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January 2, 2018

**-VIA ELECTRONIC FILING-**

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

Re: Docket No. 20170225-EI  
In re: Petition for Determination of Need for Dania Beach Clean Energy Center  
Unit 7, by Florida Power & Light Company

Dear Ms. Stauffer:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") is FPL's Prehearing Statement.

Please contact me should you or your Staff have any questions regarding this filing.

Sincerely,

*s/ William P. Cox*  
William P. Cox  
Senior Attorney

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for determination of need for  
Dania Beach Clean Energy Center Unit 7, by  
Florida Power & Light Company.

Docket No: 20170225-EI

Date: January 2, 2018

**FLORIDA POWER & LIGHT COMPANY'S  
PREHEARING STATEMENT**

Florida Power & Light Company ("FPL"), pursuant to Order Nos. PSC-2017-0426-PCO-EI, PSC-2017-0447-PCO-EI, and PSC-2017-0476-PCO-EI, hereby submits its Prehearing Statement regarding the issues to be addressed at the hearing scheduled for January 17, 2018.

**1) WITNESSES**

**Direct**

<b><u>WITNESS</u></b>	<b><u>SUBJECT MATTER</u></b>	<b><u>ISSUES</u></b>
Steven R. Sim	Provides summary of FPL's request for an affirmative determination of need for the Dania Beach Clean Energy Center (DBEC) Unit 7 and how it meets the need determination criteria in Section 403.519, Fla Stat.; presents an overview of FPL's 2016 and 2017 Analyses of FPL's resource needs and options to meet those needs for both the FPL system and the Southeastern Florida region that led to the conclusion that the modernization of the Lauderdale site with the DBEC Unit 7 in mid-2022 is best option for FPL's customers; discusses DBEC Unit 7 benefits for FPL's customers; presents conclusions regarding DBEC Unit 7's ability to cost effectively and reliably serve FPL's customers.	1, 2, 3, 4, 5, 6
Richard Feldman	Addresses FPL's load forecasting process and methodologies and assumptions used in the forecasting process; presents FPL's load forecasts which were used in FPL's 2016 and 2017 Analyses for FPL's system and Southeastern Florida, as discussed in Witness Sim's testimony in this docket.	1, 3

<u>WITNESS</u>	<u>SUBJECT MATTER</u>	<u>ISSUES</u>
Jacquelyn K. Kingston	Discusses FPL’s experience building and operating combined cycle (CC) generating units; describes in detail the DBEC Unit 7 Project’s site, technology, engineering design parameters, operating characteristics, and overall project cost and schedule; demonstrates that the proposed DBEC Unit 7 performance standards are reasonable and achievable.	1, 2, 3
Heather C. Stubblefield	Presents the fossil fuel price forecast used in the evaluation of DBEC’s Unit 7 and explains why that forecast is reasonable to use; presents and explains the proposed fuel and transportation plan for DBEC Unit 7.	3, 4

**Rebuttal**

<u>WITNESS</u>	<u>SUBJECT MATTER</u>	<u>ISSUES</u>
Hector J. Sanchez	Rebuts testimony of Sierra Club witness as to why it is critical that the DBEC Unit 7 be constructed and commissioned within the demolition and construction period of four years following the retirement of Lauderdale Units 4 and 5 beginning by late-2018.	1,3
Steven R. Sim	Rebuts testimony of Sierra Club witness Ezra Hausman, including problems with his testimony regarding reserve margin criteria, reliability, determination of need filings in Florida, his “alternative plan,” the economics of that plan, his attempt to examine the “delay” scenarios, and fuel diversity.	1, 2, 3, 4, 5, 6

