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JEWED FPSC

Charles A. Guyton 850,222,3423

July 16, 2002

-VIA HAND DELIVERY-

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

> Docket Nos. 020262-EI and 020263-EI Re:

Dear Ms. Bayó:

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On March 22, 2002, Florida Power & Light Company ("FPL") filed a Petition for Determination of Need for an Electrical Power Plant - Martin Unit 8 and a Petition for Determination of Need for an Electrical Power Plant - Manatee Unit 3. FPL's two petitions were assigned Docket Nos. 020262-EI and 020263-EI, respectively.

On April 22, 2002, FPL moved to hold both proceedings in abeyance to allow FPL to undertake a Supplemental Request for Proposals (Supplemental RFP). On April 29, 2002, FPL filed an emergency motion for waiver of Rule 25-22.080(2), F.A.C., to allow deferral of the hearing schedule if, as a result of the Supplemental RFP, Martin Unit 8 and Manatee Unit 3 were determined to be the most cost-effective alternatives to meet FPL's 2005 and 2006 need. By Order No. PSC-02-0571-PCO-EI, Commissioner Deason, acting as prehearing officer, substantially granted FPL's emergency motion to hold both proceedings in abeyance, and by Order No. PSC-02-0703-PCO-EI, the Commission granted FPL's emergency waiver of Rule 25-22.080(2).

CMP + org lest FPL has completed its Supplemental RFP. FPL's analysis shows that Martin Unit 8 and COM Manatee Unit 3 are the most cost-effective options to meet FPL's 2005 and 2006 need for capacity. Consequently, FPL is now prepared, consistent with Order Nos. PSC-02-0571-PCO-EI

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and PSC-02-0703-PCO-EI, for the Commission to proceed with its evaluation of the need for those two units in Docket Nos. 020262-EI and 020263-EI. The documents enclosed herewith, as described below, provide the information required for that evaluation.

Enclosed for filing on behalf of FPL in Docket Nos. 020262-EI and 020263-EI are the original and fifteen copies of:

- (1) FPL's Motion for Leave to Amend Petitions for Determination of Need
- (2) FPL's Amended Petition for Determination of Need for an Electrical Power Plant-Martin Unit 8
- (3) FPL's Amended Petition for Determination of Need for an Electrical Power Plant-Manatee Unit 3

Because the same analysis supported FPL's assessment of its 2005 and 2006 capacity needs and its determination that Martin Unit 8 and Manatee Unit 3 were the most cost-effective alternatives to meet the needs, FPL previously filed a motion to consolidate both dockets. Consistent with its motion to consolidate, FPL filed along with its original Need Determination petitions a single Need Study for Electrical Power Plant and a single set of Need Study Appendices, as well as a common set of testimony for both dockets. FPL continues to seek consolidation of these dockets for hearing.

In support of its amended Petitions for Determination of Need for Martin Unit 8 and Manatee Unit 3, FPL is filing the original and 15 copies of the following documents:

- (1) Need Study For Electrical Power Plant, 2005-2006
- (2) Need Study Appendices A D
- (3) Need Study Appendices E J
- (4) Need Study Appendices K O
- (5) Direct Testimony of Dr. William E. Avera
- (6) Direct Testimony of C. Dennis Brandt
- (7) Direct Testimony of Moray P. Dewhurst
- (8) Direct Testimony of Leonardo E. Green
- (9) Direct Testimony of Rene Silva
- (10) Direct Testimony of Dr. Steven R. Sim

- (11) Direct Testimony of Donald R. Stillwagon
- (12) Direct Testimony of Alan S. Taylor
- (13) Direct Testimony of William L. Yeager
- (14) Direct Testimony of Gerard Yupp

These documents reflect the results of FPL's Supplemental RFP and supercede the Need Study and Appendices and its Direct Testimony filed on March 22, 2002, in support of its initial Petitions for Determination of Need. Therefore, FPL hereby withdraws the March 22 Need Study and Appendices and the March 22 Direct Testimony.

