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January 17, 2012

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VIA HAND DELIVERY

Ms. Ann Cole Commission Clerk Florida Public Service Commission Betty Easley Conference Center 2540 Shumard Oak Boulevard, Room 110 Tallahassee, FL 32399-0850

Re:

Docket No. 110309-EI

Florida Power & Light Company's Prehearing Statement

Dear Ms. Cole:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are an original and seven (7) copies of FPL's Prehearing Statement in Docket No. 110309-EI styled *In re: Petition to determine need for modernization of Port Everglades Plant, by Florida Power & Light Company.* Also included in this filing is a compact disc containing FPL's Prehearing Statement, in Microsoft Word format.

Please contact me if you or your Staff has any questions regarding this filing.

John T. Butler

Enclosures

cc: Charles Murphy, Esq.

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company's Petition To Determine Need for Modernization of Port Everglades Plant

Docket No. 110309-EI

Dated: January 17, 2012

FLORIDA POWER & LIGHT COMPANY'S PREHEARING STATEMENT

Florida Power & Light Company ("FPL" or the "Company"), pursuant to Order No. PSC-11-0565-PCO-EI, issued December 9, 2011, hereby files with the Florida Public Service Commission ("FPSC" or the "Commission") its Prehearing Statement in connection with its Petition To Determine Need for Modernization of Port Everglades Plant:

I. FPL Witnesses

| Witness | Subject Matter |
|---|--|
| Rene Silva Senior Director, Resource Assessment and Planning Florida Power & Light Company | Provides an overview of FPL's need for generation capacity in 2016 and the results of comparing various resource plans for self-build alternatives to the Port Everglades Next Generation Clean Energy Center ("PEEC"). Addresses the unmatched advantages of PEEC over any alternatives that third parties could offer. Explains that the addition of PEEC in 2016 is the best, most cost-effective option. Explains the adverse consequences that would result if an affirmative determination of need is not granted. |
| John C. Gnecco IV Director, Project Development for Fossil Generation Florida Power & Light Company | Describes the generation alternatives evaluated by FPL and explains that PEEC avoids the need for additional land, water sources, or transmission rights-of-way. Describes the benefits PEEC's combined cycle technology. Provides detailed description of PEEC's operation and configuration. Explains that FPL has a great deal of experience building and operating the proposed type of generating unit and provides FPL's construction cost estimate. |
| Dr. Rosemary Morley Director, Load Forecasting and Analysis Florida Power & Light Company | Describes FPL's load forecasting process and the underlying methodologies and assumptions. Explains that growth in customers, peak demand, and net energy for load is expected. Presents the results of FPL's September 2011 forecast. |

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| Heather C. Stubblefield Manager, Project Development in Energy Marketing and Trading Florida Power & Light Company | Presents FPL's fuel price forecast used in the evaluation of PEEC. Explains FPL's fuel transportation plan. | |
|--|---|--|
| Kennard F. Kosky Principal Golder Associates, Inc | Provides an overview of the key environmental aspects of PEEC. Explains that PEEC's advanced combined cycle technology and environmental controls will satisfy environmental regulatory requirements, that PEEC will further reduce FPL's already-low emission profile, and that the technology selected for PEEC is the best available alternative from an environmental perspective. | |
| Juan Enjamio Supervisor Integrated Analysis, Resource Assessment and Planning Florida Power & Light Company | Describes FPL's integrated resource planning process and the major assumptions used in the analyses. Presents the projection of additional resource needs beginning in 2016. Explains that four self-build resource plans were developed to analyze the addition of PEEC in 2016, and that the analysis shows that the PEEC resource plan is the best economic choice. Demonstrates that the resource plan including PEEC in 2016 will save customers as much as \$838 million in terms of cumulative present value of revenue requirements ("CPVRR") compared to alternative self-build resource plans, and at least \$900 million compared to third party-build options. Demonstrates that, compared to returning to service the existing Port Everglades steam units, the PEEC Resource Plan will reduce FPL's system cumulative Carbon Dioxide ("CO2,"), Sulfur Dioxide ("SO2"), Nitrogen Oxide ("NOx"), and Particulate Matter (PM) emissions. Explains that PEEC will reduce FPL's annual system usage of oil and natural gas upon commercial operation. | |
| Pedro Modia Director, Transmission Services and Planning Florida Power & Light Company | Provides a general overview of FPL's transmission system. Describes the load-to-generation imbalance in FPL's Southeast Florida service area. Describes the reliability benefits of PEEC. Provides transmission system-related costs for PEEC and the alternative resource plans. | |

