State of Florida

Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: NOVEMBER 7, 2002

TO: DIRECTOR, DIVISION OF THE COMMISSION CLERK & ADMINISTRATIVE SERVICES (BAYÓ)

FROM: DIVISION OF ECONOMIC REGULATION (HAFF, HEWITT, KENNY, LESTER, SICKEL)
DIVISION OF COMPETITIVE MARKETS & ENFORCEMENT (FUTRELL, MAKIN)
OFFICE OF THE GENERAL COUNSEL (M. BROWN, L. HARRIS)

RE: DOCKET NO. 020262-EI - PETITION TO DETERMINE NEED FOR AN ELECTRICAL POWER PLANT IN MARTIN COUNTY BY FLORIDA POWER & LIGHT COMPANY.

DOCKET NO. 020263-EI - PETITION TO DETERMINE NEED FOR AN ELECTRICAL POWER PLANT IN MANATEE COUNTY BY FLORIDA POWER & LIGHT COMPANY.

AGENDA: 11/19/2002 - REGULAR AGENDA - POST HEARING DECISION - PARTICIPATION IS LIMITED TO COMMISSIONERS AND STAFF

CRITICAL DATES: 12/04/2002 - COMMISSION ORDER DUE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS FINAL REPORT ON NEED

SPECIAL INSTRUCTIONS: THE COMMISSION SHOULD VOTE ON ISSUES IN THE FOLLOWING ORDER: 2, 4, 6, 8, 1, 3, 5, 7, 9-13, 14 & 15 (TOGETHER), 16 & 17 (TOGETHER), AND 18.

FILE NAME AND LOCATION: S:\PSC\ECR\WP\020262.RCM

CASE BACKGROUND

On August 13, 2001, Florida Power & Light Company (FPL) issued a request for proposals (RFP) for capacity resources to meet an anticipated need for 1,708 MW of capacity in the Summers of 2005 and 2006. In this initial RFP, FPL identified several self-build

options: the conversion of existing units from combustion turbine to combined cycle operation at FPL's existing Martin and Ft. Myers sites and the construction of new combined cycle units at Martin and at a new site, Midway. As a result of its initial RFP analysis, however, FPL identified two different self-build options to meet its capacity need: the Martin Unit 8 expansion project and a new unit, Manatee Unit 3.

The Martin Unit 8 expansion project consists of 789 MW of new capacity additions to two existing combustion turbine units, Martin Units 8A and 8B. When completed, Martin Unit 8 will be a 1,107 MW natural gas-fired, combined cycle power plant. Using distillate oil as backup fuel, Martin Unit 8 would be located at the existing Martin site in Martin County, Florida, and is expected to be placed into service by June, 2005. Manatee Unit 3 consists of a new 1,107 MW natural gas-fired, combined cycle power plant identical to Martin Unit 8. Manatee Unit 3 will not use an alternate fuel type as backup, since the unit will rely upon two natural gas transportation pipelines, FGT and Gulfstream, to supply primary and backup fuel. Manatee Unit 3 would be located at the existing Manatee site in Manatee County, Florida, and is also expected to be placed into service by June, 2005. On March 22, 2002, FPL filed a Petition for Determination of Need with the Commission for Martin Unit 8 and Manatee Unit 3.

A number of unsuccessful bidders in FPL's initial RFP process were granted leave to intervene in this proceeding. These intervenors included Reliant Energy Power Generation, Inc. (Reliant), Mirant Corporation (Mirant), Calpine Eastern Corporation (Calpine), South Pond Energy Park, LLC (South Pond), and CPV Cana, Ltd. (CPV Cana). In part due to concerns raised by these intervenors over FPL's RFP process, FPL filed an Emergency Motion to Hold Proceedings in Abeyance on April 22, 2002. In this motion, FPL agreed to issue a supplemental RFP to allow bidders an additional opportunity to provide cost-effective alternatives to FPL's self-build option. FPL issued the supplemental RFP on April 26, 2002.

As a result of its supplemental RFP analysis, FPL again identified the Martin Unit 8 expansion and Manatee Unit 3 as the most cost-effective alternative available to meet its identified need. On July 16, 2002, FPL filed a Motion for Leave to Amend Petitions for Determination of Need, Amended Petitions for Determination of Need for Martin Unit 8 and Manatee Unit 3, and

associated prefiled testimony and exhibits. Subsequent to FPL's filings, several other parties intervened in this proceeding, including CPV Gulfcoast, Ltd. (CPV Gulfcoast), Florida Industrial Power Users Group (FIPUG), the Florida Partnership for Affordable Competitive Energy (PACE), and the Florida Action Coalition Team and several individual FPL retail customers (collectively, FACT et. al.). Several of the original intervenors subsequently withdrew from the proceeding, including Reliant, Calpine, Mirant, and South Pond. CPV Cana was dismissed from the case because it did not bid in response to FPL's supplemental RFP.

The Commission's jurisdiction and the substantive considerations of this case are governed by Section 403.519, Florida Statutes, which contains the following five areas for review by the Commission in determining the need for an electrical power plant:

(1) the need for electric system reliability and integrity;

(2) the need for adequate electricity at reasonable cost;

(3) whether the proposed plant is the most cost-effective alternative available;

(4) conservation measures taken by or reasonably available to the applicant which might mitigate the need for the proposed power plant; and

(5) other matters within the Commission's jurisdiction which it deems relevant.

Separate public hearings are scheduled to be held by the Department of Environmental Protection before the Division of Administrative Hearings to consider the environmental and other impacts of the proposed plants.

At the prehearing conference held on September 23, 2002, eighteen substantive issues were identified for resolution in this proceeding. A hearing was conducted October 2, 2002, through October 4, 2002, and briefs were filed on October 14, 2002. PACE, FIPUG, CPV Gulfcoast, and FACT et. al. participated in the hearing and submitted briefs.

Due to the substantial size of FPL's capacity need, the issues identified in this docket are closely interrelated. Therefore, Staff recommends that the Commission vote on the issues in the following order:

2, 4, 6, 8 (Manatee Unit 3 issues);
1, 3, 5, 7 (Martin Unit 8 issues);
9 through 13 (issues common to both generating units);
14 and 15 together (Cost-effectiveness issues);
16 & 17 together (Approval of both generating units); and
18 (Docket closure issue)

Having considered the testimony and exhibits, as well as the briefs filed by the parties, staff makes the following recommendations on the issues.

ISSUE 1: Does Florida Power & Light company have a need for Martin Unit 8, taking into account the need for electric system reliability and integrity?