Copies of the enclosed documents, are being provided to counsel for all parties of record. Under separate cover letter, FPL is filing its confidential appendices to the Need Study and a Request for Confidential Classification for the confidential appendices.

With the interruption of these proceedings for the Supplemental RFP, it is important that FPL's need determination proceedings be heard expeditiously. Prior to the Commission's granting of FPL's Emergency Motion To Hold The Proceedings In Abeyance, the parties had agreed to a schedule that would result in a hearing on October 2-4, 2002, a Commission decision on November 19, 2002, and a final order no later than December 4, 2002. FPL needs to preserve this schedule in order to meet its scheduled in-service date of June 2005 for both Martin Unit 8 and Manatee Unit 3. To facilitate this schedule, FPL has: (a) included more detailed data in the enclosed Need Study and Appendices than is required by Commission rule; (b) filed its direct testimony along with its amended petitions; (c) worked out with the intervenors free access to the primary analytical tools used in conducting the economic analysis of the Supplemental RFP; (d) agreed to a Confidentiality Agreement and process to allow intervenor access to most confidential data; and (e) agreed to expedited discovery. FPL will continue to work with the Commission and the parties to facilitate the Commission's prompt consideration of these proceedings.

Any delay in these proceedings would place at risk the in-service dates of Martin Unit 8 and Manatee Unit 3. In the event of delay, FPL would not achieve its 20 percent reserve margin criteria (or even a 15 percent reserve margin) in the summer of 2005. Without purchases of capacity to replace these facilities, an option which may not be available for the full capacity of these units, the reliability of FPL's system could be significantly adversely impacted to the detriment of FPL's customers. In the event of a delay, if FPL were to attempt to purchase capacity and energy to replace these units, FPL likely would pay higher costs than the costs it would incur if these units had met their in-service dates. Thus, delay also would adversely impact the costs paid by FPL's customers.

Because a delay would cause adverse impacts upon FPL's customers, FPL respectfully requests that these proceedings be processed according to the previously agreed schedule and that an Order on Procedure be issued. Such an order should place reasonable limits on discovery, encourage intervenors to coordinate discovery as they have previously agreed to do,

expedite discovery as previously agreed and set forth the agreed-to schedule, thereby facilitating the administration of these proceedings.

Respectfully submitted,

R. Wade Litchfield (Charles A. Guyton

Attorneys for Florida Power & Light Company

CAG/gc Enclosures

cc: Counsel for Parties of Record

MlA2001 122447v1

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition To Determine Need For an Electrical Power Plant in Martin County by Florida Power & Light Company. Docket No. 020262-EI

Dated: July 16, 2002

AMENDED PETITION FOR DETERMINATION OF NEED FOR AN ELECTRICAL POWER PLANT

Pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, Florida Administrative Code ("FAC"), Florida Power & Light Company ("FPL" or the "Company") respectfully petitions the Florida Public Service Commission ("PSC" or the "Commission") for an affirmative determination of need for the construction of a new four-turbine combined cycle unit at FPL's existing Martin plant site, Martin Unit 8. In support thereof, FPL states:

1. Presently, Martin Units 8A and 8B are each state-of-the-art General Electric ("GE") F-series natural gas-fired CTs operating without a steam cycle. Each unit is currently summer rated at 159 megawatts ("MW") and winter rated at 182 MW. Martin Unit 8 will add two similar GE F-series CTs, which along with the two existing turbines, will function in a combined cycle operation with four heat-recovery steam generators ("HRSGs") that will, in turn, power a single steam turbine. The resulting four-on-one combined cycle unit will have a summer peak capacity rating of 1,107 MW and a winter peak capacity rating of 1,197 MW, an incremental gain of 789 MW (summer) and 835 MW (winter) over the present generation capacity of Martin Units 8A and 8B.

