE 1600, 86 monthly peaks in the HE 1700 (76.8%), and 10 monthly peaks in the HE 1800 (8.9%). (The monthly peak in June 1996 occurred in the HE 1500. The monthly peak in June 1997 occurred at the HE 1700, but on a Saturday, outside of the On-Peak Period.) In fourteen of the sixteen years (87.5%) from 1994 to 2009, the annual summer peak occurred in the HE 1700. In the other two years, the annual summer peak occurred in the HE 1700.

The FPL Report states, in the fifth full paragraph, at page 3:

"FPL's analysis of the system load data from 2006 through 2009 shows that the current TOU rating periods are indeed accurate and correct. FPL's summer peak day has a long relatively flat peak between the hours of 12 noon and 9 p.m."

FPL offers no explanation of why a "long relatively flat peak" from the HE 1300 to HE 2100 is the most effective means by which to satisfy the primary criterion for the making of TOU rates, which criterion is the measurement of the coincident contribution of a customer or customer class to the coincident peak of FPL. In fact, this FPL assertion raises more questions that it answers. Is measurement over a "long" period likely to provide the best correlation between cost causation and the cost causer? If so, then why not use a longer period, such as eleven or thirteen or fifteen hours? Is a "relative flat" period likely to provide the best correlation and the cost causer? If "flat" is good, is "flatter" better and "flattest" best? If "flattest" is best, why not use a single hour, which is perfectly flat, or any period shorter than nine hours, each of which would be flatter than the nine hour On-Peak Period?

What is meant when FPL states that the current TOU rating periods are "accurate and correct"? Does that mean that FPL has tested other rating periods and that the nine hour On-Peak Period is the period that reflects the optimal correlation between FPL's monthly system peaks and the customer's coincident contribution to those monthly system peaks? If FPL has tested other periods and found them to be inferior, where are those studies to be found? AFFIRM's conclusion is that the selection of the nine hour On-Peak Period is entirely arbitrary and unsupported by any empirical evidence.

As noted before, FPL has focused attention on only the peak summer day, whereas its use of a 12 CP allocation of demand-related costs requires analyses of the peaks in each summer month. Second, a peak is a single hour, not a collection of hours. In case there is any doubt that the peak is a single hourly measurement, check the Cost of Service Study submitted by FPL in Docket No. 080677-EI. For purposes of the 12 CP allocation, FPL used the measurement of the single peak hour in each month, not the average of the measurements over a nine hour On-Peak Period.

The FPL Report reiterates FPL's position in its conclusion at page 14 by stating:

"The use of the current time-of-use periods (seasonal and hourly) is reflective of the FPL system load and is therefore appropriate. While FPL acknowledges that a summer peak period of noon to 9:00 pm is significant, it is nonetheless reflective of FPL's actual system load. Other jurisdictions around the United States may have shorter and more intense on-peak periods that lend themselves to intermediate "shoulder peak" periods. However, Florida, and FPL's service territory in particular, are anything but typical when compared to the rest of the country."

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Once again, the argument of FPL is unsupported by evidence and in fact raises more questions than it answers. If the loads of FPL are "anything but typical" when compared to the rest of the country, what characteristics set the FPL load apart from other electric utilities? As one of the southernmost electric utilities in the nation, would FPL not be subject to greater load swings than electric utilities in states with milder weather? If FPL has greater load swings that other electric utilities, wouldn't that weigh in favor of more pronounced short peak periods than other electric utilities? AFFIRM does not contest the fact that FPL's existing TOU rating periods are reflective of FPL's loads, but rather AFFIRM contends that FPL's existing TOU ratings periods are not <u>adequately reflective</u> of FPL's loads.

Most importantly, and overriding any other consideration for the determination of appropriate TOU rating periods, FPL has made no showing or offered any evidence that the use of a "long relatively flat peak" is an effective means to satisfy the most important criterion in allocated demand-related costs, i.e., the determination of the coincident contribution of a customer or customer class to the system peak.

As stated above, the appropriate means to allocate demand-related costs is to examine the monthly peak hour and then determine the contribution of each customer or customer class in that hour. For ratemaking purposes, this approach is impractical because the utility is unsure when such monthly peak hour will occur. Accordingly, most utilities, including FPL, have adopted a "second-best" approach that measures the non-coincident peak of a customer or customer class during a period in which a peak is most likely to occur. This second-best approach rests on the assumption that if it is impossible or impractical to measure the exact coincident contribution of a customer to the monthly system peak, an acceptable surrogate for such measurement would be a customer's non-incident peak during a likely peak period as a percentage of the sum of the non-coincident peaks of all customers. This second best approach is in fact the methodology that is the foundation of FPL's GSDT-1 Rate.

However, the glaring weakness in the structure of FPL's GSDT-1 rate is the inclusion of measurements of the customer's non-coincident peaks in hours in which a system monthly peak hour is extremely unlikely to occur. As set forth on Attachment 1, over the past sixteen years, all of FPL's monthly summer peaks with two exceptions (one of which was a system monthly peak during an Off-Peak Period) have occurred within the three hour period from the HE 1600 to the HE 1800. If nearly all of FPL's system peaks in Summer Months for sixteen years, and every summer peak since July 1997, have occurred within a discernible three hour period, then the appropriate period to measure the customers' non-coincident contributions to such peaks is within that same three hour period.

The necessity of using only the three hour period from HE 1600 to HE 1800 is further supported by analyzing FPL's summer loads for 2006, 2007 and 2008 during the On-Peak Period from HE 1300 to HE 2100.

Attachment 2 is a spreadsheet showing FPL's system hourly load data for the monthly peak day in each of the Summer Months of 2006, 2007 and 2008. For each of the three years, the spreadsheet reflects the average monthly peak day loads for the three hour periods from HE 1300 through HE 1500, from HE 1600 to HE 1800, and from HE 1900 to HE 2100. As would be expected (because all of FPL's peak monthly loads occur in the HE 1600 to the HE 1800), the average monthly peak day loads in the periods from HE 1600 to HE 1800 (hereafter referred to as the "Three Hour Summer Peak") are the highest.

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When the average monthly peak day loads for the three hour period HE 1300 to HE 1500 are compared to the Three Hour Summer Peak, the average loads for HE 1300 to HE 1500 are 94.9%, 95.8%, and 95.3% for 2006, 2007 and 2008, respectively, of the Three Hour Summer Peak. The MW differentials between the Three Hour Summer Peak and the three hour period HE 1300 to HE 1500, are 1018 MW for 2006, 851 MW for 2007, and 933 MW for 2008.

When the average monthly peak day loads for the three hour period HE 1900 to HE 2100 are compared to the Three Hour Summer Peak, the average loads for HE 1900 to HE 2100 are 93.1%, 92.3%, and 93.5% for 2006, 2007 and 2008, respectively, of the Three Hour Summer Peak. The MW differentials between the Three Hour Summer Peak and the three hour period HE 1900 to HE 2100, are 1384 MW for 2006, 1542 MW for 2007, and 1286 MW for 2008.

AFFIRM was unable to perform analyses for 2009 because FPL's 2009 peak load data on FERC Form 714 is inconsistent in several Summer Months with FPL's corresponding 2009 data on FERC Form 401b submittal.. (This discrepancy does not exist with the 2009 peak load data for the Winter Months.) FPL apparently submitted corrected 2009 data for purposes of FERC Form 401b, but did not submit the corresponding corrected 2009 load data for FERC Form 714.