II. FPL's Exhibits

| Exhibit | Description | Sponsor |
|---------|--|-----------------|
| JEE-1 | Projection of FPL's Resource Needs through 2021 | Juan Enjamio |
| JEE-2 | Resource Plans Utilized in the Analyses | Juan Enjamio |
| JEE-3 | Results of the Economic Analysis Relative to PEEC | Juan Enjamio |
| JEE-4 | Projection of Approximate Bill Impacts | Juan Enjamio |
| JEE-5 | Non-Economic Analysis Results: Emission Reductions Compared to PEEC Resource Plan | Juan Enjamio |
| JEE-6 | Non-Economic Analysis Results: Reduction in Fuel Use Compared to PEEC Resource Plan | Juan Enjamio |
| JEE-7 | Forecasted Cost of Air Emissions | Juan Enjamio |
| JCG-1 | Typical 3x1 CC Unit Process Diagram | John Gnecco |
| JCG-2 | FPL Operational Combined Cycle Plants and FPL Combined Cycle Construction Projects in Progress | John Gnecco |
| JCG-3 | Aerial view of Existing Facility | John Gnecco |
| JCG-4 | PEEC Rendering | John Gnecco |
| JCG-5 | PEEC Vicinity Map | John Gnecco |
| JCG-6 | PEEC Power Block Arrangement | John Gnecco |
| JCG-7 | PEEC Operating Characteristics | John Gnecco |
| JCG-8 | PEEC Expected Construction Schedule | John Gnecco |
| JCG-9 | PEEC Construction Cost Components | John Gnecco |
| KFK-1 | Curriculum Vitae of Kennard F. Kosky | Kennard Kosky |
| KFK-2 | Sulfur Dioxide (SO ₂), nitrogen oxides (NO _x), and Particulate Matter (PM) emissions (tons/year) – Existing and Port Everglades Next Generation Clean Energy Center (PEEC) | Kennard Kosky |
| KFK-3 | SO ₂ , NO _x and Particulate Matter emission rate (lb/MWh) – Existing and PEEC | Kennard Kosky |
| KFK-4 | Carbon dioxide (CO ₂) emission rate (lb/MWh) – Existing and PEEC | Kennard Kosky |
| KFK-5 | Cumulative CO ₂ reductions in FPL's system with PEEC | Kennard Kosky |
| PM-1 | Summary of Required Facilities for the Port Everglades Next Generation Clean Energy Center (PEEC) | Pedro Modia |
| RM-1 | Florida Population | Rosemary Morley |
| RM-2 | Total Average Customers | Rosemary Morley |
| RM-3 | Summer Peak Weather Variables | Rosemary Morley |
| RM-4 | Weighted Real Per Capita Income | Rosemary Morley |
| RM-5 | Energy Efficiency Standards (MW) | Rosemary Morley |
| RM-6 | Real Price of Electricity (cents/kWh) | Rosemary Morley |

| RM-7 | Summer Peak Load (MW) | Rosemary Morley |
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| RM-8 | Winter Peak Load (MW) | Rosemary Morley |
| RM-9 | Calendar Net Energy for Load (GWh) | Rosemary Morley |
| RS-1 | Summary of Benefits of Modernization of FPL's | Rene Silva |
| | Port Everglades Plant (PEEC Project) | |
| HCS-1 | FPL's Fuel Price Forecast | Heather Stubblefield |

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

III. STATEMENT OF BASIC POSITION

FPL proposes to build at the existing Port Everglades plant site, a modern, highly efficient, state-of-the-art combined cycle ("CC") natural gas unit with about 1,277 MW (summer) of generation for commercial operation beginning in June 2016. This generation addition will replace the 1960s-era oil and natural gas steam units that are currently in Inactive Reserve status at the Port Everglades site and will allow FPL to meet a projected need for additional capacity that begins in 2016.

Due to its efficient technology, PEEC is expected to save FPL's customers as much as \$838 million cumulative present value revenue requirements ("CPVRR") in electricity costs compared to other self-build alternatives and at least \$900 million compared to third party-build alternatives. Moreover, PEEC will be equipped with the best technology available from an environmental perspective. PEEC's features and design can meet existing and anticipated future environmental requirements and will substantially reduce CO₂, NO_x, SO₂ and PM emissions. PEEC's state-of-the-art technology will also improve the heat rate, which, in turn, will drive a substantial reduction in natural gas and fuel oil usage compared to the existing generation units or simple cycle units.

Additionally, PEEC's strategically located plant site substantially benefits customers in many ways. Having a generation site located in Broward County will allow FPL to serve its most concentrated load territory without the need to import large amounts of power over long distances and will avoid approximately \$638 million in costs for new transmission facilities that would otherwise be necessary. Moreover, PEEC avoids utilization of new land, new Florida water resources, and new rights-of-way for transmission and gas pipeline facilities that would be necessary to achieve the same generation capacity already available at Port Everglades.

For these reasons, and those set forth more fully in FPL's Petition and prefiled testimony, FPL satisfies the statutory elements for granting an affirmative determination of need for PEEC pursuant to Section 403.519, Florida Statutes.