DOCUMENT NUMBER DATE

- 2. FPL proposes to place the combined cycle unit in commercial service by June 2005. To this end, FPL filed its Site Certification application with the Florida Department of Environmental Protection ("DEP") on February 1, 2002.
- 3. FPL is submitting in support of this Petition a detailed Need Study document and appendices which develop more fully the information required by Rule 25-22.081, FAC, and which is hereby incorporated by reference (the "Need Study"). The Need Study addresses both Martin Unit 8 and Manatee Unit 3, for which FPL has separately sought a determination of need. As demonstrated below and in the Need Study, Martin Unit 8 and Manatee Unit 3 will improve electric system reliability and integrity, provide adequate power at reasonable cost, and serve as the most cost-effective options for providing the generation capacity needed to meet the needs of FPL's customers. Additionally, there is no reasonably available demand side management ("DSM") alternative that would mitigate the need for Martin Unit 8 and Manatee Unit 3.

I. Preliminary Information

4. The Petitioner's name and address are:

Florida Power & Light Company 9250 West Flagler Street Miami, Florida 33102

5. The names and addresses of FPL's representatives to receive communications regarding this docket are:

Charles A. Guyton Steel Hector & Davis LLP 215 South Monroe Street Suite 601 Tallahassee, Florida 32301 R. Wade Litchfield, Esq. Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408-0420

William G. Walker, III Florida Power & Light Company Vice President 215 South Monroe Street Suite 810 Tallahassee, Florida 32301-1859

II. The Primarily Affected Utility

- 6. FPL is a Florida corporation with headquarters at 700 Universe Boulevard, Juno Beach, Florida, 33408. FPL is a utility as defined in Section 366.82(1), Florida Statutes, and an applicant as defined in Section 403.503(4), for purposes of Section 403.519, Florida Statutes. FPL is the primarily affected utility within the meaning of Rule 25-22.081, FAC.
- 7. FPL serves over 4 million retail customers throughout Florida. Its service area comprises approximately 27,650 square miles in 35 Florida counties. Approximately 7.7 million people presently live within FPL's service area. During 2001, 52 percent of FPL's sales were to residential customers, 42 percent were to commercial customers, 4 percent were to industrial customers, and 2 percent were to highway lighting and other customers.
- 8. FPL is charged with serving both its existing customers and new customers that locate in its service territory. FPL forecasts continued growth of customers in its service territory. The population in its service territory is expected to grow to 8.4 million by 2006. FPL projects that its annualized retail

customer growth from 2002 to 2006 will be 2.6 percent and that its Net Energy Load ("NEL") will grow at an annualized rate of 3.7 percent for that period.

- 9. In 2001, FPL experienced a coincident peak demand of 18,754 MW (summer) and 18,199 MW (winter) and a NEL of 98,404 gigawatt-hours ("GWh"). For 2005 and 2006, FPL projects to experience summer peak demand of 20,719 MW (2005) and 21,186 MW (2006), and winter peak demand of 20,418 MW (2005) and 20,854 MW (2006), before accounting for DSM. FPL expects NEL to grow from its present level to 111,772 GWh in 2005 and 115,602 GWh in 2006.
- 10. FPL is part of a nationwide interconnected power network. It has eight points of interconnection with other utilities that enable power to be exchanged among utilities. (FPL's interconnection points with other utilities are addressed in more detail in the Need Study.) The FPL transmission system includes more than 1,107 circuit-miles of 500 kilovolt ("kV") and 2,644 circuit-miles of 230 kV transmission lines, 2,459 circuit miles of lower voltage transmission lines, and 505 substations.
- 11. FPL presently meets its resource needs by a mix of conventional and nuclear generating units, purchased power and DSM. FPL is projecting a total resource capability of 21,140 MW in the summer of 2002. This capability includes four nuclear steam units (2,939 total summer MW), three coal units (912 summer MW), eight combined-cycle units (4,730 summer MW), seventeen fossil-fired steam units (7,053 summer MW), fifty simple-cycle CTs (2,214 summer

MW)¹, five diesel units (12 summer MW), and long-term firm-capacity contracts from two utilities (1,310 MW) and seven qualifying facilities (877 total MW). Additionally, FPL has short-term firm capacity contracts with 6 entities (1,093 MW) for the summer of 2002.