Notwithstanding FPL's assertion that the nine hour period constitutes a "long relatively flat peak", there is a significant and material difference in the average peak day loads between the Three Hour Summer Peaks and the three hour period on each side of the Three Hour Summer Peak. (The three hour periods on each side of the Three Hour Summer Peak will hereafter be referred to as the "Wing Periods".) The differences are not only significant in percentage terms, but the real significance can be seen in the measurement of MW differences. A difference in average loads of 934 MW in the three hour period from HE 1300 to HE 1500, and of a whopping 1404 MW in the three hour period from HE 1900 to HE 2100 is huge. These MW differences are so large during the Wing Periods that when compared to the Three Hour Summer Peak, FPL has the opportunity to remove from service at least one generating unit, and possibly two, three or four generating units, and still serve the FPL load during the Wing Periods.

Example of the Discriminatory Nature of the Nine Hour On-Peak Period

By defining the On-Peak Period as a nine hour "long relatively flat peak" rather than the period in which contributions to the likely monthly system peaks can be determined, FPL discriminates against any customer, including a QSR, that has a non-coincident peak during the Wing Periods. This is illustrated by the following simple example, as set forth both numerically and graphically on Attachment 3.

Suppose that an Electric Utility has three, and only three, medium sized commercial customers, designated as Customers A, B and C. Each of these three customers has a monthly non-coincident peak of 100 kW and consumes 800 kWh over the nine hour On-Peak period. Each of these three customers has a different load pattern within the nine hour On-Peak period, as set forth on Attachment 3. For the sake of simplicity, it is assumed that the demand related charges applicable to the class of medium sized commercial customers for the subject month are a total of \$3000.

The Electric Utility's coincident peak for the subject class during the subject month is 280 kW. However, each of the three customers in the class has a non-coincident peak during the nine hour period

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of 100 kW, for a total of 300 demand billing units. With a cost of \$3000 and 300 demand billing units, the cost to each customer is \$10.00 per kW of billing demand.

However, as shown on Attachment 3, the contributions of each customer to the Electric Utility's coincident peak of 280 kW are 80 kW for Customer A, 100 kW for Customer B, and 100 kW for Customer C. If the cost of \$3000 were allocated on the basis of contributions to the monthly peak of the customer class, there would be only 280 demand billing units, and the cost to each customer would be \$10.7143 per kW of billing demand. Under this allocation, instead of each customer paying a demand charge for the subject month of \$1000 (100 kW times \$10.00 per kW), Customer B and Customer C would pay \$1071.43 (100 kW times \$10.7143 per kW) and Customer A would pay \$857.14 (80 kW times \$10.7143 per kW).

This example reveals that the 100 kW non-coincident peak demand of Customer A is treated as if such peak had occurred during the monthly system peak, even though such peak occurred well outside the system peak. In fact, the contribution of Customer A to the monthly system peak was 80 kW. The treatment of Customer A's non-coincident peak as if it were a coincident peak is unfair, unjust and discriminatory because it has the result of causing Customer A to cross-subsidize Customer B and Customer C in the amount of \$142.86.

A further examination of the load shape of Customer A, which peaks during a Wing Period, reveals that Customer A's load has the effect of filling in the valleys of the system load shape, thereby contributing to the appearance of a "long relatively flat peak period" (see Attachment 3, page 5 of 6). If not for the smoothing effect of the "contra-load shape" of Customer A, the system load shape during the nine hour peak period would be significantly less flat (see Attachment 3, page 6 of 6). These graphs illustrate that the true peak period occurs only during the three hour period for the hours ending 1600, 1700, and 1800, when the load shape is equally flat with or without the load of Customer A.

This example illustrates the fact that FPL's defined nine hour On-Peak Period during the Summer Months has the effect of causing FPL customers (any FPL customers, including QSRs) whose individual peaks occur outside of the Three Hour Peak Period to cross-subsidize the FPL customers whose individual peaks occur during the Three Hour Peak Period.

The FPL Report provided load shapes for each month of 2009 for a sampling of five QSRs in order to show that the QSRs have load shapes similar to the commercial group as a whole. In light of the fact that FPL's system peaked at either the HE 1600 or the HE 1700 in each of the Summer Months of 2009, it is informative to review the times at which the sampling of FPL's QSRs peaked during those months, as shown immediately below:

2009	System Peak	QSR Peak
April	HE 1600	HE 1300
May	HE 1600	HE 1400
June	HE 1700	HE 1300
July	HE 1600	HE 2100
August	HE 1700	HE 1300
September	HE 1700	HE 2000
October	HE 1700	HE 2000

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For rate making purposes, the primary criterion for the effective structuring of TOU rates is to choose a peak period that most effectively measures the coincident contribution of each customer or customer class to the system peak. The overwhelming evidence shows that during the Summer Months, FPL peaks only during the HE 1600, HE 1700, or HE 1800. Accordingly, for purposes of structuring an effective commercial TOU rate, the peak period in each Summer Month appropriately should be defined as the three hour period from HE 1600 to HE 1800.

FPL asserts that if new TOU rates were to be established as recommended by AFFIRM, other customers will experience economic harm. This is simply not true. It is true that certain other FPL customers will incur higher costs, but such higher costs will result from the elimination of the receipt of subsidies from other FPL customers. The elimination of overcharges levied on FPL customers that have individual peaks that are non-coincident with the Three Hour Peak Period, and the corresponding elimination of subsidies enjoyed by FPL customers that have individual peaks coincident with the Three Hour Peak Period, does not constitute economic harm. The FPL customers that have been enjoying such subsidies have no entitlement to such subsidies, and the higher amounts to be paid by certain FPL customers arise only because such subsidies have been eliminated. With the elimination of subsidies, the burden of revenues will be appropriately placed, pursuant to the matching principle, on those customers who are causing the demand-related costs.

Winter Months

While FPL's load shapes and peak during the Summer Months are relatively consistent (in shape and timing if not in magnitude), FPL's load shapes and peaks during the five Winter Months reflect substantial variations from each other. The On-Peak Hours during the Winter Months under the GSDT-1 Rate are defined as the four hour period from HE 700 to HE 1000 and a second four hour period from HE 1900 to HE 2200.

FPL's system load shapes for the Winter Months of November through March present a difficult (and likely insurmountable) problem in constructing a single rate design that would apply effectively to each individual winter month. Attachment 4 to this AFFIRM Report is a table that provides monthly system peak load data during the five Winter Months for each year from 1994 to 2009, a period of sixteen years. The subject data was reported by FPL on Page 401b of FPL's FERC Form No. 1 for each subject year.

An examination of the system peak load data for each Winter Month, as reflected on Attachment 4, reveals four significant factors that should be considered in the structuring of rates applicable to the Winter Months. These four factors are:

1. For the past sixteen years, no system peak load has occurred in a Winter Month in an HE 700, an HE 2100, or an HE 2200. The only time that a system peak load occurred in the HE 1000 was in January 1997, over thirteen years ago. In the past eight years, there has not been a single system peak load during a Winter Month occurring in the HE 700, the HE 1000, the HE 2000, the HE 2100, or the HE 22000.

- 2. A month by month examination of the system peak load data on Attachment 4 reveals a significant shift over time in the pattern of monthly peaks, particularly in the months of March and November.
 - For March, in the eight year period from 1994 to 2001, the system peak occurred in an On-Peak Period seven times (twice in the HE 800, twice in the HE 1900, and three times in the HE 2000). However, in the subsequent eight year period from 2002 to 2009, the March system peak occurred outside the On-Peak Period in all eight years (once in the HE 1500, three times each in the HE 1600 and the HE 1700, and once in the HE 1800).
 - For November, in the eight year period from 1994 to 2001, the system peak occurred seven times in the HE 1900, and once (1995) in an Off-Peak Period. But in the subsequent eight year period from 2002 to 2009, the November system peak occurred in an Off-Peak Period six times (once in the HE 1400, three times in the HE 1600, and twice in the HE 1700) and only twice in an On-Peak Period (both times in an HE 1900).
- 3. For December, the monthly system peaks have occurred in the HE 1900 in thirteen of the past sixteen years. A December monthly system peak has not occurred in an On-Peak Hour in the morning since the year 2000 (in 2003, the December monthly system peak was on a Sunday morning, an Off-Peak Period).
- 4. For January and February, the monthly system peaks for the past sixteen years have occurred twenty three out of thirty two times in the On-Peak morning hours, with six monthly system peaks in the On-Peak evening hours, and three monthly system peaks in Off-Peak Periods.