RECOMMENDATION: In order to precisely meet a planning reserve margin criterion of 20.0%, FPL needs only 15 MW of capacity with the addition of Manatee Unit 3 in Summer, 2005. Therefore, FPL does not have a pressing reliability need for the entire 789 MW of capacity from Martin Unit 8 until Summer, 2006. However, as discussed in Issue 14, it is more cost-effective for FPL to place Martin Unit 8 into commercial service in 2005 rather than 2006. Placing Martin Unit 8 into service in 2005 will enhance FPL's electric system reliability and integrity. (Haff, Hewitt)

POSITION OF THE PARTIES

FPL: Yes. Without both units, FPL's summer reserve margins fall to 14.1% in 2005 and 11.1% in 2006, well short of the Commission-approved 20% reserve margin. Even with Manatee 3, Martin 8 is definitely needed to meet FPL's 2005 and 2006 need. It costs FPL's customers at least $18 million less to complete Martin 8 in 2005 than in 2006; there is no more cost-effective alternative available; and Martin 8 provides FPL flexibility to meet unforecasted customer demand.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: No. Other options are available to meet FPL's 15 MW need in 2005, including rounding up its 19.92% reserve margin to 20%.

FIPUG: It appears that FPL may have a need for the capacity represented by Martin 8 in 2006, not in 2005. FPL seeks to build 789 MW represented by Martin 8 in 2005 to meet a 15 MW need. This raises significant questions regarding the cost-effectiveness of this decision as well as whether such capacity may be able to be provided more cost-effectively by a competitive provider.

PACE: No. If, despite the continuing economic downturn, the Commission accepts FPL's load forecast, FPL's projected need in 2005 is 1122 MW. Manatee 3 (or equivalent) would supply all but 15 MW, yielding a reserve margin of 19.92%, which the Commission can and should deem adequate. Further, FPL did not evaluate, either within of outside the RFP, a one-year purchase of 15 MW to reach

20%. PACE witness Slater demonstrated that customers would not be harmed by a denial of Martin 8.

STAFF ANALYSIS: The first step in any utility's generation expansion planning study is the load forecast. A load forecast indicates the timing and magnitude of a utility's capacity need.

FPL's load forecast appears to be reasonable. FPL witness Green offered direct testimony, prefiled exhibits summarizing FPL's forecasts (EX 20), and the historical data, forecast assumptions, and regression models used to create FPL's projected system peaks. (EX 3, Appendix G). The forecast assumptions were drawn from independent sources (TR 504) which the Commission has relied upon in prior cases. The regression models used to calculate FPL's projected peak demands conform to accepted economic and statistical practices. (TR 505; EX 3, Appendix G). The projected peak demands produced by these models appear to be a reasonable extension of historical trends. (EX 20). No other party offered an alternative load forecast to that presented by witness Green. Staff recommends that FPL's forecast assumptions and regression models are appropriate.

PACE questioned whether FPL's forecasts were "front loaded" because the forecasted average compound growth rate for the ten-year forecast period is 2.1%, although witness Green assumes that FPL's 2003 summer peak would grow by 3.3% from the prior year. (TR 524). Witness Green testified that this annual growth rate is largely due to FPL's recent rate reduction causing the price of electricity to fall. (TR 524). Staff analyzed this concern by recalculating FPL's summer peak demand model for 2003 assuming no reduction in the price of electricity. This exercise resulted in a 2003 summer peak demand of 19,525 MW and a 2.1% growth rate over 2002. Based on this analysis, staff concludes that the 2003 summer peak demand growth rate of 3.3% is reasonable and is based upon a known and quantifiable event.

Based on its load forecast, FPL has identified a need for 1,122 MW of capacity for Summer, 2005 and an additional 600 MW of capacity for Summer, 2006 to maintain a 20% summer reserve margin criterion. (TR 90, 293, 323-4, 348; EX 3, Need Study pp. 45, 49-50). FPL's capacity needs for 2005 and 2006 are consistent with what has been reflected in FPL's past two Ten-Year Site Plans. (EX 3, Appendices D and E). If FPL added only the 1,107 MW Manatee Unit 3 in Summer, 2005, FPL would have a projected capacity deficit

of only 15 MW. (TR 197, 213, 219, 433). Under this scenario, the resulting summer reserve margin for Summer, 2005 would be 19.92% (TR 199, 213, 431; EX 3, Need Study, p. 103).

CPV Gulfcoast, PACE, FIPUG, and FACT et. al. take issue with FPL's position that it needs Martin Unit 8 for reliability reasons in 2005. These parties assert that FPL should have gone outside the RFP process to find a one-year seasonal purchase of 15 MW. FPL witness Silva testified that such a purchase is possible (TR 218), and that FPL frequently purchases short-term capacity. (TR 217-8). However, FPL witness Sim testified that it was not appropriate to go outside the RFP to find 15 MW (TR 336, 366, 479), and that FPL was concerned that going outside the RFP would have been unfair to the bidders. (TR 479). Given the parties' objections with FPL's supplemental RFP process that are discussed in Issues 9, 10, and 11, staff believes that FPL's decision not to go outside the confines of the RFP process to find capacity is reasonable.

CPV Gulfcoast further asserts that FPL could have simply rounded up the 19.92% reserve margin to 20.0%. Staff agrees that FPL could have rounded its reserve margin to 20%. In past reviews of the annual Ten-Year Site Plans filed by Florida's large utilities, the Commission has not found any plan to be "unsuitable" due to having a forecasted reserve margin fall just short of the reliability criterion. Many utilities round their reserve margin to the nearest whole percent. If FPL had done so in this case, its forecasted Summer, 2005 reserve margin would be 20% with the one-year deferral of Martin Unit 8.

The addition of Martin Unit 8's 789 MW of capacity in Summer, 2005 would certainly enhance FPL's electric system reliability and integrity. The addition of this unit, combined with Manatee Unit 3, is expected to result in a Summer, 2005 reserve margin of 24.1% (EX 3, Appendix E, p. E-79). However, the true reliability need for Martin Unit 8 is for Summer, 2006. Combining the 15 MW shortfall in 2005 with FPL's identified need for 600 MW in 2006, FPL would have a need for 615 MW of additional capacity in Summer, 2006. Staff believes that FPL's electric system reliability would not be harmed by deferring the in-service date of Martin Unit 8 by one year to more closely meet FPL's projected load growth. As discussed in Issue 14, it is more cost-effective for FPL to place Martin Unit 8 into commercial service in 2005 rather than deferring the unit by one year.

FIPUG also asserts that Martin Unit 8 may not be the most cost-effective option to meet FPL's need. The issue of cost-effectiveness is discussed in Issue 14.