12. Based on a detailed reliability assessment discussed in the Need Study, FPL projects that it will need at least 1,722 MW of additional capacity to meet its needs and provide adequate reserve margins in 2005 and 2006.

III. The Proposed Electrical Power Plant

- 13. The proposed plant will utilize the two existing Martin Plant CTs along with two new CTs to produce a four-on-one combined cycle unit. In 2001, FPL installed two GE F series CTs (Units 8A and 8B) at its Martin generating plant. Those units presently provide a combined capacity of 318 MW in summer and 364 MW in winter. They are primarily used to serve peak demand, as CTs without a steam cycle have marginal generation costs that make broader use uneconomic.
- 14. Martin Unit 8 would add two additional GE F series CTs, similar to the two presently located at the Martin Plant site. To facilitate combined cycle operation, the heat generated by the two existing and two additional turbines would power four new HRSG's that would produce steam to, in turn, power a new steam turbine. The total rated capacity of the four CTs and the single steam turbine would be 1,107 MW in summer and 1,197 MW in winter.

¹ The capacity includes the 318 MW summer capacity of Martin units 8A and 8B, which pursuant to this application will be converted to combined-cycle operation along with two additional CTs.

- 15. The new combined cycle unit would have a much lower marginal operating cost than the two existing turbines. Presently, Martin Units 8A and 8B have an average net-operating heat rate in excess of 10,000 Btu/kWh, while the new combined cycle unit would have a much lower average net-operating heat rate of 6,850 Btu/kWh (at 75°F). This results in significantly improved generating efficiency over the two existing CTs. This lower heat rate would allow broader use of the new combined cycle unit, as compared to Units 8A and 8B.
- 16. The new combined cycle unit will use natural gas delivered by pipeline to the plant as its primary fuel. Martin Unit 8 will be served by firm gas from a supplier not yet selected. The Martin Plant site is currently served by two laterals from the Florida Gas Transmission ("FGT") system. Martin Unit 8 could also be served by a new lateral from either FGT or the Gulfstream Natural Gas Pipeline system. Distillate fuel oil delivered by truck and stored at two 2 million gallon oil storage tanks (one existing and one new) will be a backup fuel.
- 17. The new combined cycle unit will connect to the existing on-site system substation via a new tie line. Additional bays will be added to the existing system substation to accommodate the new interconnection to FPL's electric transmission system. (Transmission interconnection and integration are more fully discussed in the Need Study.)
- 18. Infrastructure to serve the new unit is already in place at the site, which will reduce total project cost and lead to a more streamlined siting process. In addition, the location of the new unit within an existing power plant site will serve one of the underlying purposes of the Florida Electrical Power Plant Siting

Act, Section 403.501, et. seq., and Section 403.519 -- to limit the number of power plants in the state.

- 19. The new combined cycle unit will be a highly reliable source of energy for FPL's customers. It will have an estimated equivalent availability factor of ninety-seven percent (97%) and a low estimated equivalent forced outage rate of one percent (1%). The existence of this highly-reliable unit will improve the system reliability and integrity of FPL and Peninsular Florida.
- 20. The estimated total installed cost of Martin Unit 8 is \$439 million (2005 dollars) exclusive of transmission integration costs. This estimate includes the cost of the power block, interconnection facilities, and allowance for funds used during construction. Total direct transmission integration costs for the Martin Unit 8 and Manatee Unit 3 portfolio are estimated to be \$22.1 million (2002 dollars). Martin Unit 8 represents the most cost effective option for FPL to add the 789 MW (summer) and 835 MW (winter) of incremental capacity that the unit will provide.
- 21. FPL needs to have this project in service by June 2005 to meet demand and its 20% reserve margin criterion for the summer of 2005. Without the timely completion of Martin Unit 8 and Manatee Unit 3, FPL and Peninsular Florida's electric system reliability and integrity will be significantly reduced, and FPL will fail to meet either a 20% or a 15% reserve margin in 2005 and 2006.