On the basis of the data presented above, it would be reasonable for FPL to project that in a year with a normal weather pattern, in the months of January and February, it is likely that a monthly system peak will occur in an HE 800 or HE 900. For ten of the past eleven years, the FPL system peak during the Winter Months has occurred during a January or February during an HE 800 or HE 900. The one exception to the system peak in the Winter Months occurring during a morning hour in January or February was 2004, when the system peak for the Winter Months occurred during November in an HE 1600, outside of the On-Peak Period.

Consistent with the discussion set forth above regarding the Summer Months, the fact that FPL usually peaks (and FPL expects and plans for a system peak) during January and February during the HE 800 and HE 900 means that a properly constructed TOU rate should designate the HE 800 and HE 900 as the on-peak hours during January and February. The HE 700 and HE 1000 should not be included in the on-peak hours for January and February because FPL does not experience a system peak in those hours.

Further, because the objective of effective rate making is to establish rates that reflect the coincident contribution of each customer or customer class to the system peak in a relevant time period (in this case, the months of January and February), it is totally irrelevant that FPL experiences a secondary system peak in such months. Consider the case whereby FPL peaks in the HE 800 during January, while an FPL customer experiences a non-coincident peak during an HE 1900. Under FPL's existing rate, that customer is deemed to have contributed to FPL's monthly system peak during an HE 800 because such customer had a non-coincident peak that occurred eleven hours later. This is patently unfair and

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discriminatory and should not be allowed. AFFIRM recommends that for purposes of a properly structured commercial TOU rate, the existing definition of the On-Peak Period for January and February should be changed to an on-peak period consisting of the two Hours Ending 800 and 900.

Moreover, the fact that FPL is likely to experience a system monthly peak in January or February during an AM hour is carried forward by FPL into the rating periods for the months of November, December and March. By contrast to January and February, for the last nine years, FPL has not had a single monthly system peak in an AM hour in November, December or March. Accordingly, there is no relationship between any FPL customer's consumption of energy during an AM hour and the contribution to FPL's system peak during November, December or March. For this reason, it is patently unfair and discriminatory for rate making purposes to treat energy consumption during the existing AM On-Peak Period as if such consumption is a fair measurement of a customer's coincident contribution to the monthly system peak that is anticipated to occur during a PM hour.

While it is clear that AM hours should not be included in a properly constructed TOU rate for the months of November, December or March, it is more difficult to define the hours that should be treated as On-Peak hours for such months.

During March of 2000 and 2001, FPL had a monthly system peak during the HE 2000, currently designated as an On-Peak Hour. But over the subsequent eight years, FPL has not had a single March system peak occurring in an On-Peak Period. However, in seven of the past eight years, FPL's March peak has occurred in the HE 1600, the HE 1700, or the HE 1800. AFFIRM acknowledges that March is a mild weather month in Florida and that that the average loads in March are much lower than those experienced in the other months. Nevertheless, in order to remain consistent with the principle of establishing rates that recognize that demand-related costs are allocated based on a 12 CP formula, the Commission must determine an appropriate peak period for the month of March. For purposes of practicality, if the Commission were to adopt AFFIRM's recommendation that the appropriate On-Peak Period for the Summer Months is the three hour period from HE 1600 to HE 1800, then based on the monthly system peaks for March over the last eight years, March also should be classified as a Summer Month with the same Three Hour Peak Period.

Of all months in the year, the month of November shows the greatest variability in FPL's load shape. Over the past eight years, there have been six monthly system peaks occurring outside the On-Peak Period with three peaks in the HE 1600 and two peaks in the HE 1700. November also should be classified as a Summer Month with the same Three Hour Peak Period.

In distinct contrast to March and November, the month of December has a very reliable load pattern. In eight of the last nine years (all except 2003, when the monthly peak for December was on a Sunday morning), the system monthly peak for December has occurred in the HE 1900. For purposes of an appropriately structured commercial TOU rate, the on-peak period for December should be the HE 1900.

FPL's Existing Rate Structure Negates the Usefulness of Price Signals

The primary purpose of TOU rates is to create a rate structure that provides the best match between cost causation and the customers that should bear the corresponding revenue burden. The secondary, but still

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very important, purpose of TOU rates is to provide price signals that will act as an incentive for customers to modify electric loads in order to reduce costs by either shaving loads during high cost periods or shifting loads to a lower cost period, with the intention that such load shaving or shifting will result in a corresponding cost reduction benefit to the electric service provider.

The NARUC's Electric Utility Cost Allocation Manual addresses itself to the importance of price signals by stating, in the first full paragraph at page 7:

"In recent years it has become apparent that utilities have the option of influencing their demand curves as well as varying their sources of supply. Thus, a utility with base load capacity but a rising peak demand may be able to shift some of its peak load to off-peak hours, to make better use of its base load facilities, rather than building additional peaking units."

The existing structure of FPL's primary commercial TOU rate, which has a "long relatively flat" On-Peak Period, substantially negates the usefulness of price signals. At all times, the monthly system peak hour falls within the Three Hour Peak Period, but the defined nine hour On-Peak Period includes a three hour Wing Period on each side of the Three Hour Peak Period. Many businesses have the capability to modify their loads by shaving a peak or shifting consumption backward or forward for an hour or two, but very few businesses have the capability to shift load for a period of five hours, at least without material disruption to the business. However, a load shift of up to five hours is required to effect a cost savings when the serving electric utility prescribes a nine hour On-Peak Period.

Consider the example set forth in Attachment 3. Customer B has an individual peak of 100 kW at the HE 1700 that is coincident with the Electric Utility's monthly peak of 280 kW. If Customer B were to shift 5 kW of its peak load into the HE 1900, then Customer B would have a reduction in its peak demand from 100 kW to 95 kW, and the Electric Utility would have a corresponding peak load reduction of 5 kW. Along with similar load reductions from similarly situated customers, the aggregate effect of such load reductions would allow the Electric Utility to reduce costs by deferring additions to its generating fleet. Under ordinary circumstances, the incentive for Customer B to reduce its individual peak demand by 5 kW would be the opportunity to save the demand charge on 5 kW.

But these are not ordinary circumstances, because under the structure of FPL's GSDT-1 Rate and other base rates offered by FPL, the appropriate demand charge has been artificially reduced with a corresponding artificial increase in non-fuel energy charges during the On-Peak Period. Although the act of suppressing demand by 5 kW should save Customer B the cost of the avoided demand of 5 kW, Customer B loses a part of such benefit because a portion of the demand charge has been embedded in non-fuel energy rates. This shifting of costs between the demand charge and the base energy charge reduces the incentive for Customer B to reduce its demand because the price signal has been altered. In addition, the customer does not benefit from lower cost fuel related costs in the HE 1900 versus the HE 1700 because the hourly fuel costs have been averaged over a broad number of defined On-Peak Hours, which conceals the effect of higher fuel costs during the true peak hours in the Summer and Winter months.

By contrast to the circumstance of Customer B (described in the previous paragraph), consider the implications of a shift in load by Customer A, which has individual peaks at the HE 1300 and HE 2100

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and a substantially lower load during the Three Hour Peak Period. If Customer A were to reduce its non-coincident demand by shaving 5 kW from each peak hour, or by shifting 5 kW from HE 1300 to HE 1200 and from HE 2100 to HE 2200, then Customer A would save the demand charges on 5 kW (which have been artificially reduced under FPL's rate structure) and Customer A would also save the non-fuel energy charges on 10 kWh (5 kWh shifted in both hours ending 1300 and 2100). (Note that the non-fuel energy charges have been artificially increased to counterbalance the artificial decrease in the demand charge.)

