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July 8, 2016

- VIA ELECTRONIC FILING -

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

Re: Docket Nos. 160021-EI, 160061-EI and 160088-EI

Dear Ms. Stauffer:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are the rebuttal testimony and exhibits of FPL witnesses Manuel B. Miranda (Docket Nos. 160021-EI and 160061-EI) and Sam Forrest and Roxane Kennedy (Docket Nos. 160021-EI and 160088-EI).

If you should have any questions about this filing, please do not hesitate to contact me.

Sincerely,

/s/ John T. Butler

John T. Butler

Enclosures

cc: Parties of record in Docket Nos. 160021-EI, 160061EI and 160088-EI

<u>CERTIFICATE OF SERVICE</u> Docket Nos. 160021-EI, 160061-EI and 160088-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished

by electronic mail this 8th day of July 2016, to the following parties:

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By: <u>s/ John T. Butler</u>

John T. Butler Florida Bar No. 283479

1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2	FLORIDA POWER & LIGHT COMPANY
3	REBUTTAL TESTIMONY OF MANUEL B. MIRANDA
4	DOCKET NOS. 160021-EI & 160061-EI
5	JULY 8, 2016
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1	TABLE OF CONTENTS
2	
3	I. INTRODUCTION
4	II. COORDINATION OF PLAN AND RATE CASE DECISIONS 4
5	III. PLAN EXPENDITURES ARE REASONABLE
6	IV. PLAN DISCOVERY RESPONSES ARE CONSISTENT 11
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
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18	
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20	
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1		I. INTRODUCTION
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3	Q.	Please state your name and business address.
4	А.	My name is Manuel B. Miranda. My business address is Florida Power &
5		Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408.
6	Q.	Did you previously submit direct testimony in this proceeding?
7	A.	Yes.
8	Q.	Are you sponsoring a rebuttal exhibit in this case?
9	А.	Yes. I am sponsoring the following rebuttal exhibit:
10		• MBM-3: FPL's Responses to OPC's 16 th Set of Interrogatories Nos.
11		363-365
12	Q.	What is the purpose of your rebuttal testimony?
13	А.	The purpose of my rebuttal testimony is to rebut the purported issues and
14		concerns with FPL's 2016-2018 Electric Infrastructure Storm Hardening Plan
15		("Plan") raised in the direct testimony of Office of Public Counsel ("OPC")
16		witness Helmuth W. Schultz III.
17	Q.	Please summarize your rebuttal testimony.
18	А.	In his testimony, OPC witness Schultz raises what he believes to be concerns
19		with FPL's proposed Plan, which FPL has filed in compliance with Rule 25-
20		6.0342 (F.A.C.), Electric Infrastructure Storm Hardening ("Infrastructure
21		Hardening Rule"). None of his concerns provides any valid basis for the
22		Florida Public Service Commission ("FPSC" or the "Commission") not to
23		approve the Plan, on the procedural track that it has laid out for doing so.

- Specifically, Mr. Schultz's concerns and assertions are invalid in the
 following key respects:
- The Commission in fact has scheduled consideration of the Plan
 contemporaneously with its consideration of FPL's base rate case, so all of
 the issues of costs and cost recovery for the Plan and associated storm
 hardening activities will be addressed together;
- The level of expenditures proposed under the Plan are not excessive and,
 in fact, are necessary to continue making progress toward the ultimate goal
 of providing storm hardening benefits for all of FPL's customers within a
 reasonable time frame; and
- FPL has provided consistent information through discovery on the costs
 for the Plan and associated storm hardening activities; witness Schultz's
 claims to the contrary suggest that he has not taken FPL's testimony and
 discovery responses fully into account.
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16 II. COORDINATION OF PLAN AND RATE CASE DECISIONS

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Q. Witness Schultz expresses concerns over considering FPL's Plan and the associated base rate costs on a separate basis. Is this concern valid?

A. No. The Commission's process and the timing of this process has, in fact,
been in place since May 2007, when FPL and the other Florida investorowned utilities ("IOUs") submitted their initial storm hardening plans for
Commission review and approval, as required by the Infrastructure Hardening

1 Rule. Since 2007, FPL and the other Florida IOUs have filed updated three-2 year plans in May (e.g., May 2010 and May 2013), as required by the 3 Infrastructure Hardening Rule and FPSC orders. In approving a utility's 4 Infrastructure Hardening Rule plan, the Commission considers whether the 5 plan "meets the desired objectives of enhancing reliability and reducing 6 restoration costs and outage times in a prudent, practical and cost-effective 7 manner." It has always been the Commission's practice to review the 8 expenditures resulting from storm hardening plans "when cost recovery is 9 requested" (page 16, FPSC Order No. PSC-07-1023-FOF-EI).

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11 Equally important, Mr. Schultz seems to misunderstand the intended 12 procedure in this consolidated proceeding. As shown in Order No. PSC-16-13 0182-PCO-EI, the case schedule provides for a single hearing on all four of 14 the consolidated dockets (August 22 to September 2, 2016) and a single brief 15 for all those dockets (September 16, 2016). Additionally, FPL understands 16 that the Commission will decide all issues from the consolidated dockets at 17 the same special agenda conference, currently scheduled for October 27, 18 2016. Thus, it is clear that the Commission fully intends to consider FPL's 19 Plan and its impact on base rates contemporaneously.

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1Q.If the requirement and practice of the Florida IOUs has been to file2proposed storm hardening plans in May, every three years, why did FPL3file its Plan on March 15, 2016, six weeks earlier than usual and4contemporaneously with its base rate request?

5 A. The timing associated with previous FPL three-year Infrastructure Hardening 6 Rule plan filings (filed in May 2010 and May 2013) and FPL's most recent 7 base rate request filings, Docket Nos. 080677-EI (filed in March 2009) and 8 120015-EI (filed March 2012), were not aligned such that the Plan and FPL's 9 base rate request were filed in the same year. However, this year, the timing of 10 filing FPL's base rate request and its Infrastructure Hardening Plan happened 11 to occur in the same year. As a result, FPL believed that filing its proposed 12 Plan six weeks early (rather than in May) and contemporaneously with its 13 base rate request would be more efficient and provide all parties more time to 14 review the Plan and its associated base rate impacts.

Q. Witness Schultz states that because FPL's Plan does not address vegetation management and pole inspections, it "makes it very difficult to tease out only storm hardening issues from the rate case issues and address them in an isolated way in this docket." Do you agree with witness Schultz's assertion?

A. No. It appears that witness Schultz is not familiar with the filing requirements
 of the Infrastructure Hardening Rule, even though I discussed them on pages 8
 -10 of my direct testimony. Vegetation management and pole inspections are
 not addressed in the Infrastructure Hardening Rule. Accordingly, FPL's

vegetation management and pole inspection plans and costs have never been
 included and submitted for approval in an Infrastructure Hardening Rule plan
 filing. These issues have always been addressed independently.

Q. Is witness Schultz's concern that the Commission's "decision to approve
the plan in Docket No. 160061-EI could result in automatic assumption
that the costs associated with the Plan will be allowed as part of Docket
No. 160021-EI" valid?

- 8 A. No. As I previously noted, his thinking that the two dockets are somehow 9 disconnected and will not be addressed together is inaccurate. The only thing 10 that is different for these two dockets is the filing schedule for testimony, 11 which the Commission established "to manage a prehearing process focused 12 on the issues to be litigated." All other dates and activities for the two dockets 13 are identical. Also, FPL's early filing and the consolidation of the dockets 14 ensures that the two proceedings will be addressed contemporaneously. 15 Finally, as I previously stated, it has always been the Commission's practice 16 to review the expenditures resulting from storm hardening plans "when cost 17 recovery is requested."
- Q. Witness Shultz claims that, "In Docket No. 160061-EI, FPL witness
 Miranda does not address costs at all in his testimony on storm
 hardening." Do you agree?