IV. FPL's Need for Martin Unit 8

- 22. In 2001, FPL performed reliability assessments that showed a need for an additional 1,722 MW of capacity by the summer of 2006. In performing these analyses, FPL employed two reliability criteria. First, FPL sought to maintain sufficient capacity to keep its loss of load probability to less than 0.1 day per year. Second, beyond the summer of 2004, FPL sought to maintain the 20% reserve margin to which FPL agreed and the Commission approved in Order No. PSC-99-2507-S-EU. (The results of FPL's 2000 and 2001 reliability assessments are fully discussed in the Need Study.)
- 23. As shown in the Need Study, without the timely addition of both Martin Unit 8 and Manatee Unit 3, FPL will be unable to maintain the required 20% reserve margin in 2005 and 2006. Absent these units, FPL would have summer reserve margins of only 14.1% in 2005 and 11.1% in 2006. Martin Unit 8 is, therefore, needed to maintain the electric system reliability and integrity of FPL and Peninsular Florida.
- 24. Martin Unit 8 will add highly efficient and cost-effective generation that, as a utility-owned plant, will be committed to Florida retail customers at cost-based rates. As shown in the accompanying Need Study Martin Unit 8 will produce adequate electricity at a reasonable cost, improve system efficiency, increase reliability and reduce fuel costs.

V. FPL's Analysis of Generating Alternatives

25. As discussed in more detail in the Need Study, FPL examined and evaluated thirteen self-build generating alternatives which are summarized in the following table:

Candidate Self-Build Capacity Additions*

Location	Technology	Primary Fuel	Level of Duct Firing	Incremental Net Summer Peak Capability
Fort Myers	(1) - 2x1 CC	Natural gas	Moderate	237 MW
Port Everglades	(2) – 4x1 CC repowering	Natural Gas	Light	1238 MW
Manatee	(1) – 3x1 CC	Natural Gas	Moderate	833 MW
	(1) – 4x1 CC	Natural Gas	Moderate	1107 MW
Martin	(2) – 300 MW pulverized coal boiler	Petroleum coke	N/A	600 MW
	(1) – 3x1 CC	Natural Gas	Light	763 MW
	(1) – 3x1 CC	Natural Gas	Moderate	833 MW
	(1) – 3x1 CC expansion of Units 8A&B	Natural Gas	Moderate	515 MVV
	(1) – 3x1 CC	Natural Gas	Heavy	881 MW
	(1) – 4x1 CC	Natural Gas	Moderate	1110 MW
	(1) – 4x1 CC expansion of Units 8A&B	Natural Gas	Moderate	789 MW
Sanford	(1) – 1x0 simple cycle w/ HRSG to provide power augmentation for new CT and existing Unit 4 CTs	Natural Gas	None	214 MW
	(1) – 1x0 simple cycle w/ HRSG to provide power augmentation for new CT and existing Unit 5 CTs	Natural Gas	None	214 MW

^{*}The capacity value shown for each option is the MW value used in FPL's final analysis of that option.

- 26. Ultimately, FPL rejected eleven of these FPL generating alternatives, and selected Martin Unit 8 and Manatee Unit 3 as the best self-build options. Ten of the eleven alternatives were rejected based on relative economics. The other self-build alternative, the 600 MW Martin Petroleum Coke project, was rejected because its cost and performance assumptions were not sufficiently well developed, and there were concerns over licensing and construction schedules. FPL's economic analyses showed that the combination of Martin Unit 8 and Manatee Unit 3 was the most cost-effective FPL self-build generation portfolio to meet FPL's 2005 and 2006 need for capacity.
- 27. FPL also engaged in an extensive capacity solicitation process, which is described below and discussed in further detail in the Need Study. On August 13, 2001, FPL announced in the Wall Street Journal and through news releases to numerous newspapers and periodicals that it was issuing a Request for Proposals ("RFP") for 1,150 MW of capacity to meet its 2005 needs, and an additional 600 MW of capacity for its 2006 needs.²
- 28. On August 24, 2001, consistent with the RFP notice, FPL held a pre-bid workshop in Miami. Thirty-one organizations attended the workshop during which FPL explained the RFP process and solicited comments.
- 29. On September 28, 2001, FPL received a number of capacity proposals from 15 organizations. The bidders included twelve non-utility entities, two Florida utilities and one non-Florida utility. Collectively, the proposals offered more than 14,500 MW of capacity for the 2005/2006 time frame and ranged from supply proposals as short as three years to turnkey projects. FPL undertook