In summary, FPL's load forecast appears to be reasonable. FPL needs 1,122 MW of capacity for Summer, 2005 and an additional 600 MW for Summer, 2006. The sole addition of Manatee Unit 3 in 2005 results in a projected summer reserve margin of 19.92%, reflecting a capacity deficit of only 15 MW. Adding 789 MW from Martin Unit 8 in 2005 would certainly enhance FPL's electric system reliability and integrity, but the true reliability need for Martin Unit 8 is one year later. FPL's electric system reliability should not be harmed by deferring the in-service date of Martin Unit 8 by one year to more closely meet FPL's projected load growth. However, as discussed in Issue 14, it is more cost-effective for FPL to place Martin Unit 8 into commercial service in 2005 rather than deferring the unit by one year. Therefore, staff recommends that placing Martin Unit 8 into service in 2005 will enhance FPL's electric system reliability and integrity.

ISSUE 2: Does Florida Power & Light company have a need for Manatee Unit 3, taking into account the need for electric system reliability and integrity?

RECOMMENDATION: Yes. FPL has an estimated need for 1,122 MW of capacity for Summer, 2005. The 1,107 MW of summer capacity from Manatee Unit 3 is needed by FPL to ensure electric system reliability and integrity. With the addition of Manatee Unit 3 in Summer, 2005, FPL's projected reserve margin for Summer, 2005 is 19.92%. (Haff, Hewitt)

POSITION OF THE PARTIES

FPL: Yes. FPL needs both Martin 8 and Manatee 3 to maintain system reliability through 2005 and 2006. Without Martin 8 and Manatee 3, FPL's summer reserve margins will fall to 14.1% in 2005 and 11.1% in 2006, well short of the Commission-approved 20% reserve margin criterion. Mr. Slater's EUE calculation ignores the Commission-approved reserve margin criterion and is improper because it is a Peninsular Florida, not FPL, calculation that improperly includes non-firm resources unavailable to FPL.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: While FPL may have a need for Manatee Unit 3 in 2006, the process it used to fill that need, along with its failure to secure firm contracts for the major cost components of the Manatee Unit 3 unit results in the Manatee Unit 3 not being the most cost effective alternative. Thus, ratepayers are not benefitted and the petition should be denied.

FIPUG: It appears that FPL has a need for the capacity represented by Manatee 3. However, such capacity may be able to be provided more cost-effectively by a competitive provider.

PACE: If, despite a continuing economic downturn, the Commission accepts FPL's load forecast, then FPL needs the capacity represented by Manatee 3 in 2005. However, FPL has failed to support its contention that Manatee 3 is the most cost-effective choice available.

STAFF ANALYSIS: The first step in any utility's generation expansion planning study is the load forecast. As discussed in Issue 1, staff recommends that FPL's load forecast is reasonable.

Based on its load forecast, FPL has identified a need for 1,122 MW of capacity for Summer, 2005 and an additional 600 MW of capacity for Summer, 2006 to maintain a 20% summer reserve margin criterion. (TR 90, 293, 323-4, 348; EX 3, Need Study pp. 45, 49-50). FPL's capacity needs for 2005 and 2006 are consistent with what has been reflected in FPL's past two Ten-Year Site Plans. (EX 3, Appendices D and E). To address its Summer, 2005 capacity need, FPL plans to add 1,107 MW of new capacity from Manatee Unit 3. This capacity is needed by FPL to meet its anticipated capacity need for Summer, 2005, thus ensuring electric system reliability and integrity.

CPV Gulfcoast and FIPUG do not appear to take issue with FPL's need for Manatee Unit 3 for reliability reasons. Rather, CPV Gulfcoast and FIPUG, as well as PACE, assert that Manatee Unit 3 is not the most cost-effective option to meet FPL's need. The issue of cost-effectiveness for both Martin Unit 8 and Manatee Unit 3 is discussed in Issue 14.

In summary, FPL's load forecast appears to be reasonable. This forecast identified a need for 1,122 MW for Summer, 2005 and an additional 600 MW for Summer, 2006 to maintain FPL's 20% summer reserve margin criterion. The 1,107 MW of capacity from Manatee Unit 3 would meet nearly all of FPL's identified capacity need for Summer, 2005. Therefore, staff recommends that FPL has a need for Manatee Unit 3 to ensure electric system reliability and integrity.

ISSUE 3: Does Florida Power & Light have a need for Martin Unit 8, taking into account the need for adequate electricity at a reasonable cost?

RECOMMENDATION: Yes. FPL has chosen a proven technology and has experience with the construction and operation of combined cycle units. The estimated costs for Martin Unit 8 appear to be reasonable. (Haff)

POSITION OF THE PARTIES

FPL: Yes. Martin 8 and Manatee 3 have very favorable capital and operating cost characteristics, highly efficient heat rates, high availability factors and low forced outage rates, all of which will result in electricity at a reasonable cost. FPL's estimates of costs and operating performance for both units are reasonable and are based upon FPL's demonstrated superior performance for combined cycle units. Thus, Martin 8 and Manatee 3 will provide adequate and reliable electricity to FPL's customers at a reasonable cost.

FACT ET. AL.: Among other flaws, FPL's use of the "equity penalty" adjustment biased FPL's determination that Martin Unit 8 was the most cost-effective generating alternative available with the result that there is not a need for Martin Unit 8 on the basis of its costs being the most reasonable.

CPV GULFCOAST: No. FPL's 15 MW shortfall in 2005 to meet a 20% reserve margin can be met through other means, including rounding FPL's projected 19.92% reserve margin to 20%.

FIPUG: It appears that FPL may have a need for the capacity represented by Martin 8 in 2006, not in 2005. FPL seeks to build 789 MW represented by Martin 8 in 2005 to meet a 15 MW need. This raises significant questions regarding the cost-effectiveness of this decision as well as whether such capacity may be able to be provided more cost-effectively by a competitive provider.

PACE: No. FPL's evaluation of alternatives was so seriously flawed that FPL did not support its petition on this basis. Neither did FPL prove that adding Martin 8 in 2005 would lower customers' bills.

STAFF ANALYSIS: The Martin site currently has two General Electric F-class advanced combustion turbines, Martin Units 8A and

8B. (EX 3, Need Study, p. 4). The 789 MW Martin Unit 8 expansion project proposed by FPL consists of two additional combustion turbines, four heat recovery steam generators, and a steam generating turbine. (TR 940). The total summer capacity of the unit will be 1,107 MW. FPL has extensive experience in building combined cycle plants dating back to 1976 (TR 941-2), and FPL currently has over 4,700 MW of combined cycle capacity on its system. (TR 941-2). FPL expects that air emissions from Martin Unit 8 will be minimized through the use of clean fuels and best available control technology. (TR 949). The location of Martin Unit 8 at an existing site is expected to minimize land-use impacts associated with the unit. (TR 944-5).