However, it should be noted that Customer A reacted to an inappropriate price signal resulting from the Electric Utility's treatment of the hours ended 1300 and 2100 as if such hours contained a monthly system peak. But neither of those hours contained a monthly system peak, so even though Customer A pays less revenue and the Electric Utility receives less revenue, the Electric Utility has no corresponding reduction in its demand related costs. In this instance, Customer A reacted to a signal that should never have been provided because reaction to such signal does not benefit the Electric Utility.

The FPL Report refers to the exact situation described in the previous paragraph and asserts that in this situation, Customer A is a "free rider", a customer that gains a cost reduction benefit absent a corresponding cost reduction benefit to FPL. However, if FPL has structured its rates properly to recognize only true on-peak hours, such situation that harm FPL could never occur.

The discussion above sets forth the fact that FPL's price signals are made significantly less useful because the demand charge is artificially reduced and the non-fuel energy charge is correspondingly artificially inflated. This rate treatment is explained by the testimony of FPL Witness Rosemary Morley in Docket No. 050045-EI dated March 22, 2005. At that time, Ms. Morley held the title of Rate Development Manager in the Rates & Tariffs Department at FPL. In Docket No. 050045-EI, in her direct testimony at page 29, lines 1 - 9, Ms. Morley testified that:

"Moreover, the standard demand charge approved by the Commission was generally below the classes' demand unit costs. Consequently, the energy charges approved for these schedules were designed to recover any demand charges not recovered through the demand charge. The Commission's decision in approving this rate structure relied, in part, on the fact that the coincident peak contributions of these classes tend to be more highly correlated with their kWh sales than with their billing kW. Thus, the recovery of a portion of demand costs through the energy charges was deemed appropriate (emphasis added)".

There are two problems here. First, FPL states <u>as a fact</u> that the coincident peak contributions of classes tend to be more correlated with energy sales that with demand readings. This is NOT a fact, and it flies in the face of reason that energy sales measured over a period of time would be more correlated with coincident class contributions to peak demand than coincident demand measurements. The only possible explanation for a better correlation with energy sales than with demand measurements would be the situation, as exists here, when FPL's demand measurements are made during periods that are noncoincident with the observed monthly system peaks.

Second, this same inappropriate rate structure (the reduced demand charges and increased energy charges) was proposed by FPL and approved by the Commission in Docket No. 080677-EI, but not

Docket No. 100001-EI AFFIRM Response in Docket No. 100358-EI Exhibit RLK-6, Page 16 of 20 because of any perceived better correlation between energy sales and contributions to peak demand. As explained in the third paragraph on page 189 of Order No. PSC-10-0153-FOF-EI:

"We acknowledge witness Pollock's position that demand charges should reflect demand costs and energy charges should reflect energy costs. However, consideration of rate stability and rate shock are also important considerations in rate design. Increases in the demand charge impact low load factor customers to a greater extent that high load factor customers because they are less able to offset the higher demand costs with lower energy costs and are thus less able to affect their total bill. FPL's demand rates have not changed significantly in over twenty years and increasing demand charges to unit costs in one step might be too drastic and could disproportionately affect low load factor customers. For these reasons we agree with the method used by FPL to set demand rates for the GSD classes."

In light of the foregoing, it is disingenuous for FPL to suggest in the FPL Report that any change in rates to the QSRs and other similarly situated customers would result in other customers providing a subsidy to the QSRs. The clear and simple truth is that QSRs and other medium sized business customers now provide a subsidy to low load factor customers. However, if FPL were to restructure its rates properly and narrow the On-Peak Period to encompass only those hours when monthly system peaks occur, low load factor customers would have a reasonable opportunity, which does not now exist, to modify their loads in a manner that would offset increases in demand charges.

Moreover, the Commission should take notice that when FPL filed its base rate increase request in Docket No. 080677-EI and sought nearly a 50% base rate increase on medium sized business customers, FPL did not evidence any concern over the rate making considerations of rate stability and rate shock to such customers. Apparently, such considerations are only valid to FPL when a revenue increase to a customer arises from removal of a subsidy from other customers, but not when FPL itself is seeking additional revenues.

The Inadequacy of FPL's Existing Rates for Medium Sized Business Customers

FPL offers four different rates to medium sized business (commercial and industrial) customers. These rates are (1) the General Demand Rate (GSD-1), designed as a "one-size fits all rate", (2) the General Demand TOU Rate (GSDT-1), (3) the High Load Factor TOU Rate (HLFT-1), and (4) the Seasonal Demand TOU rider (SDTR-1).

FPL contends that the mere offering of four different rates, however ineffective, is evidence of an adequate menu of rate offerings to the medium sized business customers. AFFIRM disagrees, and as the evidence shows, so do the vast preponderance of FPL's customers. FPL serves a medium sized business sector that is comprised of approximately 100,000 customers with widely varying loads. Many medium sized business customers do not operate on weekends or holidays, or have only limited weekend operations (most commercial office buildings, including banks, post offices, the offices of doctors, lawyers, accountants and other professionals, and most governmental operations). Many medium sized businesses do not operate at night. Other medium sized businesses operate extended hours, including nights, weekends and holidays. Yet despite the widely varying load patterns of such customers, more

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Exhibit RLK-6, Page 17 of 20 than 96% of all medium sized business customers find that FPL's rate offerings provide no cost reduction opportunity when comparing to simply using FPL's ordinary "one size fits all" GSD-1 Rate.

Attachment 6 to the AFFIRM Report is a copy of Pages 304 and 304.1 from FPL's 2009 FERC Form No. 1. These pages show a breakdown for 2009, for each rate offered by FPL, of energy sold, revenue, average number of customers, kWh of sales per customer, and revenue per kWh. As these pages reflect, despite the claims of rate efficiency by FPL, the commercial and industrial customers served under both the GSDT-1 Rate and the SDTR incur a substantially higher average cost per kWh than those customers who are served under the plain vanilla GSD-1 Rate. These two rates, GSDT-1 and SDTR, both of which have higher average costs per kWh that the GSD-1 Rates, are the rates that FPL encourages the AFFIRM Members to utilize. (As would be expected, those commercial and industrial customers served under the HLFT-1 Rate do realize a cost reduction benefit when compared to the GSD-1 Rate, but this rate is structured in a manner that cannot be used by AFFIRM Members.)

A few QSRs and similarly situated customers may find some cost reduction benefit in using the GSDT-1 Rate versus the GSD-1 Rate, notwithstanding the improper design of GSDT-1 Rate as explained herein. FPL asserts that the GSDT-1 Rate is accommodating to low load factor customers when compared to the GSD-1 Rate, but this is not true. Low load factor customers will have higher average costs than higher load factor customers under both the GSD-1 Rate and the GSDT-1 Rate because the same customer charge and demand charge are spread over fewer units of energy purchased. The benefit of the GSDT-1 Rate when compared to the GSD-1 Rate occurs if, and only if, the subject customer consumes less than 30% of its energy during the On-Peak Period. But as explained in detailed in the AFFIRM Report, the On-Peak Period under the GSDT-1 is improperly defined because its On-Peak Period encompasses numerous hours when no monthly system peak exists.

AFFIRM acknowledges that FPL offers a load control option that provides a credit to the customer for allowing FPL to cycle the customer's air conditioning load, and further acknowledges that FPL claims that such action has produced a "guaranteed savings" to an unnamed QSR chain in an amount of less than \$400 per store. It is true that FPL may provide an average credit in such amount to each QSR location, but AFFIRM argues that there is no guaranteed savings, especially if savings are determined net of related changes in costs. First, there is likely simply a shift in air conditioning loads into other time periods that could cause higher non-coincident peak readings than would otherwise occur, or which could result in equal or greater consumption of energy during the On-Peak Period. The AFFIRM Members also believe that there is an exposure to loss of revenues and other additional operating costs if FPL is allowed to cycle their air conditioning loads. Accordingly, the AFFIRM Members believe that a load control option would be disruptive to their businesses and are not willing to cede a load control option to FPL.