² FPL revised its estimate of need later that year to 1,122 MW for 2005.

extensive analysis of the proposals and its self-build options using the Electric Generation Expansion Analysis System Model ("EGEAS"), FPL's long-standing primary modeling tool. (The EGEAS model is described in detail in the Need Study.) Additionally, an independent, third-party evaluator, Sedway Consulting, Inc., was retained to perform its own evaluation of the proposals. The independent evaluator used its own spreadsheet model called the Response Surface Model ("RSM"), which employs the same cost inputs and system fuel profile as EGEAS. (The use of the RSM is explained in the Need Study and the Independent Evaluation Report, which is being filed along with this Amended Petition as Document No. AST-2 to the Direct Testimony of Alan S. Taylor.)

- 30. Both FPL and the independent evaluator began by performing individual rankings of the proposals. Based on these rankings, portfolios of the most economical outside proposals were developed. A similar process was also used to evaluate FPL self-build portfolios.
- 31. "Combination" portfolios were then developed, which combined the best FPL options and outside proposals into various generation portfolios. At that point, EGEAS and RSM were used to compare the most economical portfolios.
- 32. FPL's final cost comparisons for its initial RFP were completed in February and showed that the FPL portfolio of Manatee Unit 3 and Martin Unit 8 was the most cost-effective alternative to meet FPL's 2005 and 2006 capacity needs. Additionally, there were non-price attributes to the Martin Unit 8 and Manatee Unit 3 portfolio that made it an even clearer choice. The independent

evaluator's analysis confirmed that the Manatee Unit 3 and Martin Unit 8 portfolio was more cost-effective than the next lowest cost portfolio by \$36 million (CPVRR)

- 33. Based upon the economic analyses showing that the Manatee Unit 3 and Martin Unit 8 portfolio was the most cost-effective alternative to meet FPL's needs, as well as FPL's assessment of the non-price advantages of that portfolio, FPL decided to proceed with the licensing of Manatee Unit 3 and Martin Unit 8. Accordingly, FPL filed its initial Petitions for Determination of Need, along with the supporting need study and testimony, on March 22, 2002.
- 34. Several bidders intervened in that proceeding, taking issue with various aspects of the RFP procedure. Additionally, one such bidder, opened a collateral proceeding to raise the same points.³ Although FPL's original RFP fully complied with the requirements of applicable Commission regulations, FPL decided to affirmatively address the bidders' stated concerns, and give bidders yet another opportunity to submit more cost-effective proposals. Therefore, on April 22, 2002, FPL asked the Commission to suspend this proceeding so FPL could conduct a Supplemental RFP designed to address the various bidders' objections to the original RFP procedure. FPL also sought an emergency waiver of Rule 25-22.080(2) to delay the hearing schedule.

³ Many of the points raised in that docket were addressed in the supplemental RFP, and the complaint has since been withdrawn. Additionally, the entity that initiated the collateral complaint docket failed to submit a bid in the supplemental RFP, and is no longer a party to these proceedings.