A. No. On pages 2 and 9 of my direct testimony in Docket No. 160061-EI, I
refer to the cost estimates in the Plan, which is attached as Exhibit MBM-1 to
that testimony. These estimated annual costs (\$360 million in 2016, \$490

1		million for 2017 and \$750 million for 2018), are addressed multiple times in
2		the Plan (see also pages 6, 20 and 25).
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4		III. PLAN EXPENDITURES ARE REASONABLE
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6	Q.	Do you agree with witness Schultz's concern that the level of proposed
7		infrastructure hardening expenditures in FPL's Plan is excessive and not
8		necessary because a "lower historic level of spending has already made
9		FPL's (system) one of the most storm-resilient and reliable in the systems
10		in the nation"?
11	A.	No. As provided in my direct testimony, while FPL's efforts to strengthen,
12		modernize and improve the reliability of the electric grid have produced
13		superior results, our work is far from done, as a significant portion of our
14		system remains to be hardened. Among Florida's electric utilities, FPL's
15		system is the most susceptible to storms within Florida, the most hurricane-
16		prone state in the nation. While we have been fortunate that FPL has not been
17		recently impacted by a major storm (even though there were 32 named storms
18		that formed in the Atlantic in 2013-2015), we cannot reasonably rely upon this
19		continuing good fortune in the future.
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21		Additionally, even with the proposed increase in storm hardening plan
22		spending over historical levels, FPL will continue to provide great value for
23		our customers, as total residential customer bills are expected to "grow

roughly in line with inflation from today through 2020 (based on current fuel
 curves), which is likely to keep FPL's bills among the lowest in the state"
 (witness Barrett's direct testimony, page 12, lines 5-7).

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As a result, FPL believes completing infrastructure storm hardening expeditiously not only is not excessive, it is the right thing to do.

Q. You mentioned that "our work is far from done." Please discuss how
much of FPL's feeder system is currently hardened or underground, how
much will be hardened/underground at the end of its proposed Plan, and
FPL's plans to complete the hardening of its feeder system.

11 A. At year-end 2016, after ten years of Commission-approved storm hardening 12 initiatives, 40% of FPL's distribution feeders will be hardened or 13 underground. At year-end 2018, assuming FPL's Plan is executed as expected, 14 60% of FPL's feeder system will be hardened or underground. At this time, 15 FPL's plans beyond 2018 have not been finalized. Future three-year plans 16 beyond 2018 will need Commission review/approval. However, if FPL were 17 to harden the same number of feeders per year that are contained in its current 18 proposed Plan (approximately 250 - 300 feeders per year), it would take until 19 2023 or 2024 to complete the hardening of FPL's feeder system. Today, and 20 even at year-end 2018, a significant portion of FPL's feeder system remains to 21 be hardened and is subject to a greater risk (vs. hardened feeders) of incurring 22 storm damage, with more customers experiencing storm related outages and 23 longer storm restoration times.

- 1Q.Doesn't FPL's Plan also include, for the first time, the hardening of2laterals?
- A. Yes. As discussed in its Plan, in 2018, FPL will initiate the hardening of its
 laterals. Laterals, which tap off of feeders, are the final step in the distribution
 primary voltage system and make up a significant portion of the overhead
 miles in FPL's distribution system. In 2018, FPL plans to target and harden
 850 950 laterals, approximately 1% of FPL's total lateral population.

8 Q. Is FPL's proposed Plan consistent with the Commission's initial 9 intentions and expectations regarding storm hardening?

10 A. Yes. When the Commission began implementing its storm hardening 11 initiatives to enhance the reliability of Florida's electric grid during extreme 12 weather events, it recognized that storm hardening would take a considerable 13 period of time and significant financial resources. In its 2007 report to the 14 Legislature, dated July 2007, regarding its various storm initiatives, the 15 Commission made several recommendations. These included maintaining a 16 high level of storm preparation, no matter whether recent hurricane seasons have 17 been mild or severe and strengthening Florida's electric infrastructure to better 18 withstand the impacts of severe weather events, which should include a wide 19 range of hardening activities that will take years to complete. The Commission 20 also observed in its report (see page 4) that, "Achieving a transmission and 21 distribution system capable of better withstanding hurricanes will take time and

require financial resources."¹ The Commission also stated the following (see 1 2 page 6), which is just as true today as it was in 2007: "Reliable electric service is 3 the cornerstone of Florida's economy. Citizens and businesses rely on an 4 adequate reliable supply of electricity. Accordingly, utilities need to be able to 5 rapidly recover from the destruction caused by hurricanes. Strengthening 6 Florida's electric transmission and distribution grids to better withstand the 7 effects of these extreme weather events helps to reduce power outages and the 8 time and cost incurred to restore electric service."

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IV. PLAN DISCOVERY RESPONSES ARE CONSISTENT

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Q. In his testimony, witness Schultz states that he believes there are
inconsistencies among FPL's proposed Plan, its testimony and its
discovery responses. Do you agree that there are inconsistencies?

A. No. His purported concerns are unfounded and appear to mostly result from
 his misunderstanding of FPL's testimony, interrogatory responses and what is
 or is not included in an Infrastructure Hardening Rule filing. Several of his

 Report to the Legislature On Enhancing the Reliability of Florida's Distribution and Transmission Grids During Extreme Weather. Florida Public Service Commission (July 2007), available at https://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/EnergyInfrastructure/UtilityFilings/ docs/stormhardening2007.pdf concerns were also directly addressed by FPL in its responses to OPC
 interrogatories.

3 Q. Please explain.

A. On page 9 of his testimony, witness Schultz discusses what he believes to be
inconsistencies with information contained in FPL's responses to OPC's 4th
Set of Interrogatories, Interrogatory Nos. 111 and 113, and pages 5 and 6 of
Exhibit MBM-1, Docket No. 160061-EI. These exact same purported
inconsistencies were explicitly addressed by FPL in its responses to OPC
Interrogatory Nos. 363-365, which were provided to OPC on June 14, 2016,
and are attached as Exhibit MBM-3 to my rebuttal testimony.

11 Q. Please explain why witness Schultz is wrong to conclude that there are 12 inconsistencies.

A. Witness Schultz believes there are inconsistencies in the references to 2017 costs for storm hardening that have been provided in FPL's responses to OPC Interrogatory No. 111 (\$604 million), Interrogatory No. 113 (\$487 million) and Exhibit MBM-1 in Docket No. 160061-EI (\$490 million). Let me be clear, there are no inconsistencies. A more careful review of the information provided in FPL's direct testimony and interrogatory responses, indicates that:

The \$604 million amount contains more than the costs (\$487 million)
 incurred to comply with the Infrastructure Hardening Rule (i.e., the \$604
 million also includes costs associated with distribution and transmission
 pole inspections and replacing wood transmission structures, as well as
 other costs).

The estimated 2017 costs of \$490 million referenced in Exhibit MBM-1 in
 Docket No. 160061-EI include costs for feeder hardening and hardening
 critical poles but no costs for lateral hardening, as FPL's lateral hardening
 initiative is not initiated until 2018. This is discussed in my direct
 testimony and referenced multiple times throughout Exhibit MBM-1.

The two percentages for feeders remaining to be hardened at the end of 6 7 2018 (54% from FPL's response to OPC Interrogatory No. 113 and 40% 8 from Exhibits MBM-1 and MBM-2) are different because they are 9 comparing two different populations of feeders (i.e., FPL's response to 10 OPC Interrogatory No. 113 shows the number of overhead feeders 11 hardened per the Infrastructure Hardening Rule as a percentage of the total 12 number of overhead feeders in the system, while Exhibits MBM-1 and 13 MBM-2 show the total number of feeders hardened or undergrounded vs. 14 the total number of all feeders in the system).

