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August 2, 2017

**-VIA ELECTRONIC FILING -**

Ms. Carlotta S. Stauffer  
Division of the Commission Clerk and Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, FL 32399-0850

**Re: Docket No. 20170001-EI**

Dear Ms. Stauffer:

I enclose for electronic filing in the above docket Florida Power & Light Company's ("FPL") supplemental testimony and exhibits of FPL witnesses Juan E. Enjamio and William F. Brannen.

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

Sincerely,

William P. Cox  
William P. Cox

Enclosures  
cc: Counsel for Parties of Record (w/encl.)

**CERTIFICATE OF SERVICE**  
**DOCKET NO. 20170001-EI**

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

electronic service this 2nd day of August 2017 to the following:

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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                   **FLORIDA POWER & LIGHT COMPANY**

3                   **TESTIMONY OF JUAN E. ENJAMIO**

4                   **DOCKET NO. 20170001-EI**

5                   **AUGUST 2, 2017**

6  
7   **Q.    Please state your name and business address.**

8    A.    My name is Juan E. Enjamio. My business address is Florida Power & Light Company,  
9           700 Universe Boulevard, Juno Beach, Florida 33408.

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

11 A.    I am employed by Florida Power & Light Company (“FPL” or the “Company”) as  
12        Manager of Integrated Analysis in the Resource Assessment & Planning Department.

13 **Q.    Did you previously submit direct testimony in this proceeding?**

14 A.    Yes, I submitted direct testimony in this proceeding on March 1, 2017, which included  
15        Exhibits JE-1 through JE-7.

16 **Q.    Are you sponsoring any additional exhibit in this case?**

17 A.    Yes. I am sponsoring the following additional exhibits, which are attached to this  
18        testimony:

- 19           •    JE-8 - Updated Project Assumptions  
20           •    JE-9 - Updated CPVRR – Costs and Benefits

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

22 A.    The purpose of my testimony is to present an updated economic analysis which shows  
23        that the 596 megawatts alternating current (“MW<sub>ac</sub>”) of universal solar photovoltaic

1 (“PV”) generation scheduled to be placed in service in late 2017 and early 2018 remain  
2 cost-effective. My testimony identifies the updated cost assumptions used in the  
3 economic analysis and presents the updated results.

4 **Q. Please explain why you are providing an updated economic analysis.**

5 A. I am providing an update because, since the time of my March 1 testimony, there has  
6 been a significant change in Florida law that has resulted in a substantial change in the  
7 cost assumptions underlying FPL’s economic evaluation. Specifically, during the 2017  
8 legislative session, the Florida Legislature enacted Senate Bill 90, which provides an 80%  
9 exemption from property taxes for qualifying solar installations, for a twenty-year period.  
10 This exemption, which did not exist at the time of the March 1 filing, applies to three of  
11 the four sites planned for 2018: Blue Cypress, Barefoot Bay and Loggerhead.

12 **Q. What is the cost reduction resulting from the property tax exemption?**

13 A. The property tax reduction for all three qualifying sites is \$34 million on a cumulative  
14 present value of revenue requirements (“CPVRR”) basis.

15 **Q. Does your updated economic analysis reflect any other cost changes?**

16 A. Yes. Witness Brannen describes a \$31 million reduction in construction costs since the  
17 time of the March 1 filing which results in a \$33 million reduction in CPVRR. That  
18 reduction is also included in the updated economic analysis. Exhibit JE-8 reflects the  
19 updated cost, inclusive of reduced property taxes and construction costs.

20 **Q. Does your updated economic analysis reflect any other changes?**

21 A. No, the updated economic analysis otherwise reflects the same system assumptions used  
22 in the March 1 filing.

1 **Q. In developing the updated economic analysis, did you employ the same analytical**  
2 **process to determine the cost-effectiveness of the proposed solar generation?**

3 A. Yes, the updated economic analysis used the same resource plans that formed the basis  
4 for the March 1 cost-effectiveness analysis, and FPL again employed the UPLAN hourly  
5 production costing model and the Fixed Cost Spreadsheet Model to determine the  
6 CPVRR for each resource plan.

7 **Q. Please provide the result of the economic analysis.**

8 A. To determine the updated CPVRR impact of the proposed solar generation, FPL  
9 subtracted the CPVRR of the No Solar Plan from the CPVRR of the 2017-2018 Solar  
10 Plan using the updated cost information. As shown in Exhibit JE-9, Updated CPVRR  
11 Costs and Benefits, the 2017-2018 Solar Plan is projected to save FPL customers  
12 approximately \$106 million (CPVRR) compared to the No Solar Plan.

13 **Q. Does this change your conclusion regarding the cost effectiveness of the proposed**  
14 **solar generation?**

15 A. No, the updated economic analysis strengthens my original conclusion that the 2017 and  
16 2018 Projects are cost effective. The addition of the 2017 and 2018 Projects is now  
17 projected to result in \$106 million (CPVRR) of customer savings.