IV. ISSUES AND POSITIONS

- Is there a need for the proposed modernization of Florida Power & Light's Port Everglades plant, 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 PEEC, taking into account the need for electric system reliability and integrity. After accounting for all projected Demand Side Management ("DSM") from cost-effective programs approved by the Commission, FPL has future generating capacity starting at about 284 MW in 2016 and growing to 1,468 by 2021. PEEC will provide 1,277 MW of highly efficient capacity to help satisfy this need. Furthermore, PEEC will be a highly reliable source of energy, with a projected equivalent availability factor of approximately 95.4%. PEEC will also be highly reliable in terms of fuel supply because its coastal location facilitates the receipt of light oil backup fuel via both truck delivery and waterborne transportation, and because light oil will be stored on site in sufficient quantities to allow PEEC to operate at full capacity for approximately 72 hours. Additionally, PEEC is favorable from a transmission reliability perspective because it reduces the load-to-generation imbalance in the Miami-Dade and Broward County area and also provides voltage support. (Silva, Morley, Enjamio, Gnecco)

- Issue 2: Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Florida Power & Light Company which might mitigate the need for the proposed modernization of Florida Power & Light's Port Everglades plant?
- FPL: No. FPL's forecast of resource needs takes into account all projected DSM from cost-effective programs approved by the Commission. Additional cost-effective DSM cannot be counted on to contribute to system reliability. Similarly, all anticipated cost-effective firm generating capacity that will be available from renewable resources and qualifying facilities through 2016 is already reflected in FPL's resource plan. (Enjamio, Silva)
- Is there a need for the proposed modernization of Florida Power & Light's Port Everglades plant, 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 PEEC, taking into account the need for adequate electricity at a reasonable cost. The estimated total installed cost for PEEC is \$1,185 million, in 2016 dollars. PEEC will take advantage of an existing site, existing infrastructure and existing connectivity to FPL's transmission system, thereby eliminating the costs for those components. Furthermore, FPL's analyses show that the resource plan that includes PEEC in 2016 will save customers \$425 million to \$838 million CPVRR as compared to the other available self-build alternatives, and at least \$900 million CPVRR compared to third party-build alternatives. Accordingly, PEEC will provide needed electricity at a reasonable cost. (Gnecco, Enjamio, Silva)
- Is there a need for the proposed modernization of Florida Power & Light's Port Everglades plant, taking into account the need for fuel diversity, as this criterion is used in Section 403.519(3), Florida Statutes?
- FPL: Yes. There is a need for PEEC, taking into account the need for fuel diversity. PEEC will be fueled by natural gas, and to enhance fuel supply reliability, it will use light oil as a backup fuel. Compared to returning to service the existing units at Port Everglades, adding PEEC will improve the plant's heat rate by 35% and will improve FPL's overall system heat rate by 1.3%. The improved heat rate, in turn, will reduce FPL's use of natural gas by about 90 million MMBtu and fuel oil by about 10.4 million barrels over a 30-year period. (Silva, Stubblefield, Enjamio)

- Issue 5: Will the proposed modernization of Florida Power & Light's Port Everglades plant provide the most cost-effective source of power, as this criterion is used in Section 403.519(3), Florida Statutes?
- Yes. PEEC is the most cost-effective alternative available, as this criterion is used in Section 403.519, Florida Statutes. FPL's economic analyses demonstrate that adding PEEC in 2016 will result in customer savings of (i) \$469 million CPVRR when compared to returning to service the existing Port Everglades units, (ii) \$838 million CPVRR when compared to the adding a combined cycle unit at a greenfield site, and (iii) \$425 million CPVRR when compared to adding a combustion turbine unit at a greenfield site in 2016 and deferring PEEC to 2019. In addition, when compared to third party-build alternatives, customer savings will amount to at least \$900 million and may exceed \$1.1 billion. (Silva, Enjamio)
- Issue 6: Based on the resolution of the foregoing issues, should the Commission grant Florida Power & Light Company's petition to determine the need for the proposed modernization of Florida Power & Light's Port Everglades plant?
- FPL: Yes. The addition of PEEC in 2016 will result in the addition of highly efficient and reliable capacity, customer savings on a CPVRR basis, and significant environmental benefits. PEEC will save customers as much as \$838 million CPVRR over the life of the plant compared to other self-build alternatives. Additionally, it will reduce FPL's system oil and natural gas fuel usage, and will improve FPL's already low emission profile by reducing CO₂, NO_x, SO_x and PM emissions. (Silva, Enjamio, Kosky)
- Issue 7: Should this docket be closed?
- **FPL:** Yes. Upon issuance of an order granting FPL's petitions to determine the need for PEEC, this docket should be closed.

V. STIPULATED ISSUES

There are no stipulated issues at this time.

VI. PENDING MOTIONS

There are no pending motions at this time.

VII. PENDING REQUESTS FOR CONFIDENTIAL CLASSIFICATION

 FPL's Request for Confidential Classification of its Responses to Staff's First Request for Production of Documents Nos. 2 and 5

VIII. OBJECTIONS TO WITNESS QUALIFICATIONS AS AN EXPERT

At this time, only witnesses for FPL have filed testimony. Accordingly, FPL has no objections to any witness qualifications.

IX. REQUIREMENTS THAT CANNOT BE COMPLIED WITH

At this time, FPL is unaware of any requirements in the Order Establishing Procedure with which it cannot comply.

Respectfully submitted this 17th day of January, 2012.

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CERTIFICATE OF SERVICE DOCKET NO. 110309-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing FPL's Prehearing Statement was served via hand delivery and electronic delivery this 17th day of January, 2012 to the following:

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