Staff believes that FPL's cost estimates for Martin Unit 8 are reasonable. No other party took issue with FPL's construction cost or schedule. FPL estimates that Martin Unit 8 will cost approximately $439 million to build. (EX 29). FPL witness Yeager testified to his belief that FPL's experience in building combined cycle plants, such as the Ft. Lauderdale, Sanford, and Ft. Myers repowering projects and the Martin Units 3 and 4, gives FPL assurances that it can complete the units on time and on budget. (960, 964). Although staff concurs with FPL's statement, Commission approval of Martin Unit 8 does not relieve FPL from its responsibility to prudently manage costs associated with the unit. The Commission will review actual costs in subsequent recovery clause or rate case proceedings.

FPL's estimated average net operating heat rate for Martin Unit 8 is 6,850 Btu/kWh. (EX 29). Staff believes that this estimate is aggressive, but not out of line with what was contained in many of the RFP bids. (EX 4). In fact, CPV Gulfcoast's bid in response to FPL's supplemental RFP reflected a slightly lower, or better, heat rate of 6,838 BTU/kWh. (TR 1055). FPL has estimated that the equivalent availability factor will be 97%. (EX 29). Witness Yeager testified that FPL's combined cycle units have historically exceeded past targets for availability (TR 1008-1011) and have consistently exceeded the industry average. (TR 965). Staff believes that FPL's availability estimate for Martin Unit 8 is also aggressive, but is indicative of FPL's recent operating experience at Martin Units 3 and 4. The Commission may evaluate FPL's unit performance on an ongoing basis through the Generating Performance Incentive Factor (GPIF), in which the Commission can reward or penalize FPL based on achieving prescribed heat rate and unit availability targets.

The intervenors' positions related to the equity penalty are discussed in Issue 12. The issue of cost-effectiveness for both Martin Unit 8 and Manatee Unit 3 is discussed in Issue 14. Discussion of the 15 MW shortfall is contained in Issues 1 and 2.

Staff believes that FPL has chosen a proven technology, and has experience with the construction and operation of combined cycle units. The estimated costs appear to be reasonable. Therefore, staff recommends that Martin Unit 8 will contribute to the provision of adequate electricity at reasonable cost.

ISSUE 4: Does Florida Power & Light Company have a need for Manatee Unit 3, taking into account the need for adequate electricity at a reasonable cost?

RECOMMENDATION: Yes. FPL has chosen a proven technology and has experience with the construction and operation of combined cycle units. The estimated costs for Manatee Unit 3 appear to be reasonable. (Haff)

POSITION OF THE PARTIES

FPL: Yes. Martin 8 and Manatee 3 have very favorable capital and operating cost characteristics, highly efficient heat rates, high availability factors and low forced outage rates, all of which will result in electricity at a reasonable cost. FPL's estimates of costs and operating performance for both units are reasonable and are based upon FPL's demonstrated superior performance for combined cycle units. Thus, Martin 8 and Manatee 3 will provide adequate and reliable electricity to FPL's customers at a reasonable cost.

FACT ET. AL.: Among other flaws, FPL's use of the "equity penalty" adjustment biased FPL's determination that Manatee Unit 3 was the most cost-effective generating alternative available with the result that there is not a need for Martin Unit 8 on the basis of its costs being the most reasonable.

CPV GULFCOAST: While FPL may have a need for Manatee Unit 3 in 2006, the process it uses to fill that need, along with its failure to secure firm contracts for the major cost components of the Manatee Unit 3 unit results in Manatee Unit 3 not being the most cost effective alternative. Thus, ratepayers are not benefitted and the petition should be denied.

FIPUG: It appears that FPL has a need for the capacity represented by Manatee 3. However, such capacity may be able to be provided more cost-effectively by a competitive provider.

PACE: FPL's economic evaluations were so seriously flawed that FPL did not support its assertion that Manatee 3 is superior to other alternatives.

STAFF ANALYSIS: Manatee Unit 3 is comprised of four General Electric F-class advanced combustion turbines, four heat recovery steam generators, and a steam generating turbine. (TR 940). The

total summer capacity of the unit will be 1,107 MW. FPL has extensive experience in building combined cycle plants dating back to 1976 (TR 941-2), and FPL currently has over 4,700 MW of combined cycle capacity on its system. (TR 941-2). FPL expects that air emissions from Manatee Unit 3 will be minimized through the use of clean fuels and best available control technology. (TR 955-6). The location of Manatee Unit 3 at an existing site is expected to minimize land-use impacts associated with the unit. (TR 953-4).

Staff believes that FPL's cost estimates for Manatee Unit 3 are reasonable. No other party took issue with FPL's construction cost or schedule. FPL estimates that Manatee Unit 3 will cost approximately $551 million to build. (EX 29). FPL witness Yeager testified to his belief that FPL's experience in building combined cycle plants, such as the Ft. Lauderdale, Sanford, and Ft. Myers repowering projects and the Martin Units 3 and 4, gives FPL assurances that it can complete the units on time and on budget. (TR 960, 964). Although staff concurs with FPL's statement, Commission approval of Manatee Unit 3 does not relieve FPL from its responsibility to prudently manage costs associated with the unit. The Commission will review actual costs in subsequent recovery clause or rate case proceedings.

FPL's estimated average net operating heat rate for Manatee Unit 3 is 6,850 Btu/kWh. (EX 29). Staff believes this estimate is aggressive, but not out of line with what was contained in many of the RFP bids. (EX 4). In fact, CPV Gulfcoast's bid in response to FPL's supplemental RFP reflected a slightly lower, or better, heat rate of 6,838 BTU/kWh. (TR 1055). FPL has estimated that the equivalent availability factor will be 97%. (EX 29). Witness Yeager testified that FPL's combined cycle units have historically exceeded past targets for availability (TR 1008-1011) and have consistently exceeded the industry average. (TR 965). Staff believes that FPL's availability estimate for Manatee Unit 3 is also aggressive, but is indicative of FPL's recent operating experience at Martin Units 3 and 4. The Commission may evaluate FPL's unit performance on an ongoing basis through the GPIF.

The intervenors' positions related to the equity penalty are discussed in Issue 12. The issue of cost-effectiveness for both Martin Unit 8 and Manatee Unit 3 is discussed in Issues 14 and 15.