## 2) EXHIBITS

<b>Witness</b>	<b>Subject Matter</b>	<b>Exhibits</b>
Steven R. Sim	2017 Projection of Environmental Compliance Costs for CO <sub>2</sub>	SRS-1
Steven R. Sim	2017 Projection of FPL's Resource Needs Utilizing FPL's Two Reserve Margin Criteria	SRS-2
Steven R. Sim	The Three Resource Plans Analyzed in 2017	SRS-3
Steven R. Sim	The Economic Results for the Three Resource Plans Analyzed in 2017	SRS-4
Steven R. Sim	Incorrect and/or Misleading Statements Made in the Testimony of Sierra Club Witness Dr. Hausman	SRS-5
Steven R. Sim	Commission Proceedings Approving or Applying 20% Reserve Margin	SRS-6
Steven R. Sim	Comparison of FPL System NO <sub>x</sub> Emissions for Resource Plans 2 and 3	SRS-7
Steven R. Sim	Comparison of Major Drivers in DSM Cost-Effectiveness: 2014 DSM Goals Docket Inputs and Forecasts versus 2017 Inputs and Forecasts	SRS-8
Steven R. Sim	Excerpt from Prior FPL Testimony in Docket No. 20080407-EG Regarding the Flaws in Using a Levelized Cost of Electricity Approach	SRS-9
Steven R. Sim	FPL Fossil Fuel Generation Fleet Performance Improvements (1990-2016)	SRS-10
Richard Feldman	Total Average Customers	RF-1
Richard Feldman	Summer Peak Load (MW)	RF-2
Richard Feldman	Calendar Net Energy for Load (GWh)	RF-3
Jacquelyn K. Kingston	Typical 2x1 Combined Cycle Unit Schematic	JKK-1
Jacquelyn K. Kingston	FPL Combined Cycle Power Plants	JKK-2
Jacquelyn K. Kingston	History of FPL Combined Cycle Capital Construction Costs	JKK-3
Jacquelyn K. Kingston	DBEC Unit 7 Site Regional Map	JKK-4
Jacquelyn K. Kingston	DBEC Unit 7 Site Property Delineation	JKK-5
Jacquelyn K. Kingston	Rendering of Existing FPL Power Plant Site	JKK-6
Jacquelyn K. Kingston	DBEC Unit 7 Proposed Site Plan Rendering	JKK-7
Jacquelyn K. Kingston	DBEC Unit 7 Plant Specifications	JKK-8

<b>Witness</b>	<b>Subject Matter</b>	<b>Exhibits</b>
Jacquelyn K. Kingston	Emissions Comparison of Lauderdale Units 4 & 5 versus Dania Beach Unit 7	JKK-9
Jacquelyn K. Kingston	DBEC Unit 7 Expected Construction Schedule	JKK-10
Jacquelyn K. Kingston	DBEC Unit 7 Plant Construction Cost Components	JKK-11
Heather C. Stubblefield	FPL's November 7, 2016 Fuel Price Forecast	HCS-1

In addition to the above pre-filed exhibits, FPL reserves the right to utilize any exhibit introduced by any party. FPL additionally reserves the right to introduce any additional exhibit necessary for rebuttal, cross-examination, or impeachment at the final hearing.

### **3) STATEMENT OF BASIC POSITION**

FPL has petitioned the Commission for an affirmative determination of need for the construction of a combined cycle (“CC”) generating unit at the site of FPL’s existing Lauderdale power plant in Broward County, Florida, which will utilize existing facilities, including transmission line, substation facilities, and gas infrastructure, to integrate, interconnect, and transmit energy from this site to FPL’s transmission network for delivery to customers. The unit and associated facilities are collectively referred to as the Dania Beach Clean Energy Center Unit 7 (“DBEC Unit 7”).

FPL proposes to build a new 2-on-1 (“2x1”) CC unit sited at FPL’s existing Lauderdale plant site in Broward County, Florida. The new CC unit, DBEC Unit 7, will replace the older, less efficient existing Lauderdale Units 4 & 5 currently at the site. These older CC units will be retired in 2018 prior to beginning construction of the new CC unit. This modernization of the Lauderdale site is projected to be completed by June 2022.