- 35. On April 26, 2002, the prehearing officer ordered that the need determination proceedings be held in abeyance. *See* Order No. PSC-02-0571-PCO-EI. Additionally, on May 23, 2002, the Commission granted FPL's Emergency Petition for Waiver of Rule 25-22.080(2). In that order, the Commission recognized that both FPL and the intervenors would face substantial hardship if the rule waiver were not granted, and found that "granting the request for waiver supports the principles of fairness, in that it allows the supplemental RFP process to take place, giving all parties additional opportunity to submit new or additional proposals which may be cost-effective alternatives to FPL's self-build option." *See* Order No. PSC-02-0703-PCO-EI.
- 36. The Supplemental RFP was announced on April 26, 2002, and detailed Supplemental RFP documents were sent that same day to all bidders that had previously submitted proposals. In response to the Supplemental RFP, FPL received 53 proposals from 16 bidders, most of which were participants in the prior request for proposals. Of these, 4 proposals were later withdrawn and another 18 declared ineligible, 4 leaving 31 proposals that were evaluated by FPL using EGEAS and separately evaluated by the independent evaluator using RSM.

⁴ One was declared ineligible for failing to meet the Supplemental RFP's minimum requirement of agreeing to a completion security. Five proposals were declared ineligible because the bidder had failed to perform under an existing purchased power agreement. The remaining twelve were declared ineligible because public allegations regarding the prior conduct of the bidder led FPL to conclude it was too risky to rely on the bidder.

- 37. The Supplemental RFP made several changes to the original process in response to comments from bidders: (i) the detailed costs of FPL's next planned generating units -- Martin Unit 8 and Manatee Unit 3 -- were fully disclosed so that bidders would know up-front the price they had to beat;⁵ (ii) natural gas tolling proposals (whereby FPL provides the fuel used by a bidder's unit) were allowed; (iii) the time that proposal had to be held firm was reduced from 390 to 120 days; (iv) the provisions dealing with Commission refusal of cost-recovery were revised in light of intervener suggestions; and (v) the provisions dealing with contract cancellation in the event of legislative restructuring of the electric market were removed.
- 38. As discussed in detail in the Need Study, the evaluation of the Supplemental RFP bids by both FPL and the independent evaluator confirmed that the combination of Martin Unit 8 and Manatee Unit 3 is the most cost-effective option to meet FPL resource needs. However, FPL decided to give one more chance to the top bidders, identified the most cost-effective portfolios containing alternative portfolios and undertook negotiations with the bidders in those portfolios to determine whether the relative economics of those portfolios could be improved.
- 39. FPL therefore named the non-FPL proposals comprising, in part, the second and third best portfolios to a short list for further negotiation. These negotiations quickly revealed not only that there would be no further price

⁵ In this regard, the bidders also had access to the detailed information and testimony submitted along with FPL's original need determination petitions for Martin Unit 8 and Manatee Unit 3.

concessions, but also that the leading non FPL proposals had benefited from overly favorable assumptions in the modeling and actually had higher costs than both FPL and the independent evaluator had modeled. Based on these negotiations, FPL again concluded that the construction of Manatee Unit 3 and Martin Unit 8 was its most cost-effective alternative to meet its 2005 and 2006 resource needs.

VI. FPL's Analysis of Non-Generating Alternatives

- 40. Apart considering all potentially viable supply-side from alternatives, FPL also considered DSM alternatives. FPL comprehensive and cost-effective DSM programs to reduce load requirements and encourage conservation. FPL has long been one of the key innovators in the field of DSM, and is a nationally ranked industry leader in conservation and load management.⁶ Without its DSM, FPL would require far more additional capacity to meet its present and projected needs.
- 41. FPL most recently revised and submitted its DSM Plan for PSC approval in 1999. FPL's request was approved by the Commission in Order No. PSC-99-1942-FOF-EG. (A copy of FPL's approved DSM Plan is found in documents attached to the pre-filed Direct Testimony of Mr. Dennis Brandt being filed along with this petition.) In its DSM Plan, FPL evaluated and proposed various DSM strategies which comply with the Florida Energy Efficiency and Conservation Act and Commission-approved tests of cost-effectiveness. This

⁶ In 2000, FPL was rated first in energy conservation achievement and second in load management among the nation's electric utilities by the U.S. Department of Energy.

evaluation led to a DSM Plan consisting of six residential, eight commercial/industrial DSM programs, one research and development program, and five research and development projects.

