

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for expansion of Turkey Point and St. Lucie nuclear power plants, for exemption from Bid Rule 25-22.082, F.A.C., and for cost recovery through the Commission's Nuclear Power Plant Cost Recovery Rule, Rule 25-6.0423, F.A.C.

DOCKET NO. 070602-EI

DATED: NOVEMBER 21, 2007

COMMISSION  
CLERK

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STAFF'S PREHEARING STATEMENT

Pursuant to Order No. PSC-07-0819-PCO-EI, filed October 11, 2007, establishing the prehearing procedure in this docket, the Staff of the Florida Public Service Commission files its Prehearing Statement.

a. All Known Witnesses

Staff is not sponsoring any witnesses.

b. All Known Exhibits

Staff has no direct exhibits.

c. Staff's Statement of Basic Position

Staff's positions are preliminary and based on materials filed by the parties and on discovery. The preliminary positions are offered to assist the parties in preparing for the hearing. Staff's final positions will be based upon all the evidence in the record and may differ from the preliminary positions stated herein.

d. Staff's Position on the Issues

**CMP** ISSUE 1: Is there a need for the proposed expansion of the Turkey Point and St. Lucie nuclear power plants, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519(4), Florida Statutes?  
**COM** 5  
**CTR** \_\_\_\_\_

**ECR** POSITION: Yes. There is a need for the Turkey Point nuclear power plant ("PTN") and St. Lucie nuclear power plant ("PSL") uprates, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519(4), Florida Statutes. Without the uprates, FPL's electric system reliability and integrity will be significantly reduced, and FPL will fail to meet its 20% reserve margin beginning in 2012, as shown in the table below.  
**GCL** \_\_\_\_\_  
**OPC** \_\_\_\_\_  
**RCA** \_\_\_\_\_

**SCR** \_\_\_\_\_

**SGA** \_\_\_\_\_

**SEC** \_\_\_\_\_

**OTH** \_\_\_\_\_

DOCUMENT NUMBER-DATE

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| <b>Estimated Impact on FPL's Summer Reserve Margin</b> |                               |                                |
|--|-------------------------------|--------------------------------|
| Year   | Reserve Margin<br>w/o Uprates | Reserve Margin<br>with Uprates |
| 2010   | 22.6%                         | 22.6%                          |
| 2011   | 20.1%                         | 20.1%                          |
| 2012   | 17.8%                         | 19.2%                          |
| 2013   | 16.1%                         | 17.9%                          |
| 2014   | 14.2%                         | 16.0%                          |
| 2015   | 11.7%                         | 13.4%                          |

FPL has future resource needs of 490 MW of incremental capacity in 2012. All demand side management ("DSM") that is known to be cost-effective through 2013 is already reflected in FPL's 2006/2007 resource planning work, which identified this capacity need. Consequently, to meet FPL's summer reserve margin criterion of 20% through 2013, FPL needs new capacity in the form of power plant construction and/or purchases.

The data in the table above actually reflects an optimistic view by also including 287 MW of renewable energy purchases that are not yet certain. Three contracts for 143 MW from municipal solid waste facilities will expire in 2009-2010, but are assumed to be extendable. FPL is also analyzing three new proposals for a total of 144 MW of capacity beginning in 2011-2012. Even combined, the 287 MW of renewable generation does not significantly defer the need for additional capacity beyond the 2012 time frame.

As the table above shows, considering load projections today, the proposed uprates do not satisfy all reliability needs. Without the uprates, the gap between capacity and need becomes even larger.

**ISSUE 2:** Is there a need for the proposed expansion of the Turkey Point and St. Lucie nuclear power plants, taking into account the need for fuel diversity, as this criterion is used in Section 403.519(4), Florida Statutes?

**POSITION:** Yes. There is a need for the PTN and PSL uprates, taking into account the need for fuel diversity, as this criterion is used in Section 403.519(4), Florida Statutes. Increasing nuclear generation through the nuclear uprates will enhance fuel diversity.

During 2006, about 21% of the energy produced by FPL was generated using nuclear fuel. Without the nuclear uprates, due to system growth, the percentage of nuclear-fueled production will decrease to about 17% by 2013 and decline

thereafter. In contrast, FPL's analysis shows that the nuclear uprates would contribute to FPL's system supplying approximately 19% of its energy with nuclear-fueled energy by 2013. Likewise, with the uprates, natural gas-fueled production will decrease from 67% to 65%. Thus, the nuclear uprates contribute to improving and maintaining FPL's fuel diversity as well as decreasing reliance on natural gas as a fuel for electric generation. The diversification of fuel type, technology type and transportation method provided by the uprates will enhance system reliability for FPL's customers.

**ISSUE 3:** Is there a need for the proposed expansion of the Turkey Point and St. Lucie nuclear power plants, taking into account the need for baseload generating capacity, as this criterion is used in Section 403.519(4), Florida Statutes?

**POSITION:** Yes. There is a need for the PTN and PSL uprates, taking into account the need for baseload generating capacity, as this criterion is used in Section 403.519(4), Florida Statutes. The uprates will add approximately 414 MW of nuclear-fueled baseload generating capacity, which is needed to keep pace with the increasing demand for reliable power and the steady growth that the state of Florida continues to experience.

**ISSUE 4:** Is there a need for the proposed expansion of the Turkey Point and St. Lucie nuclear power plants, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(4), Florida Statutes?