The Project is projected to provide \$337 million cumulative present value of revenue requirements (“CPVRR”) in savings to FPL’s customers compared to keeping the existing Lauderdale Units 4 & 5 operating with their higher operational and fuel costs. It will also enhance FPL’s system reliability by increasing two reserve margin criteria and enhancing the load-generation balance in the Southeastern Florida region of FPL’s service territory. In addition, the Project would defer the need for future capacity additions, and the unit’s high fuel efficiency will result in less natural gas burned on the FPL system than would be the case if the existing Lauderdale Units 4 & 5 remained in operation. Beyond the fuel savings, system

reliability improvements, and air emission reductions, DBEC Unit 7 is estimated to generate significant economic benefits, including millions of dollars in tax revenues for local governments and school districts, and a number of temporary and permanent jobs.

Thus, the proposed modernization of the existing Lauderdale plant site with a new 2x1 CC unit, DBEC Unit 7, is projected to result in economic, reliability, and fuel usage benefits for FPL's customers. For these reasons and for those set forth more fully in FPL's Petition and pre-filed testimony, FPL satisfies the statutory elements for granting an affirmative determination of need for DBEC Unit 7 with an in-service date of June 1, 2022, pursuant to Section 403.519, Florida Statutes.

#### **4) STATEMENT OF ISSUES AND POSITIONS**

**ISSUE 1:** **Is there a need for the proposed Dania Beach Clean Energy Center Unit 7, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519(3), Florida Statutes?**

**FPL:** Yes. There is a need for DBEC Unit 7, taking into account the need for electric system reliability and integrity. DBEC Unit 7 will enhance FPL's system reliability and integrity as measured by FPL's two reserve margin criteria. The additional 279 MW that will result from retiring the 884 MW from existing Lauderdale Units 4 & 5, and adding 1,163 MW from DBEC Unit 7, will increase FPL's reserve margin values and also defer the need for future capacity additions. The new CC unit will also maintain and enhance the balance between generation and load in the Southeastern Florida region because this increased generation capacity amount will be sited in that region. (Sim, Feldman, Kingston, Sanchez)

**ISSUE 2:** **Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Florida Power & Light, which might mitigate the need for the proposed Dania Beach Clean Energy Center Unit 7?**

**FPL:** No. In determining the need for DBEC Unit 7, FPL took account of all FPL-and Commission-identified cost-effective renewable energy and conservation measures reasonably available to FPL that might mitigate the need for the proposed DBEC Unit 7. FPL's forecast of resource needs takes into account all projected DSM from cost-effective programs approved by the Commission, including all cost-effective energy efficiency ("EE") programs that might be implemented in the Southeastern Florida region. FPL's analyses supporting the need for DBEC Unit 7 accounted for all achievable, cost-effective DSM approved by the FPSC in the DSM Goals set for FPL through the year 2024, plus an assumed continuation of that same level of annual DSM implementation through the year 2030. FPL's summer MW Goals for the 2015 – 2024 time period were

set at 526 MW or about 53 MW of DSM per year on average. FPL has not identified additional cost-effective DSM beyond that already reflected in FPL's analyses. There is no evidence to suggest that additional DSM could provide economic benefits to FPL's customers that could in any way diminish the unquestionable benefits projected to be provided by DBEC Unit 7 beginning in 2022. Taking these benefits into consideration, the interests of FPL's customers are best served by placing DBEC Unit 7 in commercial operation in June of 2022. (Sim, Kingston)

**ISSUE 3: Is there a need for the proposed Dania Beach Clean Energy Center Unit 7, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(3) Florida Statutes?**

**FPL:** Yes. There is a need for DBEC Unit 7, taking into account the need for adequate electricity at a reasonable cost. DBEC Unit 7 is the best resource available to FPL and its customers to meet the need for adequate electricity at a reasonable cost. The Lauderdale modernization project, which results in DBEC Unit 7, is projected to be approximately \$337 million CPVRR less expensive than continuing to operate the existing Lauderdale Units 4 & 5 in their present form. Further, the new CC unit is projected to result in the lowest system CPVRR cost of all of the numerous resource options and resource plans evaluated by FPL, including CC, CT, solar PV, and energy storage technologies. As such, the unit is also projected to result in the lowest electric rates for FPL's customers when compared to these alternatives, which is driven in part by the fact that the new unit will not require any new gas pipeline, transmission line, or water supply. (Sim, Feldman, Kingston, Stubblefield, Sanchez)