Staff believes that FPL has chosen a proven technology, and has experience with the construction and operation of combined cycle units. The estimated costs appear to be reasonable. Therefore, staff recommends that Manatee Unit 3 will contribute to the provision of adequate electricity at reasonable cost.

ISSUE 5: Are there any conservation measures taken by or reasonably available to Florida Power & Light Company that might mitigate the need for Martin Unit 8?

RECOMMENDATION: No. FPL appears to have implemented all available cost-effective conservation and demand-side management measures. (Haff)

POSITION OF THE PARTIES

FPL: No. FPL is pursuing and implementing every reasonably available cost-effective DSM measure. FPL is a recognized industry leader in DSM. There is no reasonably available, cost-effective conservation measure that would allow FPL to forego either Martin 8 or Manatee 3. Using 15 MW of DSM that was not cost-effective to defer Martin 8 from 2005 to 2006 would be uneconomic to FPL's customers, unfair to bidders, and unnecessarily limit FPL's flexibility to meet unanticipated load growth.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: CPV adopts the position of PACE.

FIPUG: No position.

PACE: FPL has not met its burden to prove that FPL could not achieve an additional 15 MW of conservation with which to meet its reserve margin target in 2005.

STAFF ANALYSIS: FPL has already implemented a considerable amount of cost-effective conservation and demand-side management (DSM). This level of DSM savings was quantified in FPL's DSM goals, which the Commission set in August, 1999. (TR 558). To meet these Commission-prescribed goals, FPL has a DSM Plan consisting of six residential and eight commercial/industrial DSM programs. (TR 560). The Commission approved FPL's DSM Plan in May, 2000. (TR 560). Through its DSM efforts, FPL fell short of several of its DSM goals in 2000 but met all DSM goals in 2001. (TR 558, 574). It appears that there are no additional cost-effective conservation or DSM measures available to defer the need for Martin Unit 8.

FIPUG did not take a position on this issue. PACE, CPV Gulfcoast, and FACT et. al. state that FPL failed to address whether an additional 15 MW of conservation was available to defer

the need for Martin Unit 8 by a year and, therefore, that FPL failed to meet its burden of proof. In fact, FPL witness Brandt testified that there may be 15 MW of additional conservation available to FPL to defer Martin Unit 8 if cost-effectiveness was not a concern. (TR 576, 580). However, as discussed in Issue 14, deferral of Martin Unit 8 by one year carries an approximately $18 million cost above FPL's plan to build both units in 2005. As a result, there appears to be no cost savings associated with the deferral of Martin Unit 8 which could be used to pay for the additional 15 MW of conservation savings. Stated another way, if 15 MW of additional DSM were available to FPL for free, it would cost FPL's ratepayers $18 million more to defer Martin Unit 8.

The preponderance of the evidence in this proceeding supports FPL's position. Therefore, staff recommends that there appears to be no additional cost-effective conservation or DSM measures available that might mitigate FPL's need for Martin Unit 8.

ISSUE 6: Are there any conservation measures taken by or reasonably available to Florida Power & Light Company that might mitigate the need for Manatee Unit 3?

RECOMMENDATION: No. FPL appears to have implemented all available cost-effective conservation and demand-side management measures. (Haff)

POSITION OF THE PARTIES

FPL: No. FPL is pursuing and implementing every reasonably available cost-effective DSM measure. FPL is a recognized industry leader in DSM. There is no reasonably available, cost-effective conservation measure that would allow FPL to forego either Martin 8 or Manatee 3. Using 15 MW of DSM that was not cost-effective to defer Martin 8 from 2005 to 2006 would be uneconomic to FPL's customers, unfair to bidders, and unnecessarily limit FPL's flexibility to meet unanticipated load growth.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: No position.

FIPUG: No position.

PACE: No position.

STAFF ANALYSIS: FPL has already implemented a considerable amount of cost-effective conservation and demand-side management (DSM). This level of DSM savings was quantified in FPL's DSM goals, which the Commission set in August, 1999. (TR 558). To meet these Commission-prescribed goals, FPL has a DSM Plan consisting of six residential and eight commercial/industrial DSM programs. (TR 560). The Commission approved FPL's DSM Plan in May, 2000. (TR 560). Through its DSM efforts, FPL fell short of several of its DSM goals in 2000 but met all DSM goals in 2001. (TR 558, 574). It appears that there are no additional cost-effective conservation or DSM measures available to defer the need for Manatee Unit 3.

None of the intervenor parties took a position on this issue. Consequently, the evidence in this proceeding supports FPL's position. Therefore, staff recommends that there appears to be no additional cost-effective conservation or DSM measures available that might mitigate FPL's need for Manatee Unit 3.

ISSUE 7: Has Florida Power & Light Company adequately ensured the availability of fuel commodity and transportation to serve Martin Unit 8?

RECOMMENDATION: Yes. While FPL has yet to sign a contract to supply natural gas to the proposed unit, FPL will provide the Commission with a copy of the signed contract for commodity and transportation to serve Martin Unit 8 once signed. (Makin)

POSITION OF THE PARTIES

FPL: Yes. FPL will have firm gas transportation and supply contracts necessary to serve Martin 8, as it has firm contracts to supply the other gas burning units on its system. It is premature to enter into such contracts until the plants are approved, but FPL is prepared to enter into such contracts when it is in the best interest of its customers. FPL will also have 4 million gallons of oil as back up fuel.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: No. It has failed to secure firm contracts for fuel supply or transportation.

FIPUG: No position.

PACE: No position.

STAFF ANALYSIS: At the present time there are no signed firm natural gas supply or transportation contracts in place. FPL witness Yupp indicated, however, that FPL will enter into firm contracts for both supply and transportation when the time is appropriate. (TR 771). As stated in witness Yupp's testimony, two natural gas pipeline laterals, both tied to the Florida Gas Transmission System (FGT) interstate pipeline, currently serve the Martin site. The northern lateral supplies both residual oil and natural gas to Martin Units 1 and 2. The southern lateral supplies natural gas to the existing Martin Units 3 and 4. (TR 753). While adequate for Martin Units 3 and 4, the northern lateral cannot adequately supply the additional natural gas demand, during peak periods, of Martin Unit 8. (TR 771). Another lateral or additional compression will be required to ensure sufficient supply of natural gas to the Martin site. FGT will independently undertake the necessary permitting and construction activities for any new

lateral or added compression on the existing (north) lateral to the Martin site. (TR 754).