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16 Witness Schultz also has concerns that FPL has created inconsistencies by not 17 including certain base rate cost impacts (e.g., vegetation management and pole 18 inspections) in its Infrastructure Hardening Plan filing. As previously 19 mentioned, the Infrastructure Hardening Rule does not address vegetation 20 management and pole inspection plans and costs, which is why they are not 21 addressed in the Plan. I would note that those topics likewise were not 22 addressed in any of FPL's prior infrastructure storm hardening plans approved 23 by the Commission.

1 Finally, witness Schultz notes that pole inspection costs are decreasing, yet 2 hardening costs are more than doubling and material supply inventory costs 3 are increasing due, in part, to storm hardening. Apparently, his point is to once 4 again indicate that storm costs should not be looked at separately in Docket 5 Nos. 160021-EI and 160061-EI. While these concerns are not valid (e.g., the 6 decrease in pole inspection costs is not related to increasing Infrastructure 7 Hardening Rule costs), as noted previously, the Commission has consolidated 8 these two dockets to facilitate precisely the kind of review contemplated by 9 witness Schultz.

10 Q. Should the Commission approve FPL's 2016-2018 Plan?

A. Yes. As described throughout my direct and rebuttal testimonies and exhibits
in this proceeding, FPL's 2016-2018 Plan meets the requirements set out in
Rule 25-6.0342, F.A.C. Our proposed Plan also broadens the scale and scope
of feeder hardening to expeditiously address all feeders within FPL's system,
initiates lateral hardening in 2018 and is appropriate and necessary because it:

- helps to address customers', public officials' and other stakeholders'
 expectations for increased storm resiliency, fewer outages and prompt
 service restoration, as evidenced by recent storm events (e.g., Hurricane
 Sandy in the northeast);
- expands the benefits of hardening, including improved day-to-day
 reliability, to all customers throughout the system;
- is aligned with the goals of the U.S. DOE (i.e., developing a more resilient
 and reliable system to meet future demands); and

 2 Therefore, since witness Schultz's testimony provides no basis for a cont 3 conclusion, FPL's Plan should be approved by the Commission. 4 Q. Does this conclude your rebuttal testimony? 5 A. Yes. 6 	trary
 4 Q. Does this conclude your rebuttal testimony? 5 A. Yes. 	
5 A. Yes.	
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Florida Power & Light Company Docket No. 160021-EI OPC's Sixteenth Set of Interrogatories Interrogatory No. 363 Page 1 of 1

QUESTION:

Storm Hardening. Refer to the response to OPC Interrogatory No. 111. Provide for 2016 and 2017 a breakdown of the forecasted spending into categories (i.e., feeders, laterals, transmission wood structures to be replaced, pole inspections, etc.) and if the amount in the rate filing for 2017 is different from the \$604 million, provide that amount by category also. Also, for 2016, provide the actual spending by category by month.

RESPONSE:

	(<u>\$ Millions)</u>				ions)	
	Actua	Actual 2016 YTD Capital Expenditures			Forecasted Capital Expenditures	
FPSC Hardening	Jan	Feb	Mar	<u>Apr</u>	May	<u>2016</u> <u>2017</u>
Feeders/Critical Poles	\$20	\$24	\$25	\$30	\$32	\$350 \$475
Pole Inspections – Distrib.	\$5	\$6	\$5	\$4	\$4	\$40 \$42
OH/UG Conversions	\$0	\$0	\$0	\$0	\$0	\$7 \$7
Structure Inspections – Trans.	\$4	\$3	\$3	\$3	\$3	\$28 \$29
Replacing Wood Trans. Poles	<u>\$2</u>	<u>\$2</u>	<u>\$3</u>	<u>\$4</u>	<u>\$4</u>	<u>\$46</u> <u>\$51</u>
Total	\$31	\$35	\$36	\$41	\$43	\$471 \$604

Florida Power & Light Company Docket No. 160021-EI OPC's Sixteenth Set of Interrogatories Interrogatory No. 364 Page 1 of 1

QUESTION:

Storm Hardening. Refer to the response to OPC Interrogatory No.111, OPC Interrogatory No. 113 and page 6 of Exhibit MBM-1 in Docket No. 160061-EI. OPC Interrogatory No. 111 indicates a total storm hardening forecast of \$604 million for 2017 and OPC Interrogatory No. 113 indicates that \$487 million will be for distribution feeder hardening yet page 6 of Exhibit MBM-1 in Docket No. 160061-EI indicates that the Company's 2017 estimated hardenings for laterals is \$490 million. Please explain how the 2017 level of feeder hardening can be \$487 million and the 2017 level of lateral hardening can be \$490 million when the total forecast including other hardening is \$604 million.

RESPONSE:

As can be seen in FPL's response to OPC's Sixteenth Set of Interrogatories No. 363, the \$604 million in 2017 represents total capital expenditures for all FPSC hardening initiatives. The \$487 million in 2017 contained in FPL's response to OPC's Fourth Set of Interrogatories No. 113 (rounded to \$490 million in Exhibit MBM-1, Docket No. 160061-EI) represents total costs (capital and O&M) for hardening feeders/critical poles, per FPSC Rule 25-6.0342. FPL's plan to harden laterals is not scheduled to be initiated until 2018, as discussed on page 7 of witness Miranda's direct testimony and pages 5, 6, 13, 15 and 20 of Exhibit MBM-1, Docket No. 160061-EI.

Florida Power & Light Company Docket No. 160021-EI OPC's Sixteenth Set of Interrogatories Interrogatory No. 365 Page 1 of 1

QUESTION:

Storm Hardening. Refer to the response to OPC Interrogatory No. 113 and page 6 of Exhibit MBM-1 in Docket No. 160061-EI. OPC Interrogatory No. 113 indicates that the cumulative feeders hardened at the end of 2018 is 46%, suggesting 54% remains to be hardened, yet page 5 of Exhibit MBM-1 in Docket No. 160061-EI indicates that after 2018, the Company will have 40% of its feeder system that will still need to be addressed. Please explain the difference.

RESPONSE:

The "40% of its feeder system that will still need to be addressed" presented in Exhibit MBM-1, Docket No. 160061-EI, was calculated adding the number of all feeders hardened (i.e., per Rule 25-6.0342 and FPL's Priority Feeder reliability initiative) plus the number of feeders placed underground, divided by the total number of feeders (both overhead and underground) in FPL's system (see Exhibit MBM-2). The "46% cumulative feeders hardened" presented in FPL's response to OPC's Fourth Set of Interrogatories No. 113 was calculated by dividing the number of overhead feeders hardened per Rule 25-6.0342 (F.A.C.) by the total number of overhead feeders in the system.

1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2	FLORIDA POWER & LIGHT COMPANY
3	REBUTTAL TESTIMONY OF SAM FORREST
4	DOCKET NOS. 160021-EI AND 160088-EI
5	JULY 8, 2016
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16	
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22	
23	
24	

TABLE OF CONTENTS

2		
3	I. INTRODUCTION	
4	II. SUMMARY	4
5	III. INCENTIVE MECHANISM PERFORMANCE	6
6	IV. ADEQUACY OF INFORMATION PROVIDED BY FPL	9
7	V. REPLACEMENT OF UPS CONTRACTS	
8	VI. INCENTIVES FOR POWER SALES AND PURCHASES	
9	VII. RECOVERY OF VARIABLE POWER PLANT O&M	
10	VIII. IMPACT OF INCENTIVE MECHANISM ON CAPACITY	Y DECISIONS
11		
12	IX. MARKET IMPLICATIONS	
13	X. COMBINING DISSIMILAR INCENTIVES	
14	XI. JURISDICTIONAL POLICY ISSUES	
15		
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1		I. INTRODUCTION
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3	Q.	Please state your name and business address.
4	A.	My name is Sam Forrest. My business address is Florida Power & Light
5		Company ("FPL"), 700 Universe Boulevard, Juno Beach, Florida 33408.
6	Q.	Did you previously submit direct testimony in this proceeding?
7	A.	Yes.
8	Q.	What is the purpose of your rebuttal testimony?
9	A.	The purpose of my testimony is to rebut the testimony of the Office of Public
10		Counsel ("OPC") witness David E. Dismukes and the South Florida Hospital
11		and Healthcare Association ("SFHHA") witness Lane Kollen. Specifically, I
12		will rebut witness Dismukes' inaccurate assertions that: (1) the evidence
13		provided by FPL does not show that the Incentive Mechanism has been
14		successful; (2) FPL has provided no compelling information on the extent to
15		which customers will benefit from the continuation of the Incentive
16		Mechanism; (3) FPL has developed generation capacity that will offset the
17		UPS contracts; (4) the Incentive Mechanism can lead to inappropriate
18		incentives for the over-development of capacity resources; and (5) the
19		Incentive Mechanism has anti-competitive market implications. I will also
20		address witness Dismukes' recommendation that FPL's proposal should be
21		spun-off into a separate proceeding.