18 **Q. Does this conclude your testimony?**

19 A. Yes.

Updated Solar Energy Center Assumptions

Solar Energy Centers	In-service date	Nameplate Capacity (MWac)	Projected 1st Year Net Capacity Factor	Capital Cost (\$M)	Capital Cost (\$/kW)
2017 Solar	12/31/2017	298	26.7%	\$419	\$1,405
2018 Solar	2/28/2018	298	26.6%	\$443	\$1,485
<b>Total/Average =</b>	---	<b>596</b>	<b>26.7%</b>	<b>\$861</b>	<b>\$1,445</b>

Solar Revenue Requirements		Non-Solar (Avoided) Generation Costs						Avoided System Costs			Total CPVRR
Generation Capital (Millions)	Fixed O&M (Millions)	Generation Capital (Millions)	Fixed O&M (Millions)	Transmission Interconnection (Millions)	Capital Replacement (Millions)	Incremental Gas Transport (Millions)	Short-Term Purchases (Millions)	System Net Fuel (Millions)	Startup + VOM (Millions)	Emission (Millions)	(Millions)
\$902.3	\$45.0	(\$224.0)	(\$10.6)	(\$13.7)	(\$37.4)	(\$157.8)	\$8.5	(\$515.8)	(\$31.2)	(\$71.3)	(\$105.9)

\* Negative Indicates Savings to FPL Customers

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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
**FLORIDA POWER & LIGHT COMPANY**  
**TESTIMONY OF WILLIAM F. BRANNEN**  
**DOCKET NO. 20170001-EI**  
**AUGUST 2, 2017**

**Q. Please state your name and business address.**

A. My name is William F. Brannen. My business address is NextEra Energy Resources, LLC (“NEER”), 700 Universe Boulevard, Juno Beach, Florida, 33408.

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

A. I am employed by NEER as a Senior Director for Project Engineering and Due Diligence.

**Q. Did you previously submit direct testimony in this proceeding?**

A. Yes, I submitted direct testimony in this proceeding on March 1, 2017, which included Exhibits WFB-1 through WFB-7.

**Q. Are you sponsoring any additional exhibits?**

A. Yes, I am sponsoring the following additional exhibit, which is attached to this testimony:

Exhibit WFB-8 Updated Construction Costs for Proposed 2017 and 2018 Projects

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

A. The purpose of my direct testimony is to provide updated construction costs

1 for the solar energy centers expected to begin commercial operation by  
2 December 31, 2017 (“2017 Project”), and the solar energy centers expected to  
3 begin commercial operation by March 1, 2018 (“2018 Project”). My direct  
4 testimony will also demonstrate that the updated cost estimates continue to be  
5 reasonable and do not exceed \$1,750 per kilowatt alternating current  
6 (“kW<sub>ac</sub>”).

7 **Q. Please explain why you are providing updated costs.**

8 A. As described by FPL witness Juan Enjamio, the Florida Legislature recently  
9 enacted property tax exemptions for qualifying solar facilities, which resulted  
10 in a change to the assumptions included in FPL’s cost-effectiveness analysis.  
11 That change prompted FPL to evaluate the status of its projected construction  
12 costs for the 2017 and 2018 Projects. Since the time of my March 1  
13 testimony, the competitive solicitations for the construction of the  
14 interconnection facilities and the detailed design for the 2017 and 2018  
15 Projects have been completed. FPL was able to secure lower than anticipated  
16 pricing for the interconnection facilities. Additionally, during the detailed  
17 design for the solar energy centers, FPL was able to incorporate cost-effective  
18 alternatives and eliminate certain construction risks, which further reduced the  
19 projected construction costs.

20 **Q. What is the reduction of the projected cost resulting from the factors**  
21 **described above?**

22 A. The completion of the detailed design and competitive solicitations for the  
23 construction of the interconnection facilities for the solar energy centers

1 reduced the projected construction cost by \$16 million for the 2017 Project  
2 and \$14 million for the 2018 Project.

3 **Q. Please provide FPL's updated estimated costs for 2017 and 2018 Projects.**

4 A. As shown in Exhibit WFB-8, the cost for the solar energy centers that will be  
5 placed in service in 2017 is now projected to be \$419 million, or \$1,405/kW<sub>ac</sub>,  
6 and the cost for the solar energy centers that will be placed in service in 2018  
7 is now projected to be \$443 million, or \$1,485/kW<sub>ac</sub>. Additionally, the capital  
8 cost for each solar energy center will be less than or equal to the values in  
9 Exhibit WFB-7 to the March 1, 2017 testimony.

10 **Q. Are FPL's updated cost estimates for the proposed solar energy centers**  
11 **reasonable?**

12 A. Yes. The updated cost estimates strengthen my original conclusion that FPL  
13 has a robust cost-control process that identified and allowed FPL to act upon  
14 opportunities to achieve savings on construction costs for the proposed solar  
15 energy centers. FPL's efforts have resulted in costs that are projected to be  
16 well below the \$1,750/kW<sub>ac</sub> cap prescribed in the Stipulation and Settlement  
17 approved by the Commission in Order No. 16-1560-AS-EI.

18 **Q. Does this conclude your testimony?**

19 A. Yes.

**Updated Construction Costs for Proposed 2017 and 2018 Solar Energy Centers**

<b>2017 Centers<sup>1,2</sup> (Coral Farms, Horizon, Wildflower, Indian River)</b>			
	Construction Cost From March 1, 2017 Testimony	Updated Construction Cost	Reduction in Construction Cost
Capital Cost (\$M)	435	419	16
Capital Cost (\$/kWac)	1,461	1,405	56

<b>2018 Centers<sup>1,2</sup> (Loggerhead, Barefoot Bay, Hammock, Blue Cypress)</b>			
	Construction Cost From March 1, 2017 Testimony	Updated Construction Cost	Reduction in Construction Cost
Capital Cost (\$M)	457	443	14
Capital Cost (\$/kWac)	1,534	1,485	49

<sup>1</sup>The Name Plate Capacity (Mwac) are unchanged from the values in Exhibit 7 to the March 1, 2017 testimony

<sup>2</sup>The Capital Cost (\$/kWac) for each solar center will be less than or equal to the values in Exhibit 7 to the March 1, 2017 testimony