**POSITION:** Yes. There is a need for the PTN and PSL uprates, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(4), Florida Statutes. The uprates will increase the amount of highly efficient nuclear-fueled generation on FPL's system, and will displace large amounts of higher cost fossil fuel and purchase power generation, resulting in fuel savings that provide a net benefit (i.e., lower system cost) to customers. In addition, customers will benefit from reduced capacity costs due to the deferral effect of the nuclear uprates upon the timing of subsequent additional units in the 2014-2017 time period.

Furthermore, adding incremental capacity by uprating plants maximizes use of existing sites, as compared to constructing a generating plant of equivalent capacity at a new site. FPL already owns the necessary land at Turkey Point and St. Lucie, it is permitted for electric generation plants, and most of the necessary infrastructure is already in place. The proposed project precludes these costs at a new site.

**ISSUE 5:** 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 expansion of the Turkey Point and St. Lucie nuclear power plants?

**POSITION:** No. FPL's forecasted need already accounts for all the cost-effective DSM identified through the year 2014 plus a projection of continued DSM for the years 2015-2020. This DSM includes FPL's current Commission-approved DSM goals and a significant amount of additional DSM that FPL has identified as cost-effective, and the Commission has approved, since the current DSM goals were approved. Additional conservation measures cannot be implemented to eliminate the need for the PTN and PSL uprates.

For purposes of analysis, FPL's forecast assumed successful contracting for and delivery of 144 MW of renewable firm capacity bid in response to its 2007 request for proposals for renewable energy, and successful extension of 143 MW of renewable firm capacity from three expiring municipal waste-to-energy contracts. There are not sufficient additional renewable energy options to mitigate the need for the 414 MW of nuclear baseload capacity that will be provided by the uprates. The table shown under Issue 1 shows the need for additional capacity even after including DSM and purchased power from renewable energy sources.

**ISSUE 6:** Will the proposed expansion of the Turkey Point and St. Lucie nuclear power plants provide the most cost-effective source of power, as this criterion is used in Section 403.519(4), Florida Statutes?

**POSITION:** Yes. The proposed uprates will provide the most cost-effective source of power, as this criterion is used in Section 403.519(4), Florida Statutes. The estimated nominal costs for the PTN and PSL uprates, not including construction carrying costs, are approximately \$750 million and \$651 million, respectively. The costs of changes to the transmission system that are needed to support the uprates are estimated at \$45 million.

To fully evaluate the system impacts of the nuclear uprates, FPL developed a long-term resource plan that included the uprates ("the Plan with Nuclear Uprates") and an alternate resource plan not including the nuclear uprates ("the Plan without Nuclear Uprates"). The Plan without Nuclear Uprates represents the addition of combined-cycle (CC) units that could be sited and receive permitting approval in the relative near term. FPL also utilized three different fuel cost forecasts and four different environmental compliance cost forecasts in its economic analysis to address the impacts of uncertainty in future fuel and

environmental compliance costs. Because 3 of these 12 scenarios represent a highly unlikely combination of low natural gas costs and high CO<sub>2</sub> environmental compliance cost, FPL used 9 scenarios in its economic analysis. FPL's analysis shows that in eight of the nine economic scenarios comparing the generating technology choices represented in the two plans, the Plan with Nuclear Uprates is the most cost effective option. The estimate is that total net savings realized by customers are expected to range from \$222 million to \$963 million on a cumulative present value revenue requirement basis.

**ISSUE 7:** Are the proposed uprates exempt from the Commission's Bid Rule, Rule 25-22.082, Florida Administrative Code?

**POSITION:** Yes. The PTN and PSL uprates are within the definition of electrical power plants utilizing nuclear materials as fuel (see Sections 403.513(13), 403.506(1), and 366.93, Florida Statutes). Accordingly, pursuant to Section 403.519.(4)(c), the proposed uprates are exempt from Rule 25-22.082, Florida Administrative Code.

**ISSUE 8:** 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 expansion of the Turkey Point and St. Lucie nuclear power plants?

**POSITION:** Staff has no position at this time.

**ISSUE 9:** Is Rule 25-6.0423, Florida Administrative Code, applicable to the costs of the proposed expansion of the Turkey Point and St. Lucie Nuclear Plants after the Commission has issued a final order granting a determination of need?

**POSITION:** Yes.

**ISSUE 10:** Should this docket be closed?

**POSITION:** Yes.

e. Stipulated Issues

Staff is aware of no stipulated issues at this time.

f. Pending Motions

Staff has no pending motions at this time.

g. Pending Confidentiality Claims or Requests

Staff has no pending confidentiality claims or requests at this time.

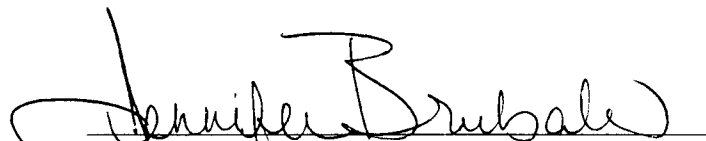
h. Objections to Witness Qualifications as an Expert

Staff has no objections to any witness' qualifications as an expert in this proceeding.

i. Compliance with Order No. PSC-07-0819-PCO-EI

Staff has complied with all requirements of the Order Establishing Procedure entered in this docket.

Respectfully submitted this 21st day of November, 2007.

  
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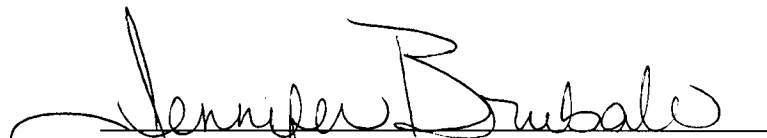
DATED: NOVEMBER 21, 2007

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of STAFF'S PREHEARING STATEMENT has been served this day on November 21, 2007, by electronic and U. S. Mail, to the following:

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