1 Further, I will rebut witness Kollen's assertions that FPL's proposal to net 2 economy sales and purchases for purposes of calculating variable power plant operating and maintenance ("O&M") costs results in the enhanced recovery of 3 these "non-fuel" costs, that are already included in the base revenue 4 5 requirement, through the Fuel Clause. I will also rebut witness Kollen's 6 assertion that wholesale power sales should be excluded from the proposed 7 modified Incentive Mechanism. Finally, I will rebut the assertions by both 8 witness Dismukes and witness Kollen that short-term power purchases should 9 be excluded from the proposed modified Incentive Mechanism.

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In my rebuttal testimony, I will refer to the Incentive Mechanism that was approved by Order No. PSC-13-0023-EI as the "initial Incentive Mechanism" and the Incentive Mechanism proposed in Docket No. 160088-EI as the "proposed modified Incentive Mechanism." I will use the unmodified term Incentive Mechanism" to refer to FPL's asset optimization program in general, whether current or future.

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II. SUMMARY

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20 Q. Please summarize your rebuttal testimony.

A. My rebuttal testimony demonstrates that witnesses Dismukes and Kollen raise
no legitimate objections to the proposed modified Incentive Mechanism.
Rather, in their zeal to find fault they overlook the substantial benefits that the

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Incentive Mechanism has generated for customers and the potential for it to continue to provide substantial benefits.

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Over the three-year period from 2013 through 2015, FPL has delivered 4 5 additional benefits to customers of nearly \$22 million under the initial 6 Incentive Mechanism, through its incentives for expanding asset optimization 7 activities. The overall success of the initial Incentive Mechanism has been clearly demonstrated through numerous filings in the Fuel Clause docket and 8 9 through testimony and the discovery process in this proceeding. FPL's 10 proposed reduction to the "Customer Savings Threshold" of \$10 million is warranted due to the expiration of the Unit Power Sales ("UPS") contracts, 11 12 under which FPL was able to realize slightly more than \$10 million in benefits 13 While renewal of the UPS contracts on the terms offered by per year. 14 Southern Company was not economically attractive for FPL overall, the 15 expired contracts offered unique market advantages for optimization activities 16 and cannot be duplicated with capacity additions on FPL's system. Finally, 17 FPL's share of the initial Incentive Mechanism benefits has not been 18 unreasonable, unjust, or excessive. In fact, the share of benefits to FPL has been, in total, only 0.5% higher under the initial Incentive Mechanism as 19 20 compared to the prior sharing mechanism, yet the magnitude of total 21 optimization dollars delivered is up nearly 23%, resulting in significant 22 incremental benefits for customers.

III. INCENTIVE MECHANISM PERFORMANCE

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3Q.Witness Dismukes asserts on page 13 of his testimony that customers4were better off under the 2009 through 2011 incentive regime because5they received over \$202.8 million in wholesale power gains and savings as6compared to the \$102.2 million they received in total benefits under the7initial Incentive Mechanism from 2013 through 2015. Is this a valid8conclusion?

9 A. Absolutely not. The comparison that witness Dismukes makes is 10 disingenuous and misleading. For his comparison to have any validity, one 11 would have to assume that all of the factors that drive the wholesale power 12 market and FPL's ability to participate in the power market have remained 13 unchanged since 2009, resulting in the same outcome year after year. This is 14 a nonsensical assumption that reflects a lack of understanding of the practical 15 realities and drivers of the wholesale market. The primary factors that drive 16 the wholesale power market include weather, FPL's generation mix, other 17 market participants' generation mix, FPL's unit outages, other market 18 participants' unit outages, fuel prices, and transmission limitations. These 19 factors change constantly. At a minimum, FPL's system is markedly different 20 today than it was six years ago. Therefore, comparing the gains and savings 21 of FPL's wholesale power transactions from 2009 through 2011 to the total 22 benefits from 2013 through 2015 is a completely irrelevant and misleading 23 exercise.

1 FPL has never contended that the Incentive Mechanism could create 2 wholesale power opportunities where they wouldn't otherwise exist. Those opportunities are predominately driven by market conditions outside of FPL's 3 control. What the Incentive Mechanism can do, and has done, is to create 4 5 additional incentives for FPL to search out every opportunity for gains within 6 the market conditions as they exist. For example, witness Dismukes fails to 7 mention that the volume of MWh FPL traded from 2013 through 2015 8 increased nearly 24% over the volume traded from 2009 through 2011. While 9 the volume of MWh traded is also a function of market conditions to some 10 degree, it is also influenced by FPL's active engagement in pursuing available 11 opportunities. FPL's entry into the PJM and MISO markets, which I will 12 discuss later in my testimony, is a clear example of this active engagement.

Q. On page 22 of his testimony, witness Dismukes asserts that he does not view FPL's performance under the initial Incentive Mechanism as a success. Do you agree with this conclusion?

A. No. In fact, the assertion is baffling. The information provided on Exhibit
SAF-1 (pages 1 through 4), attached to my direct testimony in Docket No.
160088-EI, contradicts his assertion and clearly demonstrates the success of
the initial Incentive Mechanism. Overall, customers received nearly \$22
million in additional benefits under the initial Incentive Mechanism over the
2013 through 2015 time period. This is clear proof that the program has
delivered added value for customers, just as FPL and the Florida Public

- Service Commission ("Commission") envisioned when it was approved in
 2012.
- Q. Witness Dismukes asserts on page 25 of his testimony that the initial
 Incentive Mechanism program lacks many characteristics that comprise
 a well-managed, well-executed asset management program. Do you agree
 with this characterization of the initial Incentive Mechanism?
- 7 A. No. While FPL has never characterized the Incentive Mechanism as an asset 8 management plan, it has all of the characteristics that witness Dismukes 9 claims are the hallmark of a well-managed and well-executed asset 10 management program. Upon implementation of the initial Incentive Mechanism, FPL fully vetted and analyzed all aspects of the program 11 12 including accounting, risk management, reporting, regulatory filings, deal 13 entry, entry into new markets, and optimization strategies to develop a clear 14 set of processes and guidelines. This analysis provided the foundation for 15 FPL to continue achieving its primary goal of delivering the most reliable fuel 16 supply to its customers at the lowest possible cost and then, once native load 17 requirements have been met, to try to derive additional value from assets that 18 aren't being fully utilized at a particular time. Furthermore, FPL has 19 evaluated third party management services and entered into several Asset 20 Management Agreements that provided the most cost-effective method of 21 optimizing a portion of idle natural gas transportation capacity. At the same 22 time, however, FPL has been able to derive the majority of value through its 23 own trading activities, which allows us to retain a greater share of the asset

1 management benefits for customers. The results of the initial Incentive 2 Mechanism show that FPL has delivered over \$32.9 million of customer 3 benefits from measurable improvements in the increased utilization of its 4 natural gas assets.

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IV. ADEQUACY OF INFORMATION PROVIDED BY FPL

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Q. On page 16 of his testimony, witness Dismukes asserts that there has been
little formal data and information collected or provided on the workings,
performance, and policy implications of the Incentive Mechanism. Do
you agree with this assertion?