In response to the testimony of AFFIRM in Docket No. 080677-EI, and in discussions between FPL and AFFIRM, FPL consistently has stated that AFFIRM Members should consider the use of the Seasonal Demand TOU rider (SDTR-1) because such rate is structured as suggested by AFFIRM, i.e., the On-Peak Period in June, July, August and September is established as the three hour period from the HE 1600 to the HE 1800.

This rate may offer the opportunity for a selected number of QSRs and other similarly situated medium sized commercial customers to reduce their electric costs, but the design of the rate (the other eight

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months are substantially unchanged from the GSDT-1 Rate) is not appropriate for such customers. In fact, when seeking to implement this Seasonal Demand TOU rate in the context of Docket No. 050045-EI, in her direct testimony at page 32, lines 18 - 21, FPL Witness Rosemary Morley testified:

"Customers who typically experience lower usage during the summer months are likely to take advantage of the option Seasonal Demand TOU rider. Likely participants include customers involved in the agricultural and educational sectors".

The SDTR-1 was not designed for use by QSRs and similarly situated customers and does not fit the need of such customers. The QSRs and similarly situated customers are not square pegs that should be forced into round holes. These are customers who deserve to have the availability of a TOU rate that accurately and properly reflects the cost causation characteristics of their loads.

The Necessity of Multi-Period Pricing

The Energy Policy Act of 2005 ("EPAct 2005") is "An Act to ensure jobs for our future with secure, affordable and reliable energy." Among other actions, the EPAct 2005 amended the Federal Power Act and the Public Utilities Regulatory Policy Act and repealed the Public Utility Holding Company Act. TITLE XII of the EPAct 2005 is cited as the "Electricity Modernization Act of 2005". Sec. 1252 of the EPAct 2005, entitled "Smart Metering", provide in relevant part that "each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a time-based rate schedule under which the rate charged by the electric utility varies during different time periods and reflects the variance, if any, in the utility's cost of generating and purchasing electricity at the wholesale level. The time based rate schedule shall enable the electric customer to manage energy use and cost through advanced metering and communications technology".

Adoption by each state of the federal standard set forth in the previous paragraph was not mandated, and instead, each state was required only to consider the adoption of such standard. The Florida Commission considered such standard in a 2007 proceeding and failed to adopt such standard on the basis that the Florida electric utilities were already in substantial compliance with such standard. However, there can be no argument that the energy policy of the United States of America, as set forth in the EPAct 2005, embodies an intention for electric public utilities to become as cost effective and affordable as possible, in part by establishing time based rate schedules where different time periods reflect the serving utility's cost of generating and purchasing electricity at the wholesale level.

FPL is explicit in stating that it believes that customers do not react to price signals. FPL cites its implementation of a real-time pricing rate in or about 1996 and the closure of such rate in 2003 because of inadequate penetration of such rate. All over the United States, electric utilities have had great success in attracting customers and helping control demand-related costs through the implementation of time sensitive prices. (By way of example, over one-third of the entire load of Georgia Power Company, an affiliate of Gulf Power Company, is served under a real-time pricing scheme or another time-sensitive rate.) It is not clear why an extensive number of United States electric utilities other than FPL would have been successful in implementing real time pricing of electric energy when such efforts have been unsuccessful in the FPL service territory.

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Exhibit RLK-6, Page 19 of 20 As a result of FPL's belief that customers do not react to price signals, Steve Roemig, the Vice President of Rates & Tariffs for FPL, was very clear in explaining to AFFIRM that FPL's rates are not designed to provide any sort of incentive for a customer to shift its load profile or energy usage. Of course, this FPL position is contrary to the federal energy policy of the United States, and can be seen as an underlying reason that the GSDT-1 Rate offered by FPL is designed in a manner that substantially mitigates any customer incentive to shave or shift load in response to a price signal.

AFFIRM acknowledges that base rates are designed primarily to recover demand-related costs, and that demand-related costs can be adequately recovered through two part base rates; provided, however, that such two part rates embody properly constructed demand components and energy components that provide pricing incentives for customers to reduce demand during system peak periods. AFFIRM contends that base rates are improved when a third rate component (a shoulder period) is properly identified and priced in a manner that provides a further rate incentive for customers to shift usage from a shoulder period to an off-peak period.

This Docket No. 100358-EI was established to investigate TOU base rates and not the structure of fuel cost recovery rates. However, there is an inevitable entanglement between FPL's base rates and fuel cost recovery rates because FPL uses the On-Peak Period and Off-Peak Period established under FPL's base rates for the implementation of fuel cost recovery factors. This process for the determination of On-Peak and Off-Peak fuel cost components ignores the fact that an hour by hour study of fuel costs shows that fuel costs can be stratified into at least three distinct tiers during the Summer Months and at least two distinct tiers during the Winter Months, and that the stratification of hours for fuel cost purposes does not match the On-Peak and Off-Peak Periods as now defined in FPL's GSDT-1 Rate for either the Summer Months or the Winter Months. Further, as contemplated by the EPAct 2005, the greatest variations in the wholesale cost of power arise from variations in fuel-related and other variable energy costs and not from demand-related costs.

Accordingly, if the Commission intends to use the rating periods established under FPL's base rates for purposes of establishing time sensitive fuel cost recovery rates, then FPL's base rate should be comprised of at least three separate time periods for the Summer Months and at least two separate time periods for the Winter Months, and the fuel recovery components for the Summer Months and the Winter Months should be separate and discrete from each other unless FPL can demonstrate a correlation between the fuel-related costs in a defined summer rating period with the fuel-related costs in a defined winter rating period.

Conclusion

As set forth in detail above, AFFIRM asserts that FPL does not offer an appropriately structured TOU rate to QSRs and other similarly situated medium sized business customers. The existing TOU rate, GSDT-1, is unfair and discriminatory because it does not reflect an appropriate correlation between FPL's monthly system peaks and the coincident contributions of such customers to FPL's monthly system peaks. FPL's existing rates are unfair, unreasonable and discriminatory in that such rates cause QSRs and other similarly situated customers to pay more than their fair share of FPL's demand-related costs and thereby cross-subsidize the costs borne by other of FPL's medium sized business customers.

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Exhibit RLK-6, Page 20 of 20 The use by FPL of overly broad system peak hours within the GSDT-1 Rate is inconsistent with prudent utility practice by simply ignoring the facts that (1) during the Summer Months, FPL almost never experiences a monthly system peak outside of the hours ending 1600, 1700 and 1800, (2) during the Winter Months, FPL rarely experiences a monthly system peak during the hours ending 700, 1000, 2000, 2100, or 2200, (3) during the months of January and December, customer peaks during the PM hours do not correlate to FPL's system peaks that occur, or are expected by FPL to occur, during the AM hours, and (4) during the months of March, November and December, there is rarely (if ever) a monthly system peak during the AM hours or in the hours ending 2000, 2100, or 2200.

Further, the use by FPL of overly broad system peak hours substantially mitigates the usefulness of price signals that would provide a mutual benefit to both FPL and its customers by providing an incentive for customers to reduce electric costs by shaving or shifting loads during specific time periods, and therefore helping FPL to defer the construction or acquisition of new generating resources. This failure to offer effective pricing signals is directly contrary to the express national energy policy of the United States of America as specifically set forth in the Energy Policy Act of 2005.