- 42. Since the inception of FPL's DSM program in the late 70's, FPL has achieved (at the meter) 3,076 MW of summer peak demand reduction and 2,680 MW of winter peak demand reduction. After accounting for reserve margin requirements, that is the equivalent of nine 400-MW nominal capacity power plants that otherwise would have been built. Since the inception of its DSM initiatives, FPL has saved an annual total of 19,713 GWh of energy at the generator and completed more than 1,730,000 energy audits of customer homes and facilities.
- 43. All of FPL's DSM programs are being actively implemented by FPL and all were factored into FPL's reliability analyses. As shown in the accompanying Need Study, FPL's projected need for 1,722 additional megawatts of capacity in 2005/2006 already takes into account the cost-effective DSM options presently available. Therefore, there is no reasonably available DSM option that could eliminate the need to add the generation capacity provided by Manatee Unit 3.

VII. Adverse Consequences of Delay

44. As noted above and detailed in the Need Study, FPL needs both Martin Unit 8 and Manatee Unit 3 to maintain FPL system reliability through 2005 and 2006. Because of this, it is critical that the in-service date for each project be met. Without Martin Unit 8 and Manatee Unit 3, FPL's summer reserve margins

will fall to 14.1% in 2005 and 11.1% in 2006, well short of the 20% reserve margin goal approved by the Commission.

45. Any delay in licensing Martin Unit 8 and Manatee Unit 3 may adversely affect FPL's and Peninsular Florida's electric system reliability and integrity in 2005 and 2006. Any delay in these projects will also delay the benefits of the reliable, cost-effective and environmentally friendly power that would be provided upon their timely completion.

VIII. Disputed Issues of Material Fact

46. Since the initiation of this proceeding, several bidders have intervened or sought intervention and raised various issues regarding the initial RFP. Many of these issues have been addressed in the Supplemental RFP, and FPL is presently unsure what, if any, issues will remain in contention or whether new issues will be raised. In any event, FPL intends to prove at the final hearing that Manatee Unit 3 and Martin Unit 8 are needed to maintain electric system reliability and integrity, and to provide adequate power at reasonable cost, and are the most cost-effective options for providing the generation capacity needed to meet the needs of FPL's customers. FPL will also prove that there is no reasonably available conservation or other non-generation alternative that would mitigate the need for Martin Unit 8 and Manatee Unit 3.

CONCLUSION

The proposed Martin Unit 8 is a highly cost-effective and environmentally benign option for meeting FPL's capacity needs. It presents several key

advantages to FPL and its customers. Most importantly, it is critically needed to meet reliability needs in 2005 and 2006. Beyond that, it increases electric system reliability and integrity throughout Peninsular Florida, it provides adequate power at reasonable cost, and along with Manatee Unit 3 it is the most cost-effective alternative to meet needed capacity to FPL's system.

Based upon the foregoing and the more detailed information in the Need Study and pre-filed testimony submitted contemporaneously with this Petition, FPL requests that the Commission grant a favorable determination of need for Martin Unit 8 within the time limitations set forth in Rule 25-22.080, FAC.

Respectfully submitted,

R. Wade Litchfield, Esq. Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408-0420 Telephone: 561-691-7101

Steel Hector & Davis LLP 215 South Monroe Street Suite 601 Tallahassee, Florida 32301 Telephone: 850-222-2300

By: <u>(havus / Suufo</u> Charles A. Guyton

CERTIFICATE OF SERVICE Docket No. 020262-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing Amended Petition for Determination of Need For An Electrical Power Plant has been served by hand delivery (*) or overnight courier (**) this 16th day of July, 2002, to the following:

Martha Carter Brown, Esq.*
Legal Division
Florida Public Service Commission
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