12 A. No. When the initial Incentive Mechanism was evaluated as part of the 13 settlement issues in the 2012 rate case, FPL provided direct testimony, 14 rebuttal testimony, and responses to over 100 interrogatories and document 15 requests. SFHHA witness Kollen provided both direct and rebuttal testimony 16 in support of the initial Incentive Mechanism and OPC witness Daniel filed 17 direct testimony in opposition to it. There are over 200 transcript pages of 18 live testimony from witness Kollen, witness Daniel, and myself. The initial 19 Incentive Mechanism was one of four specific issues from the proposed 20 settlement agreement that were identified for separate, individualized "public 21 interest" findings. After considering the extensive record of prefiled 22 testimony, exhibits and cross-examination, the Commission concluded that the 23 initial Incentive Mechanism was in the public interest as a pilot program. See

Order No. PSC-13-0023-S-EI, at pages 6-7. The Florida Supreme Court
 affirmed that order in all respects.

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In support of the proposed modified Incentive Mechanism, I have provided direct testimony and this rebuttal testimony and FPL has filed responses to more than 135 interrogatories (including subparts), four documents requests, and nine requests for admissions in this proceeding.

8 Q. You noted that the Commission approved the initial Incentive 9 Mechanism as a pilot program. Has FPL provided information in the 10 Fuel Clause docket for the last four years that has allowed the initial 11 Incentive Mechanism's performance as a pilot program to be evaluated?

- 12 A. Yes. FPL has filed testimony and exhibits related to performance data and 13 O&M costs in the 2013, 2014, 2015, and 2016 Fuel Clause docket. More 14 specifically, testimony and information has been provided in FPL's 2013, 15 2014, and 2015 Final True-up filings and FPL's 2014, 2015, and 2016 16 Projection filings. Additionally, FPL has provided information related to the 17 initial Incentive Mechanism as part of the annual Fuel Clause audit process 18 conducted by Commission Staff. The initial Incentive Mechanism has been 19 reviewed as part of the 2014, 2015, and 2016 annual audits.
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Q. Do you agree with witness Dismukes' assertion on page 16 of his
 testimony that the parties have not been afforded an appropriate amount
 of time to examine the issues surrounding the Incentive Mechanism?
 A. No. Witness Dismukes apparently finds fault with the nine weeks that parties
 have had to conduct discovery and evaluate the proposed modified Incentive

6 Mechanism. He also asks the Commission to note that the initial Incentive 7 Mechanism was evaluated over "only" a three-month period. While both 8 proceedings have provided ample opportunity to examine the issues, as 9 evidenced by the amount of information that FPL has provided, witness 10 Dismukes fails to mention that the parties have also had roughly three and 11 one-half years to evaluate the initial Incentive Mechanism.

12

13 As I stated previously, in addition to the information provided and evaluated 14 in the 2012 rate case settlement proceedings and this proceeding, FPL has 15 provided a voluminous amount of information related to the Incentive 16 Mechanism in various filings in the Fuel Clause docket. OPC is a party to the 17 Fuel Clause docket and has had ample opportunity to analyze, review and 18 evaluate all aspects of the Incentive Mechanism. Finally, the initial Incentive 19 Mechanism was approved as a four-year "pilot" program with an option to 20 review at the end of two years. If at that time, it was determined that the 21 program was not providing the benefits that were anticipated or the program 22 was not satisfactory, the "pilot" program could be terminated. OPC did not raise any issues regarding the initial Incentive Mechanism at the two-year
 mark.

3Q.Witness Dismukes further recommends on pages 17 and 18 of his4testimony that FPL's proposal should be moved to a separate proceeding5due to the lack of information provided by FPL, insufficient review time,6consistency with the Commission's previous evaluation of issues with7similar, industry-affecting magnitude, and because the initial Incentive8Mechanism was not found specifically to be in the public interest? Do9you agree with his recommendation?

A. No. I have previously shown that all of these arguments lack merit. In view
of the voluminous information that has been provided, coupled with the ample
time for review, there is simply no need for a separate proceeding to evaluate
FPL's proposal. I cannot imagine what additional meaningful and necessary
information could be gathered in a separate proceeding that hasn't already
been provided, reviewed and evaluated.

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V. REPLACEMENT OF UPS CONTRACTS

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Q. On page 22 of his testimony, witness Dismukes asserts that FPL is
proposing to lower its threshold targets by eliminating the \$10 million
"stretch" goal from the initial Incentive Mechanism, suggesting that it is
doing so because the program did not meet FPL's margin expectations.

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Is this an accurate assessment of the proposed \$10 million reduction in the threshold?

3 No. First, FPL is not proposing to eliminate the "stretch" goal that was A. 4 included in the initial Incentive Mechanism. As described in my direct 5 testimony in this proceeding, the initial Incentive Mechanism threshold was 6 comprised of a \$36 million "Customer Savings Threshold" and an incremental 7 \$10 million "stretch goal" that represented the additional value that FPL was 8 seeking to create for its customers through expanding its optimization 9 activities. Under the proposed modified Incentive Mechanism, the \$10 10 million "stretch goal" remains and continues to represent the additional value 11 that FPL seeks to create through its expanded optimization activities.

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FPL is proposing to lower the "Customer Savings Threshold" to \$26 million, to account for the expiration of the UPS contracts. Optimization of the UPS contracts and the associated transmission capacity delivered, on average, \$10.5 million per year in benefits from 2013 through 2015. Therefore, FPL has proposed to lower the "Customer Savings Threshold" from \$36 million to \$26 million. In total, under the proposed modified Incentive Mechanism, customers will receive 100% of the benefits up to \$36 million.

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As far as witness Dismukes' suggestion that the existing Incentive Mechanism has not met margin expectations, nothing could be further from the truth. Over the first three years of the program, FPL was under the threshold in year one, over the threshold in year two, and essentially at the threshold in year
three. Said differently, FPL averaged \$46.4 million per year over the threeyear period, demonstrating that the \$46 million combined threshold was
appropriate in that time frame. Lowering what has been an appropriate
threshold by \$10 million to account for the expiration of the UPS contracts
and associated transmission capacity that, on average, delivered \$10.5 million
per year in benefits is a logical and appropriate adjustment.

8 Q. Witness Dismukes asserts on pages 22 and 23 of his testimony that FPL's 9 collective capacity additions over the next five years should put FPL in 10 the position of replacing the lost UPS capacity (plus 100 MW) from which 11 it can make additional economy energy sales. He goes on to state that, 12 due to these collective capacity additions, the expiration of the UPS 13 contracts does not serve as a meaningful rationale for reducing the 14 sharing threshold by \$10 million. Do you agree with these assertions?

15 A. No. I will first point out that witness Dismukes' math is incorrect regarding 16 his assertion that FPL will have a net 100 MW of additional capacity. Table 17 ES-1 in FPL's 2016 Ten Year Site Plan shows net capacity changes in the 18 summer of 2016 of 1,280 MW and net capacity changes in the summer of 19 2017 of (465 MW).¹ The combination of these two numbers results in net 20 capacity additions in the summer of 2017 of 815 MW. Removing 928 MW

¹http://www.floridapsc.com/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2016/Fl orida%20Power%20and%20Light.pdf?bcsi_scan_fd86d3dd427d821e=m9tbeWyhe8o YnceClAjHp5MsKd1JAAAA8HJuIg==&bcsi_scan_filename=Florida%20Power%20 and%20Light.pdf

for the expiration of the UPS contracts will result in a net capacity *reduction* of 113 MW between the summer of 2015 and the summer of 2017, rather than
 the 100 MW increase claimed by witness Dismukes.