The use of On-Peak and Off-Peak Periods as defined in GSDT-1 is inappropriate for establishing time sensitive fuel cost recovery components. If the fuel cost recovery periods are to be consistent with the base rating periods under a time sensitive base rate, then such base rate must include at least three rating periods during the Summer Months and at least two rating periods during the Winter Months, and the rating periods during the Summer Months and the Winter Months should not be subject to simple averaging unless there is substantial evidence of a meaningful correlation between the fuel costs occurring in the summer ratings periods versus the winter rating periods.

The Commission should cause FPL to establish a properly constructed time of use base rate, either as a stand-alone rate or as a modification to the existing GSDT-1 Rate, which has the following characteristics:

- The On-Peak Periods should be defined as follows: for the months of March through November, the On-Peak Period should be the three hours ending 1600, 1700 and 1800; for the months of January and February, the On-Peak Period should be the two hours ending 800 and 900; and for the month of December, the On-Peak Period should be the hour ending 1900. The Off-Peak Periods should be all hours not included in an On-Peak Period.
- The Demand Charge for each month should be determined based on the customer's metered peak demand occurring in an On-Peak Period.
- The Demand Charge for each month should be reflective of all demand-related costs, and should not be reduced by inclusion of demand-related costs in the base energy charges.

The proposed base rate as described above should not be used as the basis for the development and application of fuel cost recovery charges unless such base rate is further revised to consider the time periods that are most appropriate in order to cause the hour by hour incidence of fuel-related costs to be borne by the customers causing the fuel-related costs.

n Dkt 10000358-El

Exhibit RLK-6, Page <u>21</u> of **33**

Attachment 1

Exhibit RLK-6, Page <u>22</u> of <u>33</u>

Florida Power & Light System Load Data as Reported on Page 401(b) of FERC Form No. 1 Filings 1994 through 2009

FPL System Monthly Peak Hour Occurrence During Summer Months (APR-OCT)

								Summer Peak			
Year	APR	MAY	JUN	JUL	AUG	SEP	OCT	Day	Hour		
1994	1700	1800	1700	1700	1700	1700	1700	Jun 24	1700		
1995	1800	1800	1700	1700	1600	1700	1700	Jun 09	1700		
1996	1700	1600	1500	1700	1700	1700	1700	Jul 24	1700		
1997	1800	1700	1700	1700	1700	1700	1700	Aug 14	1700		
1998	1700	1700	1700	1700	1700	1700	1700	Jun 05	1700		
1999	1700	1700	1600	1700	1700	1600	1800	Sep 30	1600		
2000	1700	1700	1700	1700	1700	1700	1700	Aug 25	1700		
2001	1800	1800	1600	1700	1700	1700	1700	Aug 16	1700		
2002	1700	1800	1600	1700	1700	1700	1700	Aug 01	1700		
2003	1800	1700	1700	1700	1700	1700	1600	Jul 09	1700		
2004	1800	1700	1700	1700	1700	1700	1700	Jul 14	1700		
2005	1600	1800	1600	1700	1700	1700	1700	Aug 17	1700		
2006	1700	1700	1700	1700	1700	1700	1700	Aug 02	1700		
2007	1700	1700	1700	1600	1600	1700	1700	Aug 10	1600		
2008	1700	1700	1700	1700	1700	1700	1700	Aug 07	1700		
2009	1600	1600	1700	1600	1700	1700	1700	Jun 22	1700		

Notes:

1. June 1997 peak hour occurred on a Saturday.

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Attachment 2

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Florida Power & Light

Analysis of SUMMER Monthly Peak Day System Load Data for 2006, 2007, and 2008

Note - 2009 Summer Data has been omitted due to FPL reporting errors and inconsistencies between FERC Form 1, p. 401(b) and FERC Form 714 data

Hr24 M D Y dav Hrt Hr2 Hr3 Hr4 Hr6 Hr20 Hr21 Hr22 Hr23 Hr5 Hr14 Hr15 Hr16 Hr17 Hr18 Hr19 Hr7 Hr8 Hr9 Hr10 Hr11 Hr12 Hr13 12827 4 20 6 4 10827 9784 9171 8821 8722 9203 10558 11375 13357 14578 15613 16490 17457 18118 18649 18975 18762 18156 17255 17178 16238 14625 12244 8 6 1 11150 10087 9488 9121 9132 9739 11018 11690 12643 13882 15131 16093 16953 17766 18344 18812 19321 19172 18682 17829 17608 16622 14951 13215 19123 18717 16917 15297 6 15 6 4 13046 12073 11359 10853 10625 10890 19317 20086 20615 20901 21123 20997 20472 19680 11828 12647 13978 15509 16550 18272 6 11535 11903 19053 18317 16882 15329 7 26 3 13825 12824 12155 11624 19765 20384 20991 21342 21493 21248 20518 19536 12694 13471 14685 16155 17646 18828 2 6 13322 20018 20765 21346 21649 21819 21475 20973 20054 19657 18817 17265 15706 8 3 14302 12563 12128 11896 12123 12846 13402 14669 16337 17866 19049 9 1 6 5 12655 11840 11150 10840 10806 11383 12556 13115 14112 15660 17125 18246 19031 19648 19697 19146 18667 21585 20777 16483 16222 15330 14303 13158 18490 17701 16389 15067 13474 10 19 6 - 4 11943 11031 10403 10071 9951 10455 11792 12489 12971 14292 15483 16597 17557 18354 18895 19300 19440 19101 18468 19124 20142 18758

7 9959 13953 12726 4 27 5 10859 9463 9161 9081 9558 10801 11580 12313 13416 14486 15327 16069 16673 17071 17407 17626 17456 16896 16022 15839 15061 7 5 16738 15871 14634 - 4 11192 10248 9693 9305 9206 16943 13227 9618 10842 11623 12676 13982 15127 16289 17216 17980 18487 18856 19021 18713 17872 6 22 7 5 12728 11650 11021 10611 18620 19442 20021 20299 20584 20397 19868 18892 18143 17492 16057 14638 10443 10768 11603 12447 13830 15351 16743 17718 7 18 7 3 19384 18532 17031 15456 14046 13144 12443 12006 11857 12108 12761 13446 14805 16445 18075 19364 20370 21019 21421 21754 21746 21463 20784 19740 7 5 14559 13496 12813 12246 18650 17376 16044 8 10 12049 12251 12935 13604 15046 16701 18323 19653 20620 21363 21750 21999 21923 21525 20615 19680 19449 4 14307 9 13 7 12537 11628 11037 10657 10593 11031 11956 12497 13448 15072 16776 18114 19185 20046 20649 20914 21142 20798 19945 19241 18823 17594 15938 10 18 74 11652 10946 10410 10122 10099 10646 11938 12694 13178 14667 16041 17328 18264 19028 19480 19756 19880 19378 18664 18726 18005 16765 15290 13909 18584 19275 20126

4 28 8 1 9970 9101 8658 8445 8477 9003 10321 11057 11750 12856 13938 14770 15411 15988 16437 16750 16997 16800 16429 16006 15986 15042 13630 11977 5 21 8 3 12231 11309 10801 10484 10443 10949 19663 18781 18506 17425 15800 14025 12017 12864 13874 15136 16412 17458 18298 18987 19544 20048 20315 20121 8 4 13216 12319 11689 16354 14894 -5 11300 11161 11599 12389 13327 14575 20589 20289 19681 18871 18425 17778 15902 17182 18212 18978 19612 20069 20388 7 21 8 1 13318 12378 11822 20110 19120 18750 17979 16448 14828 11558 11398 11497 12142 12937 14254 15796 17225 18467 20903 20970 20653 19443 20148 20621 8 7 8 4 13533 12497 11828 11344 11218 11475 12220 12885 14281 15871 17328 18613 19556 20229 20658 20842 21084 20955 20378 19455 19133 18296 16791 15164 9 3 8 3 12963 12117 11595 11247 11233 11770 18446 19115 19658 20108 20417 20187 19484 18736 18630 17493 15918 14481 12939 13401 13929 15249 16575 17633 8 5 10886 10139 9360 9353 9895 11125 11841 12606 14010 15234 16321 17134 17810 18235 18818 18755 18181 17255 17126 16438 15502 14301 13012 10 10 9662 19713 18427 18780

Exhibit RLK-6, Page **25** of **25**

Attachment 3

.