CPV Gulfcoast was the only intervenor to take a position on this issue. CPV Gulfcoast asserts that FPL has not adequately ensured the supply and transport of fuel to serve Martin Unit 8 because no contract has yet been signed. FPL witness Yupp stated that FPL could provide the Commission a copy of the signed contract for commodity and transportation to serve Martin Unit 8 once one is signed. (TR 772). Staff believes that it is appropriate for FPL to gain regulatory approval for a generating unit prior to signing a firm gas transportation contract. The preponderance of the evidence indicates that FPL will not have difficulty acquiring fuel commodity or transportation. For the reasons stated herein, staff recommends that FPL has adequately ensured the availability of fuel commodity and transportation to serve Martin Unit 8.

ISSUE 8: Has Florida Power & Light Company adequately ensured the availability of fuel commodity and transportation to serve Manatee Unit 3?

RECOMMENDATION: Yes. While FPL has yet to sign a contract to supply natural gas to the proposed unit, FPL will provide the Commission with a copy of the signed contract for commodity and transportation to serve Manatee Unit 3 once signed. (Makin)

POSITION OF THE PARTIES

FPL: Yes. FPL will have firm gas transportation and supply contracts for Manatee 3, as it has firm contracts to supply its other gas burning units. It is premature to sign such contracts until the plant is approved, but FPL is prepared to enter into such contracts when it is in its customers' best interests. Manatee 3's close proximity to a gas pipeline which is interconnected to another pipeline will provide Manatee 3 a gas backup, making oil backup unnecessary.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: No. It has failed to secure firm contracts for fuel supply or transportation.

FIPUG: No position.

PACE: No position.

STAFF ANALYSIS: At the present time there are no signed firm natural gas supply or transportation contracts in place. FPL witness Yupp indicated, however, that FPL will enter into firm contracts for both supply and transportation when the time is appropriate. (TR 771). As stated in witness Yupp's testimony, the proposed Manatee Unit 3 will burn only natural gas. (TR 754-5). FPL has executed an interruptible transportation agreement with Gulfstream to deliver natural gas for the existing Manatee Units 1 and 2 through a recently installed lateral. This new lateral from the Gulfstream main line is sufficient in size to deliver natural gas to Manatee Units 1, 2, and 3 during peak periods.

CPV Gulfcoast was the only intervenor to take a position on this issue. CPV Gulfcoast asserts that FPL has not adequately ensured the supply and transport of fuel to serve Manatee Unit 3

because no contract has yet been signed. FPL witness Yupp stated that FPL could provide the Commission a copy of the signed contract for commodity and transportation to serve Manatee Unit 3 once one is signed. (TR 772). Staff believes that it is appropriate for FPL to gain regulatory approval for a generating unit prior to signing a firm gas transportation contract. The preponderance of the evidence indicates that FPL will not have difficulty acquiring fuel commodity or transportation. For the reasons stated herein, staff recommends that FPL has adequately ensured the availability of fuel commodity and transportation to serve Manatee Unit 3.

ISSUE 9: Did Florida Power & Light Company's Supplemental Request for Proposals, issued April 26, 2002, satisfy the requirements of Rule 25-22.082, Florida Administrative Code.

RECOMMENDATION: Yes. FPL properly issued and evaluated the supplemental RFP in accordance with Rule 25-22.082, Florida Administrative Code, and has therefore satisfied the requirements of the Rule. (Futrell, Harris)

POSITION OF THE PARTIES

FPL: Yes. FPL fully complied with the requirements of Rule 25-22.082. Indeed, in allowing bidders a second chance to submit proposals, addressing various concerns of bidders that were not required by the rule, retaining an independent evaluator and allowing Staff to monitor the economic evaluation and negotiations, FPL went beyond the requirements of Rule 25-22.082. Many different options were evaluated in great detail to find the most cost-effective alternative for FPL and its customers.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: No. FPL listed a methodology to be used to evaluate alternative generating proposals which was not followed. Additional criteria, not listed in the supplemental RFP, were used in evaluating bids. FPL failed to describe how the equity penalty would be applied. Because the bid was not conducted in a fair and impartial manner, the rule was also violated.

FIPUG: No, the purpose of the bid rule is to ensure that the selection of generating capacity is done in a fair and impartial manner so that the project(s) most beneficial to the ratepayers is chosen. In this instance, the record demonstrates that the requirements of the bid rule were not applied so as to achieve that result. Both the RFP and the comparison of proposals appear to have been skewed in favor of FPL's self-build option.

PACE: While the supplemental RFP eliminated some of the blatantly egregious contractual terms and conditions, the provisions were inadequate to ensure that the valuation of alternatives would be fair, reasonable and appropriate.

STAFF ANALYSIS: The purpose of this issue is to determine whether FPL's supplemental RFP complied with the requirements of

Rule 25-22.082, Florida Administrative Code (the RFP Rule). FPL met the notice requirements of the RFP rule by disseminating the supplemental RFP to the public and the electric industry at large. (EX 3, Appendix J). The supplemental RFP properly identified FPL's next planned generating units, Martin Unit 8 and Manatee Unit 3, that would be evaluated against responses to the Supplemental RFP. The supplemental RFP also provided a detailed description of the next planned generating units, including the data and information required by the RFP rule. (EX 3, Appendix F). The supplemental RFP included the schedule of critical dates for solicitation, evaluation, screening of proposals, and any subsequent contract negotiations pursuant to the RFP rule. A description of price and non-price attributes to be addressed by each bidder, as well as a description of FPL's planned evaluation methodology, including the use of the EGEAS model for economic screening, was included in the supplemental RFP. (EX 3, Appendix F).

As CPV Gulfcoast points out, FPL did not explicitly provide an evaluation criteria for the review of a responding utility's projected reserve margin in its Supplemental RFP. (TR 192). FPL was concerned with TECO's RFP proposal because FPL believed that if the proposal were accepted, TECO's reserve margin would fall below 20%. TECO's proposal did not make the short list for further negotiations as it was not part of a cost-effective grouping of proposals. (TR 449-451). Witness Sim stated that this would have been an issue for subsequent contract negotiations.

CPV Gulfcoast witness Finnerty testified that FPL did not appropriately disclose how exceptions to the supplemental RFP would be evaluated. (TR 1031-2). FPL presented evidence that it properly provided for exceptions, but without prior knowledge of what exceptions would be claimed, it could not state in the Supplemental RFP how exceptions would be treated. (TR 1347-9). In addition, according to FPL witness Sim, all proposals were treated identically in the economic evaluation without regard to whether exceptions were posed. (TR 1404). As such, staff believes that FPL properly issued and evaluated the supplemental RFP in accordance with Rule 25-22.082, Florida Administrative Code, and has therefore satisfied the requirements of the Rule.