5 Moreover, evaluating the \$10 million reduction in the "Customer Savings" 6 Threshold" based on MW additions and subtractions completely misses the 7 point and shows that OPC has ignored FPL's response to discovery that addressed this topic (i.e., OPC's First Set of Interrogatories Asset 8 9 Optimization No. 6, Docket Nos. 160021-EI and 160088-EI). Simply put, the 10 UPS units provided significant optimization opportunities because of their 11 location on the Southern Company transmission system. This location 12 resulted in a substantial advantage for capturing economy sales opportunities 13 in the SERC market and beyond. FPL was able to sell directly into the SERC 14 market without incurring additional costs for transmission service, as it would 15 when making sales from units located on FPL's system.

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The location of the UPS units also helped avoid potential transmission limitations that would have restricted wheeling power from FPL's system into the SERC market. For example, during periods of extreme cold weather in the winter of 2014, the demand for power was very high in the SERC region but FPL was not able to sell, at times, all of the excess power from its own system into the SERC market because the available transmission capacity to move power from FPL's system to the SERC market was already fully

1 utilized. FPL was, however, able to sell power directly into the SERC market 2 from the UPS units and effectively increase its economy sales volume. 3 Additionally, the firm transmission service that FPL procured to deliver the UPS energy to FPL's system for serving native load, could be redirected to 4 5 other delivery points on Southern's system when it was not required for FPL's 6 system needs. Redirecting this transmission service at no cost allowed FPL to 7 be competitive in making wholesale power sales to other locations tied to the Southern Company system. 8 Moreover, FPL was able to optimize the 9 transmission service itself, by reselling to third parties when it was not 10 required for its own load or to make sales. These optimization activities no longer exist with the expiration of the UPS contracts and associated firm 11 12 transmission service. No other asset in FPL's portfolio offers these unique 13 characteristics and no new units are planned that will.

Q. Given the unique characteristics and advantages that the UPS contracts
provided, why didn't FPL renew the contracts with Southern Company?

- A. While the UPS contracts did offer significant optimization opportunities, the
 renewal terms of the UPS contracts were not favorable overall for FPL's
 customers and, therefore, FPL did not renew the contracts.
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VI. INCENTIVES FOR POWER SALES AND PURCHASES

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Q. Witness Kollen asserts on pages 8 and 9 of his testimony that it is
inappropriate to provide an incentive to make economy purchases and

sales because FPL has a prudence obligation to do so without an
incentive. Witness Dismukes asserts on page 5 of his testimony that
incenting utilities for purchasing lower cost electricity is antithetical to
the philosophical underpinnings of utility regulation because part of a
utility's obligation to serve is to provide least-cost service and failure to
do so should represent grounds for imprudence. Do you agree with these
assertions?

8 A. No. Witnesses Kollen and Dismukes misunderstand both the statutory duties 9 of utilities in providing service and the intent of the Incentive Mechanism. 10 Contrary to their assertions, utilities do not have a statutory obligation to 11 provide "least-cost service." The obligation of FPL and every other utility 12 regulated by the Commission is to provide service at rates that are fair, just 13 and reasonable. It is entirely appropriate to incent utilities to strive toward 14 increasing their cost efficiency and otherwise to find innovative ways to 15 improve customer value. The intent of the Incentive Mechanism is to provide 16 this incentive for FPL to go above and beyond in "shaking the trees" to find 17 additional value for customers. FPL's entry into the PJM and MISO markets 18 demonstrates that point exactly. Participation in these new markets has 19 provided the opportunity for FPL to capture additional value for customers, 20 with nearly \$2.1 million in additional benefits delivered from 2014 through 21 2015.

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1 Regarding witness Dismukes' argument that the savings from power 2 purchases should not be included in the Incentive Mechanism, there is no 3 logical rationale for that position. The savings from purchases and the gains from sales result in the same dollar for dollar reduction to overall fuel costs 4 5 for customers. Furthermore, both types of transactions require marginal cost 6 modeling, communicating and negotiating with counterparties, submitting 7 transmission service requests, submitting data electronically showing the flow of power, and capturing transaction data for risk management and accounting 8 9 purposes, thus putting purchases and sales on equal footing. There is simply 10 no difference in the activities required to execute power purchases and power 11 sales.

Q. On page 5 of his testimony, witness Kollen states that prior to FPL's 2012
rate case settlement, there was no calculation of the savings generated
from power purchases? Is this assertion correct?

A. No, witness Kollen is wrong. FPL has been calculating and filing the savings
associated with economy purchases on a monthly basis on Schedule A9 in the
fuel docket for at least 17 years.

Q. On page 4 of his testimony, witness Kollen asserts that the proposed
modified Incentive Mechanism will result in excessive, unjust, and
unreasonable rates and provide unnecessary and inappropriate incentives
for activities that already are required of a prudent utility. Do you agree
with this assertion?

1 A. No. The initial Incentive Mechanism has delivered the results that were 2 envisioned by not only FPL and the Commission, but also by witness Kollen 3 himself. He made the following observation in his testimony filed in FPL's 2012 rate case to support the initial Incentive Mechanism, "This expansion of 4 5 the existing sharing mechanism will not harm customers, but has the potential 6 to substantially benefit customers." Looking only at FPL's gas asset 7 optimization activities, customers have received a "substantial" benefit, in the 8 form of an additional \$22 million over the three-year period from 2013 9 through 2015. FPL's share of the overall benefits under the new mechanism 10 was 9.8% as opposed to the 9.3% that FPL would have received under the prior incentive mechanism. This 0.5% increase, or roughly \$2.9 million in 11 12 FPL's benefits, could not be reasonably seen as excessive, unjust, or 13 unreasonable. In fact, when the net incremental value provided to customers -14 - nearly \$22 million -- is taken into consideration, the change in structure from 15 the prior incentive mechanism is clearly justified.

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VII. RECOVERY OF VARIABLE POWER PLANT O&M

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Q. In reference to FPL's proposal to net economy sales and purchases for
purposes of calculating variable power plant O&M expenses, witness
Kollen asserts on page 10 of his testimony that if there are net economy
purchases, FPL will add the "avoided" expense to the net "gain" that is
allocated between customers and FPL. Do you agree with this assertion?

1 A. No. The calculations of net gains that can potentially be shared between 2 customers and FPL will only include the savings associated with each 3 wholesale power purchase. Variable power plant O&M will not be included. For wholesale power sales gains, the amount that is reflected in net gains 4 5 available for sharing will be adjusted to remove variable power plant O&M 6 expenses, just as it is today under the initial Incentive Mechanism. This 7 methodology ensures that variable power plant O&M expenses are not part of 8 the sharing calculation. For example, assuming a variable power plant O&M 9 cost of \$0.97/MWh, if FPL sells one MWh (incurs \$0.97 in O&M) and 10 purchases two MWh (avoids \$1.94 in O&M), customers will receive a net 11 benefit of \$0.97. This \$0.97 net benefit will be passed through to customers 12 and will not be shared even if FPL surpasses the sharing thresholds.

Q. Witness Kollen also states on pages 10 and 11 of his testimony that FPL's
proposal to net economy sales and purchases for purposes of calculating
variable power plant O&M provides enhanced recovery through the Fuel
Clause because such costs already are included in the base revenue
requirement. Do you agree with this assertion?

A. No. As I explained in my direct testimony, for the 2017 and 2018 test years
included in FPL's rate case filing, FPL did not include economy sales or
economy purchases in the base rate forecast. Therefore, these costs are not
already included in the base revenue requirement. Additionally, FPL's
"netting" proposal provides a much fairer and straightforward approach for

both customers and FPL as only the O&M costs actually incurred (or saved)
 will be passed through (or credited) to customers.

Q. Do you agree with witness Kollen's assertion on pages 11 and 12 of his
testimony that "base O&M fossil overhaul" costs are not reasonable and
appropriate for inclusion in the variable power plant O&M rate because
they are not variable and will be incurred regardless of the output from
the Company's owned generation?