Docket N. 100001-EI Response of AFFIRM in Dkt 1000358-EI

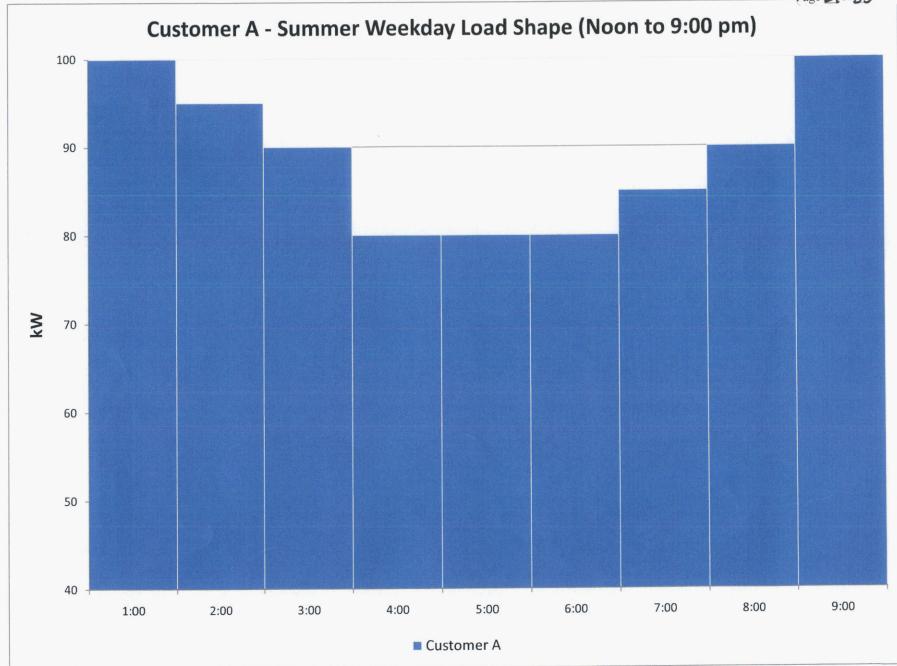
Exhibit RLK-6, Page **26** of **33**

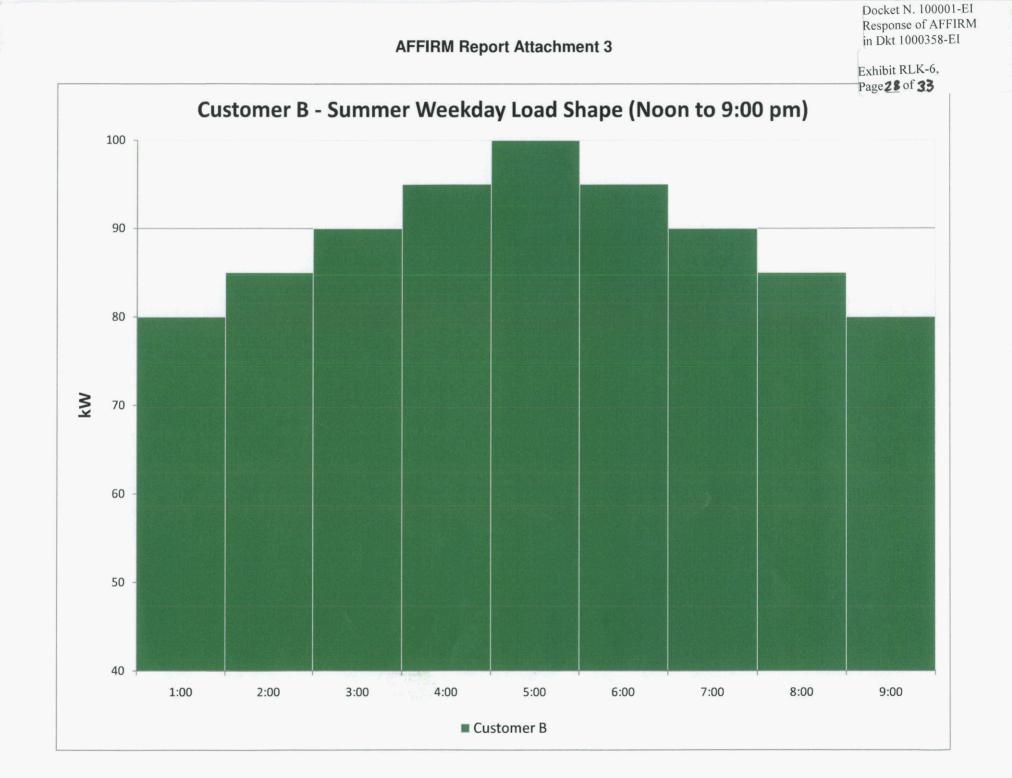
Example Customer Load Shapes - Summer Weekdays Noon to 9:00 p.m.

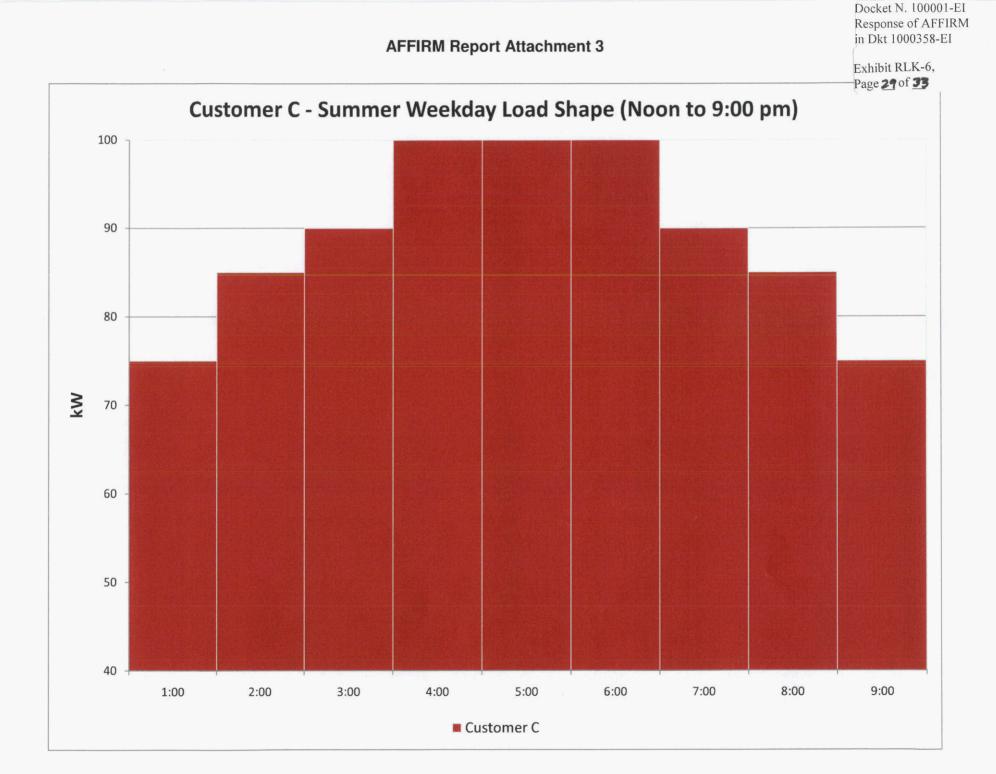
Customer A)							. .	~~	
	Peak kW =	100	kWh =	800	kW at Ti	me of Syste	m Peak =	80	
Customer B)									
	Peak kW =	100	kWh =	800	kW at Ti	me of Syste	m Peak =	100	
Customer C)									
	Peak kW =	100	kWh =	800	kW at Time of System Peak =		m Peak =	100	
			Sun	mer Week	day Hour E	nding (p.m	i.)		
	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
Customer A	100	95	90	80	80	80	85	90	100
Customer B	80	85	90	95	100	95	90	85	80
Customer C	75	85	90	100	100	100	90	85	75