**ISSUE 4: Is there a need for the proposed Dania Beach Clean Energy Center Unit 7, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519(3) Florida Statutes?**

**FPL:** Yes. There is a need for DBEC Unit 7, taking into account the need for fuel diversity and supply reliability. Because of DBEC Unit 7's high level of fuel efficiency, the unit is projected to lower the total amount of natural gas used by FPL's generating fleet compared to continuing to operate the existing Lauderdale Units 4 & 5 in a status quo scenario. (Sim, Stubblefield)

**ISSUE 5: Will the proposed Dania Beach Clean Energy Center Unit 7 provide the most cost-effective alternative available, as this criterion is used in Section 403.519(3) Florida Statutes?**

**FPL:** Yes. DBEC Unit 7 is the most cost-effective alternative that has been identified to meet the reliability needs of FPL's customers. It is the most economic option available to FPL and its customers. The result of FPL's 2017 analyses was that retiring the existing Lauderdale Units 4 & 5 in late 2018, followed by a modernization of the site by June 1, 2022 with a 2x1 CC unit (DBEC Unit 7), was projected to be the most economic option for FPL's customers. It is projected to be approximately \$337 million CPVRR less expensive than continuing to operate

the existing Lauderdale Units 4 & 5 in a status quo scenario, and \$1,288 million CPVRR less expensive than a resource plan in which DBEC Unit 7 is not built and an equivalent amount of firm capacity (approximately 1,163 MW) in Southeastern Florida is assumed to be supplied by solar and batteries sited in that region. FPL's analyses also showed that a delay from the planned 2022 in-service date by one year results in a projected \$12 million CPVRR increase and a \$38 million CPVRR increase for a two year delay. (Sim)

**ISSUE 6: Based on the resolution of the foregoing issues and other matters within its jurisdiction which it deems relevant, should the Commission grant Florida Power & Light's petition to determine the need for the proposed Dania Beach Clean Energy Center Unit 7?**

**FPL:** Yes. Building DBEC Unit 7 with an in-service date of June 1, 2022 is the best, most cost-effective choice for FPL's customers for maintaining reliable electric service beginning in that year. This unit was determined to be the most cost-effective choice through extensive analyses that began in 2016 and culminated in 2017, taking into account all reasonably available renewable energy and conservation measures. DBEC Unit 7 is projected to deliver major cost savings to benefit FPL's customers, enhance system and regional reliability to serve FPL's customers, and reduce FPL's usage of natural gas as a fuel source for generation. (Sim)

**ISSUE 7: Should this docket be closed?**

**FPL:** Yes. Upon issuance of an order granting FPL's petition to determine the need for DBEC Unit 7, this docket should be closed.

**5) STIPULATED ISSUES**

**FPL:** None at this time.

**6) PENDING MOTIONS**

**FPL:** None at this time.

**7) PENDING REQUESTS FOR CONFIDENTIALITY**

1. Florida Power & Light Company's request for confidential classification of information [DN 10129-2017] provided in response to Staff's First Set of Interrogatories (Nos. 16 and 17), dated November 28, 2017. [DN 10128-2017]
2. Florida Power & Light Company's request for confidential classification of supplemental information [DN 10233-2017] provided in response to Staff's First Set of Interrogatories (No. 16) dated December 1, 2017. [DN 10232-2017]
3. Florida Power & Light Company's request for confidential classification of information [DN 10235-2017] provided in response to Staff's First Request for

**8) OBJECTIONS TO WITNESS QUALIFICATIONS AS AN EXPERT**

FPL: None at this time.

**9) STATEMENT OF COMPLIANCE WITH ORDER ESTABLISHING PROCEDURE**

There are no requirements of the Order Establishing Procedure with which FPL cannot comply.

Respectfully submitted this 2<sup>nd</sup> day of January 2018.

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By: s/ William P. Cox  
William P. Cox  
Fla. Bar No. 0093531

**CERTIFICATE OF SERVICE**  
**Docket No. 20170225-EI**

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

by electronic service on this 2nd of January, 2018 to the following:

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