- 8 No. This type of cost was approved for recovery by the Commission under A. 9 the initial Incentive Mechanism. As further discussed in the rebuttal 10 testimony of FPL witness Roxane Kennedy in this docket, those costs vary 11 correspondingly with system generation. Recall that, as stated in my direct 12 testimony, FPL did not forecast any net wholesale sales in developing its 13 power plant O&M forecast for the test years. FPL made, on average, about 14 1.7 million MWh of net wholesale sales per year for the period 2013-2015. 15 Witness Kennedy explains that, if the net wholesale sales are anywhere near 16 those levels in future years, FPL's base O&M fossil overhaul costs will be 17 higher than forecast. FPL's customers benefit from the gains on the wholesale 18 sales, and so it is entirely fair and reasonable for FPL to continue recovering 19 from customers the added costs of making those wholesale sales.
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VIII. IMPACT OF INCENTIVE MECHANISM ON CAPACITY DECISIONS

Q. Do you agree with witness Dismukes' assertion beginning on page 27 of
his testimony that FPL's initial Incentive Mechanism and its proposed
modified Incentive Mechanism leads to overcapacity incentives?

7 A. No. Witness Dismukes' assertion fails at two levels. First, it ignores the 8 extensive process that the Commission has in place to ensure that capacity 9 additions are needed to serve customers. Generation capacity additions must 10 go through a rigorous need determination process in order to get Commission 11 approval. Pipeline capacity additions, such as the most recent significant 12 expansion of Sabal Trail/FSC, were closely evaluated in a separate docket and 13 approved by the Commission. To be clear, FPL has not and will not add 14 "unnecessary" capacity to create opportunities for asset optimization.

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16 Second, his assertion shows a complete lack of understanding of how FPL 17 optimizes the utilization of its system. The simple fact is that optimization 18 opportunities exist within FPL's current portfolio, as evidenced by the results 19 of the existing Incentive Mechanism. FPL adds capacity, whether generation 20 assets or gas assets, when it is necessary to meet peak conditions, including a 21 suitable reserve margin. Inherently, there will be times that these assets are 22 not fully utilized because peak conditions do not occur 24 hours per day, 365 23 days per year. Asset optimization opportunities arise in non-peak conditions,

1 when FPL's assets are not being fully utilized to meet customer demand. This 2 program is not about having excess peak capacity. The success of the 3 program is derived from the existence of market opportunities during nonpeak times when idle capacity exists. There is no need for FPL to overbuild in 4 5 order for this program to work to the benefit of its customers. 6 **IX. MARKET IMPLICATIONS** 7 8 9 **O**. Do you agree with witness Dismukes' assertion on page 35 of his 10 testimony that FPL's initial Incentive Mechanism and its proposed 11 modified Incentive Mechanism allows FPL to participate in wholesale 12 commodity markets in ways that differ from other market participants? 13 No. Witness Dismukes clearly does not understand trading in the wholesale A. 14 commodity markets. He seems to believe that the market is comprised of 15 companies that have invested in assets to facilitate participation in the 16 wholesale commodity markets and that they must price their sales differently 17 so as to recover the investment that was made in the asset. That simply is not 18 true. The market is comprised of many entities, from marketers to end-users. 19 The evaluation of whether an investment should be made in an asset for the 20 sole purpose of participating in the wholesale commodity markets, to 21 ultimately recover the investment and earn a return on the investment, must 22 include an analysis of whether forecasted market pricing would accomplish 23 this goal. However, once the investment is made, short-term (economy) sales

1 made from that asset would be executed at any level above variable cost and 2 the fixed cost of the asset becomes irrelevant. In the case of firm gas 3 transportation, if the market would always pay a price equivalent to the full 4 demand charge plus variable costs plus a margin, there would be no 5 competitive market, as each entity would simply buy firm transportation to 6 meet its needs. Market prices reflect what participants are willing to pay at a 7 given time, and each participant prices accordingly, including FPL. The entry 8 of FPL into the gas market has enhanced competition within the market. 9 Increased competition within the market creates a "win-win" situation for all 10 market participants.

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X. COMBINING DISSIMILAR INCENTIVES

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Q. Do you agree with witness Dismukes' proposal to implement "one,
broader composite incentive" as he suggests on pages 25 and 26 of his
testimony?

17 A. No. Little purpose would be served by trying to consolidate all incentive 18 mechanisms into one comprehensive program. The different incentive 19 mechanisms encourage different behaviors and are appropriately addressed 20 separately so that the parties can focus on FPL's performance with respect to 21 each of those different behaviors. The Incentive Mechanism incents strong 22 performance in the management of its fuel and purchased power 23 responsibilities. The Generation Performance Incentive Factor ("GPIF")

1 incents strong performance in operating FPL's generation fleet. Finally, the 2 ROE adder FPL has proposed in this case would incent strong performance 3 throughout the organization, most notably in areas that aren't measured by 4 either the Incentive Mechanism or the GPIF. There is little overlap in the 5 different incentives to suggest combining them would be appropriate. 6 **XI. JURISDICTIONAL POLICY ISSUES** 7 8 9 **O**. On pages 37 through 40 of his testimony, witness Dismukes expresses 10 jurisdictional policy concerns regarding the Incentive Mechanism. Do 11 you agree with these concerns? 12 A. No. Witness Dismukes claims that natural gas transactions under the 13 Incentive Mechanism go beyond optimizing FPL's core electrical generation, 14 transmission, and production assets. However, natural gas transportation 15 contracts and natural gas storage contracts are, in fact, core components of 16 utility operations and these costs have been recovered from customers through 17 the Fuel Clause for decades. The Incentive Mechanism provides the vehicle 18 for FPL to optimize the use of those assets in order to reduce overall fuel costs 19 for customers. 20 **O**. Does this conclude your rebuttal testimony? 21 A. Yes.

1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2	FLORIDA POWER & LIGHT COMPANY
3	REBUTTAL TESTIMONY OF ROXANE KENNEDY
4	DOCKET NOS. 160021-EI and 160088-EI
5	JULY 8, 2016
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23	

TABLE OF CONTENTS
I. INTRODUCTION
II. SUMMARY 4
III. VARIABLE POWER PLANT O&M 4

1		I. INTRODUCTION
2		
3	Q.	Please state your name and business address.
4	A.	My name is Roxane Kennedy. My business address is Florida Power & Light
5		Company ("FPL"), 700 Universe Boulevard, Juno Beach, Florida 33408.
6	Q.	Did you previously submit direct testimony in Docket No. 160021 which
7		has been consolidated with Docket No. 160088?
8	A.	Yes.
9	Q.	Are you sponsoring any rebuttal exhibits in this case?
10	A.	Yes. I am sponsoring the following rebuttal exhibits:
11		• RRK-1, Example (Mitsubishi) Combustion Turbine (CT) Maintenance
12		Intervals by Outage Type
13		• RRK-2, Example (Mitsubishi) Combustion Turbine Parts Standards by
14		Outage Inspection Type
15	Q.	What is the purpose of your rebuttal testimony?
16	A.	The purpose of my testimony is to rebut the portion of the testimony of South
17		Florida Hospital and Healthcare Association ("SFHHA") witness Lane Kollen
18		that argues for removing all "base O&M fossil overhaul" from the calculation
19		of variable operating and maintenance ("O&M") expenses because those
20		expenses are fixed.
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1		II. SUMMARY
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3	Q.	Please summarize your rebuttal testimony.
4	A.	My rebuttal testimony demonstrates that witness Kollen's objections to the
5		recovery of the base overhaul maintenance component of the Variable O&M
6		in the proposed modified Incentive Program are unfounded. Using Original
7		Equipment Manufacturer ("OEM") documentation, industry guidelines and
8		FPL maintenance practices, I will demonstrate that fossil generating
9		maintenance is variable and should be recovered as specified in the proposed
10		modified Incentive Mechanism.
11		
12		III. VARIABLE POWER PLANT O&M
13		
14	Q.	Witness Kollen states on pages 10 and 11 of his testimony that FPL's
15		proposal to net economy sales and purchases for purposes of calculating
16		variable power plant O&M provides enhanced recovery through the Fuel
17		Clause even though such costs already are included in the base revenue
18		requirement. Do you agree with this assertion?
19	A.	No. As witness Forrest explained in his direct testimony, for the 2017 and
20		2018 test years included in FPL's rate case filing, FPL did not include
21		economy sales or economy purchases in developing its base rate forecast for
22		the costs associated with operating and maintaining its generating fleet.
23		Therefore, any variable production and maintenance costs associated with

increases from FPL's generation system output due to net economy sales are
 not reflected in the test period base rate revenue requirements.