ISSUE 10: Was the process used by Florida Power & Light Company to evaluate Martin Unit 8, Manatee Unit 3, and projects submitted in response to its Supplemental Request for Proposals, issued April 26, 2002, fair, reasonable, and appropriate?

RECOMMENDATION: Yes. FPL's analysis of its self-build options, individual responses to the Supplemental RFP, and grouping of proposals for purposes of the economic evaluation was appropriate. FPL's evaluation process reasonably resulted in the choice of the most cost-effective alternative required by statute. (Futrell)

POSITION OF THE PARTIES

FPL: Yes. FPL appropriately screened ineligible proposals. FPL conducted a rigorous economic evaluation employing sound analytical tools and consistent assumptions. FPL's economic analysis was independently confirmed and subject to Commission Staff monitoring. FPL's assessment of non-price factors reinforced the conclusion that the All FPL Plan was the best option for FPL's customers. FPL negotiations with El Paso demonstrated the non-binding nature of proposals and resulted in the All FPL Plan being the most cost-effective proposal by at least $83 million.

FACT ET. AL.: No. FPL's use of an equity penalty, as well as other adjustments, and flaws in the underlying bid process, biased the competition results to the advantage of its own self-build options in a manner that was unfair, unreasonable and inappropriate.

CPV GULFCOAST: No. FPL used criteria not disclosed to bidders in evaluating its self-build options against other bids. It also evaluated outside bids using criteria, such as contractual certainty, that was not disclosed to bidders in the Supplemental RFP.

FIPUG: No, because both the RFP and the process used to compare the proposals were skewed in favor of FPL's self-build option, the process was not fair, reasonable and appropriate.

PACE: No. The activities of FPL's "independent" consultant were dependent on FPL's own flawed evaluation. FPL employed crude and simplistic economic comparisons that favored FPL's self-build options, then relied on an improper and prejudicial "equity penalty" to distance itself from alternatives. So pervasive was

the attitude of self-serving favoritism among the evaluation team that at one point FPL designed its procedure to allow FPL to alter its proposal as many times as necessary to "win" the RFP competition.

STAFF ANALYSIS: FPL received 53 proposals from 16 bidders in response to the Supplemental RFP. (TR 300). Prior to performing an economic evaluation of the proposals and the self-build options, 22 proposals were either withdrawn or determined by FPL to be ineligible. (TR 301). Several bidders did not agree to the Completion Security requirement; one bidder under an existing contract with FPL could not meet its in-service date and its bids were declared ineligible; and, twelve proposals were deemed too risky due to the corporate conditions of the respective bidders. (TR 94-6). Following its receipt of clarifying information and data from the remaining proposals, FPL ranked the proposals based on relative economics, resulting in two groupings, or tiers, of proposals. FPL performed its economic analyses of its self-build options and the RFP proposals using the Electric Generation and Analysis System (EGEAS) model. (TR 303-4).

The intervenors have challenged the grouping of proposals by FPL in its economic analyses, arguing that proposals should have been evaluated on a stand-alone basis. While Section 403.519, Florida Statutes, does not expressly require FPL's evaluation process to be "fair, reasonable, and appropriate," the evidence in this case shows that it was, given the large megawatt need, the number of proposals submitted, the variation of the proposals with regard to term, and megawatts offered, and the limitations of EGEAS in evaluating a number of options in one run. (TR 309-10). FPL's evaluation process reasonably resulted in the most cost-effective alternative required by statute.

The intervenors argue that the process used by FPL was biased in favor of FPL. They claim that FPL was predisposed to select its self-build options instead of fairly considering alternatives. FPL witness Silva contradicts this assertion by stating that FPL's actions to issue capacity solicitations in the past and to purchase power from other entities are evidence that FPL is not pre-disposed to select its self-build options. (TR 145-6).

PACE and FACT et. al. also argue that FPL's use of the equity penalty biased the results of the evaluation process. These concerns are discussed in Issue 12.

The RFP required by Rule 25-22.082, Florida Administrative Code (the RFP Rule), is a tool to measure the cost-effectiveness of an investor-owned utility's proposed capacity selection. Having the statutory obligation to serve retail consumers, the utility is responsible for deciding which generation resources it should build or buy in order to ensure reliable and cost-effective power for its consumers. As recommended in Issue 9, FPL's supplemental RFP complied with the requirements of the RFP Rule. Staff recommends that FPL's process fairly evaluated its self-build options and proposals received in response to the Supplemental RFP.

ISSUE 11: In its evaluation of Martin 8, Manatee 3, and projects filed in response to its Supplemental Request for Proposals, issued on April 26, 2002, did Florida Power & Light employ fair and reasonable assumptions and methodologies?

RECOMMENDATION: Yes. Given the variation in the proposals with regard to term and megawatts proposed, the methodologies employed to evaluate supply-side options were fair and reasonable. As discussed in staff's recommendation for Issues 11(a) through 11(g), FPL used fair and reasonable assumptions in evaluating all supply-side options. (Futrell)

POSITION OF THE PARTIES

FPL: Yes, FPL used the same reasonable assumptions in analyzing Supplemental RFP proposals and self-build options. These assumptions, load and fuel forecasts as well as financial assumptions, are uncontested. The models employed by FPL and the independent evaluator were analytically sound and well tested. EGEAS has been used by FPL and relied upon by the Commission for years. Similarly, the methodologies employed to complete the economic analyses were appropriate and reasonable.

FACT ET. AL.: No. Amongst other unfair and unreasonable assumptions and methodologies is the use of the equity penalty.

CPV GULFCOAST: No position.

FIPUG: No position.

PACE: No. EGEAS models production costs crudely. Bidders offered several alternatives that, when the equity penalty is excluded, were better than or close to the self-build options. Even a relatively minuscule "swing" in the $41 billion pool of roughly (by EGEAS) calculated production costs easily could have changed FPL's rankings. Given the size of FPL's proposal and its impact on customers, FPL's failure to refine its appraisal of top alternatives with a more detailed production cost model is inexcusable and imprudent.

STAFF ANALYSIS: While Section 403.519, Florida Statutes, does not expressly require FPL's evaluation process to be "fair, reasonable, and appropriate," the evidence in this case shows that FPL used fair and reasonable assumptions in evaluating all supply-

side options, both the self-build units and those projects submitted in response to FPL's supplemental RFP.