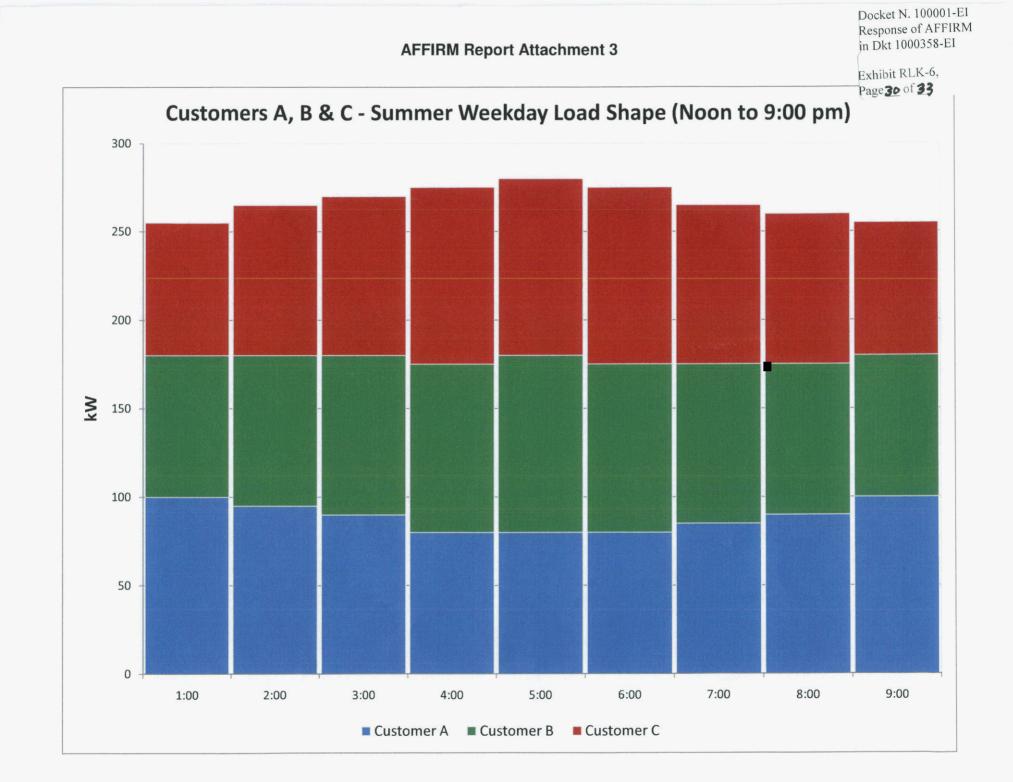
Response of AFFIRM in Dkt 1000358-EI











Docket N. 100001-EI Response of AFFIRM in Dkt 1000358-EI

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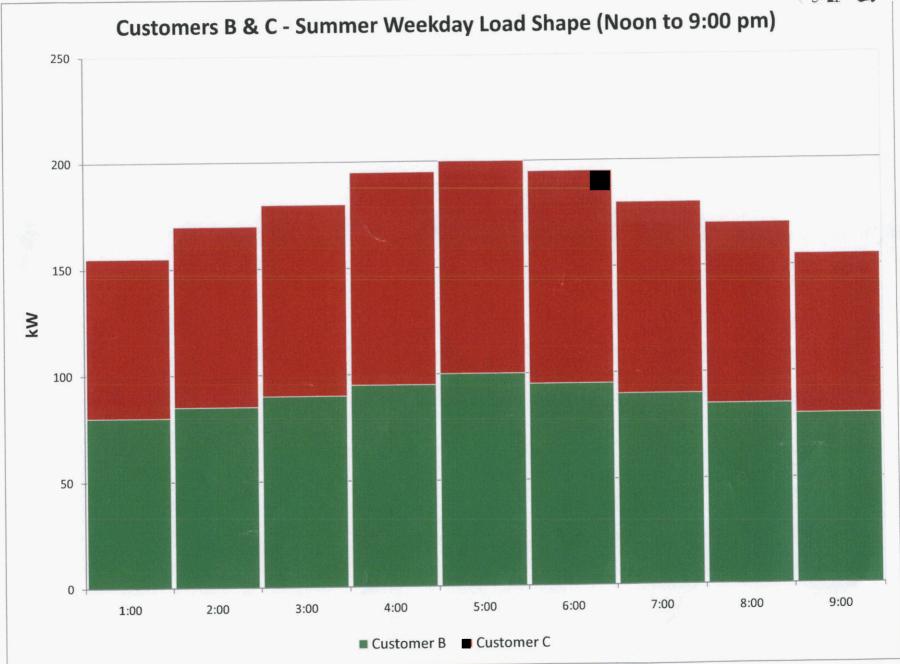


Exhibit RLK-6, Page **32** of **33**

Attachment 4

Exhibit RLK-6, Page **33** of **33**

AFFIRM Report Attachment 4

Florida Power & Light System Load Data as Reported on Page 401(b) of FERC Form No. 1 Filings 1994 through 2009

FPL System Monthly Peak Hour Occurrence During Winter Months

a manufacture a construction of the second s					·	Winter Peak		
Year	JAN	FEB	MAR	NOV	DEC	Day	Hour	
1994	800	800	1700	1900	1900	Mar 28	1700	
1995	800	800	2000	1500	900	Feb 09	800	
1996	800	800	1900	1900	1900	Feb 05	800	
1997	1000	800	1900	1900	1900	Jan 10	1000	
1998	1900	800	800	1900	1900	Nov 19	1900	
1999	800	800	800	1900	1900	Jan 06	800	
2000	800	800	2000	1900	800	Jan 27	800	
2001	900	2000	2000	1900	1900	Jan 05	800	
2002	800	1900	1600	1600	1900	Jan 09	800	
2003	800	1700	1600	1900	900	Jan 24	800	
2004	1900	800	1700	1600	1900	Nov 03	1600	
2005	800	900	1500	1600	1900	Jan 24	800	
2006	1900	800	1700	1900	1900	Feb 14	800	
2007	1500	800	1600	1700	1900	Feb 19	800	
2008	900	1900	1700	1400	1900	Jan 03	900	
2009	800	800	1800	1700	1900	Feb 05	800	

Notes:

1. December 2003 peak hour occurred on a Sunday.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and purchased power cost recovery clause with generating performance incentive factor.

DOCKET NO. 100001-EI

FILED: September 22, 2010

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Direct Testimony of Russell Klepper on Behalf of Florida AFFIRM was furnished to the following, by electronic and/or U.S. Mail, on this <u>22nd</u> day of September, 2010.

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Office of Public Counsel J.R. Kelly/Patricia Christensen c/o The Florida Legislature 111 W. Madison Street, Room 812 Tallahassee, FL 32399-1400 Tampa Electric Company Paula K. Brown P. O. Box 111 Tampa, FL 33601-0111

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Progress Energy Service Company, LLC John T. Burnett P.O. Box 14042 St. Petersburg, FL 33733-4042 White Springs Agricultural Chemicals, Inc. Randy B. Miller Post Office Box 300 White Springs, FL 32096 Respectfully submitted 22nd day of September 2010.

By

Wiggins, Esq.

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