Q. Do you agree with witness Kollen's assertion on pages 11 and 12 of his
testimony that "base O&M fossil overhaul" costs are not reasonable and
appropriate for inclusion in the variable power plant O&M rate because
they are not variable and will be incurred regardless of the output from
FPL-owned generation?

8 A. No. FPL's current base rate filing contains MWh sales, production and 9 maintenance forecasts that are based on only serving native customers. As 10 witness Forrest explained in his direct testimony, economy sales were not 11 contemplated in the base rate forecast and neither were the associated 12 production and maintenance costs for generation of incremental sales. This 13 base rate filing includes a level of sales, production and maintenance activity 14 for FPL's native customer requirements only. To demonstrate the impact of 15 wholesale sales and purchases, the total level of production activity for the 16 period 2013-15 – reflecting the net impact of the wholesale sales and 17 purchases that generated over \$100 million of customer benefits during that 18 period – was significantly above the level of activity forecasted both the prior 19 and the current base rate filings. FPL's system-wide economy sales, net of 20 purchases, totaled 5.1 million MWh for the period of 2013-15, which was 21 equivalent to over 70% of the annual generation at a large combined cycle 22 unit such as FPL's Cape Canaveral or Riviera Beach Energy Centers in 2015. 23 It is reasonable to expect the incremental level of fossil overhaul costs above

the level included in our base rate filing will be significant. Over the life of a
 combined cycle unit, this level of additional generation increases maintenance
 costs significantly.

4

5 Thus, it is clear that if the total level of production for FPL's fossil generating 6 fleet is above the forecast assumed in the base rate filing, as it was in 2013-7 2015, it will directly impact maintenance costs as well as increase wear and 8 tear on Combustion Turbine ("CT") Parts. The variable production and 9 maintenance costs for these incremental MWh sales would not have been 10 incurred if opportunities were not seized for FPL's customers in the 11 marketplace.

Q. Would you please explain the concept of variable maintenance costs and its applicability to FPL's generating assets?

14 A. Yes. Simply put, as generating fleet output increases, there is a corresponding 15 increase in labor and parts required to maintain reliable operating 16 Examples of maintenance equivalent fired hour interval performance. 17 documentation from Mitsubishi for their CTs and part requirements by outage 18 type, for example, are contained in Exhibits RRK-1 and RRK-2. Mitsubishi is 19 the manufacturer for the CTs at FPL's West County Energy Center and these 20 exhibits clearly demonstrate that maintenance activity is directly correlated to hours of operation and number of starts, exactly the concept of variable. 21

22

1	Energy industry literature also contains numerous references to the variability
2	of O&M costs as a function of power plant output levels. For example, PJM
3	is a regional transmission organization ("RTO") that coordinates the
4	movement of wholesale electricity in all or parts of 13 states and the District
5	of Columbia. PJM cites several specific examples of variable O&M costs in
6	its educational material:
7	• Air filter replacements
8	• Inspections and overhauls, including labor, parts, and rentals
9	• Water treatment expenses
10	Catalyst replacements
11	• Major overhaul expenses
12	PJM also has issued specific guidance for addressing variable maintenance
13	expense for combustion turbine and combined cycle plants: "Furthermore,
14	Combustion Turbine and Combined Cycle Plant major inspection and
15	overhaul expenses may be included in variable maintenance expenses if these
16	costs are due to incremental degradation directly related to generation, starts
17	or a combination of both." ¹
18	
19	The major components in FPL's generating fleet include, but are not limited
20	to CTs, Generators and Steam Turbines. The manufacturers for these

¹ <u>http://www.pjm.com</u> Variable Operations and Maintenance ("VOM") Costs: Educational Document

components in FPL's fleet include General Electric, Siemens, Mitsubishi and
 Toshiba. Steam and coal unit maintenance intervals for boilers and steam
 turbines are also driven by operating hours and thermal cycles. For all of
 these manufacturers and unit types, maintenance performed is directly tied to
 ranges of operating hours and/or unit starts and is thus variable.

- In summary, maintenance intervals driven by operating hour ranges are
 consistently applied by utility industry OEMs, as well as FPL's Operating,
 Central Maintenance and Engineering experts. The large volume of FPL's
 wholesale sales, which generate gains for the benefit of its retail customers,
 impact the operating hours and hence the maintenance costs for FPL's
 generating fleet. Thus, contrary to witness Kollen's assertions, those costs are
 being properly viewed as variable.
- 14 Q. Do you agree with witness Kollen's recommendation to remove the "base
- 15 **O&M fossil overhaul" costs from the incentive power plant O&M**

16 calculation in the proposed modified Incentive Mechanism?

- A. No. For the reasons above, base O&M fossil overhauls are variable and are
 entirely reasonable and appropriate for continued inclusion in the power plant
 O&M calculation.
- 20 Q. Does this conclude your rebuttal testimony?
- 21 A. Yes.

EQUIVALENT FIRED HOURS (EFH) / EFFECTIVE STARTS (ES) FORMULAE

FPL INSPECTION INTERVALS*

FPL combustor inspections, turbine inspections and major inspections are

recommended as shown below

Combustor Inspection	Earlier of 12,000 EFH or 300 ES from previous inspection or first firing.
Turbine Inspection	Earlier of 24,000 EFH or 600 ES
Major Inspection	Earlier of 48,000 EFH or 1,200 ES

* In the event that a turbine is upgraded with G1+ row 1 blades, row 1 vanes and row 2 vanes, the turbine outage and repair intervals shall not be limited to less than 900 starts.

Maintenance on combustion turbines is driven by operating hours and unit starts

Example (Mitsubishi) Combustion Turbine Parts Standards by

Outage Inspection Type

CI Nozzles CI Tophats CI Swirler Holder (Baskets) CI Combustion Liner (Transitions) CI Transition Seals CI Cross Flame Tubes

<u>Turbine (</u>	Hot Gas Path) Inspection
HGP	Nozzles
HGP	Tophats
HGP	Swirler Holder (Baskets)
HGP	Combustion Liner (Transitions)
HGP	Transition Seals
HGP	Cross Flame Tubes
HGP	R1 Vanes
HGP	R2 Vanes
HGP	R3 Vanes
HGP	R4 Vanes
HGP	R1 Blades
HGP	R2 Blades
HGP	R3 Blades
HGP	R4 Blades
HGP	R1 Ring Segments
HGP	R2 Ring Segments
HGP	R3 Ring Segments
HGP	R4 Ring Segments

MI	Nozzles
м	Tophats
мі	Swirler Holder (Baskets)
MI	Combustion Liner (Transitions)
MI	Transition Seals
мі	Cross Flame Tubes
MI	R1 Vanes
MI	R2 Vanes
MI	R3 Vanes
MI	R4 Vanes
MI	R1 Blades
MI	R2 Blades
MI	R3 Blades
MI	R4 Blades
MI	R1 Ring Segments
MI	R2 Ring Segments
MI	R3 Ring Segments
MI	R4 Ring Segments
MI	R1 Interstage Seals
MI	R2 Interstage Seals
MI	R3 Interstage Seals
MI	R4 Interstage Seals
MI	Thrust Bearings
MI	Exhaust Bearing
MI	Inlet Bearings

Major Inspection (MI)

CT parts, costs and complexity increase for maintenance inspections performed at the appropriate operating hour and/or unit start intervals