PACE's position on this issue asserts that the EGEAS model is not adequate or appropriate to model a dynamic system. While the EGEAS model's production cost capability is less sophisticated than other computer programs that model hourly production costs, FPL modeled the self-build units and all RFP projects equally with EGEAS. The present worth costs of all proposals and groups of proposals were within 1.3% of each other. (EX 45). There is no record evidence which indicates that use of a different production cost model would render any of the RFP proposals cost-effective. Given the variation of the self-build and RFP projects with regard to term and megawatts proposed, staff recommends that the methodologies employed by FPL to evaluate supply-side options were fair and reasonable.

ISSUE 11(a): Were the assumptions regarding parameters that FPL assigned to its own proposed units reasonable and appropriate?

RECOMMENDATION: Yes. FPL's heat rate and availability assumptions for Martin Unit 8 and Manatee Unit 3 are reasonable and appropriate. (Haff)

POSITION OF THE PARTIES

FPL: Yes. FPL used reasonable average annual (not new and clean) values for heat rates, availability and forced outages. FPL's availability parameters reflect FPL's demonstrated capability to achieve superlative combined cycle performance. FPL's heat rate values were well within the range of the RFP proposals and less favorable than demonstrated rates at Ft. Myers. FPL actually gave the benefit of the doubt to RFP proposers, using values provided without question, even though many such values were better than the values used for FPL.

FACT ET. AL.: No. Adopt post-hearing position of PACE as to specifics.

CPV GULFCOAST: CPV Gulfcoast adopts the position of PACE.

FIPUG: FIPUG adopts the position of PACE.

PACE: No. FPL chose for its self-build options heat rate and availability values that are overly aggressive and unrealistic. More importantly, FPL has not committed to stand by these values for ratemaking purposes. The Commission must consider the risk of nonperformance by FPL relative to the contractual commitments of the outside alternatives, when evaluating cost-effectiveness.

STAFF ANALYSIS: FPL's estimated average net operating heat rate for both Martin Unit 8 and Manatee Unit 3 is 6,850 Btu/kWh. (EX 29). Staff believes that this estimate is aggressive, but not out of line with what was contained in many of the RFP bids. (EX 4). In fact, CPV Gulfcoast's bid in response to FPL's supplemental RFP reflected a slightly lower, or better, heat rate of 6,838 BTU/kWh. (TR 1055).

FPL has estimated that the equivalent availability factor for both Martin Unit 8 and Manatee Unit 3 will be 97%. (EX 29). Witness Yeager testified that FPL's combined cycle units have

historically exceeded past targets for availability (TR 1008-1011) and have consistently exceeded the industry average. (TR 965). Staff believes that FPL's availability estimate for Martin Unit 8 and Manatee Unit 3 is also aggressive, but is indicative of FPL's recent operating experience at Martin Units 3 and 4.

PACE's position on this issue states that the Commission "must consider the risk of nonperformance by FPL relative to the contractual commitments of the outside alternatives". The Commission may evaluate the performance of FPL's new units on an ongoing basis through the GPIF. Based on the above discussion, staff recommends that FPL's heat rate and availability assumptions for Martin Unit 8 and Manatee Unit 3 are reasonable and appropriate.

ISSUE 11(b): Did FPL appropriately model variable O&M costs in its analysis?

RECOMMENDATION: Yes. FPL used the variable O&M costs contained in its supplemental RFP for the self-build projects. FPL modeled variable O&M costs for the bidders as they were bid. (Haff)

POSITION OF THE PARTIES

FPL: Yes. FPL modeled variable O&M costs as they were submitted. Variable O&M costs for bids exhibited a wide range, and FPL modeled them as they were bid. Variable O&M costs for FPL's self-build options were modeled as they were published in the Supplemental RFP. FPL's variable O&M was modeled as budgeted, and FPL's budget included all O&M costs. Both Dr. Sim and the independent evaluator testified that FPL's variable O&M was properly modeled.

FACT ET. AL.: No. Adopt post-hearing position of PACE as to specifics.

CPV GULFCOAST: CPV Gulfcoast adopts the position of PACE.

FIPUG: FIPUG adopts the position of PACE.

PACE: No. FPL attributed only 3.7c per MWH of variable O&M to its proposed units, whereas the bidders identified $2/MWH. Because variable O&M comprises part of the dispatch price of the unit, FPL's unrealistically low variable O&M value artificially lowers its units' dispatch prices, thereby giving Manatee 3 and Martin 8 an undeserved advantage over bidders' proposals with respect to the opportunities to lower revenue requirements by displacing more expensive generation over time.

STAFF ANALYSIS: Variable O&M expenses are the non-fuel expenses of electricity production that vary according to the amount of energy generated. FPL witness Taylor testified to the different ways that bidders divide total O&M expenses between fixed and variable. (TR 1274). FPL witness Sim testified that there is no single correct method of dividing O&M costs between fixed and variable (TR 1379), as evidenced by the wide range of variable O&M costs supplied by the bidders. (TR 1380). Witness Taylor testified that units with higher than average variable costs might be dispatched less frequently. (TR 1270). It is for this reason that PACE asserts that, due to FPL's relatively low variable costs, FPL

inappropriately modeled variable O&M expenses to the detriment of the bidders. However, witness Taylor testified that each bidder had the choice "to structure its fixed and variable charges as it saw fit." (TR 1284).

In evaluating the RFP projects, FPL modeled variable O&M costs exactly as they were bid. (TR 1274). In evaluating Martin Unit 8 and Manatee Unit 3, FPL used the exact same variable O&M costs that were contained in the supplemental RFP. Thus, FPL modeled variable O&M on the same basis. (TR 1294). Staff believes that it would have been inappropriate for FPL, in its analysis, to make any changes to variable O&M costs bid by RFP respondents or for its self-build units after-the-fact. FPL properly used the data that was provided in the bid responses for RFP projects, and in the supplemental RFP for Martin Unit 8 and Manatee Unit 3. Therefore, staff recommends that FPL appropriately modeled variable O&M costs in its analysis.

ISSUE 11(c): When modeling and quantifying the costs of all options, did FPL fairly and appropriately compare the costs of projects having different durations?

RECOMMENDATION: Yes. FPL's use of greenfield filler units in its expansion plan studies was appropriate. (Haff)

POSITION OF THE PARTIES

FPL: Yes. FPL appropriately used filler units to fill in behind short term purchases to meet annual reserve margin requirements so that various alternatives of different lengths were consistently considered. The use of greenfield rather than brownfield filler units was appropriate given the number of necessary filler units and the limited number of brownfield sites. Mr. Taylor's sensitivity analysis using a brownfield filler unit (and Gulfstream rather than FGT transportation) confirmed the All FPL plan to be the most cost effective.

FACT ET. AL.: No. Adopt post-hearing position of PACE as to specifics.

CPV GULFCOAST: CPV Gulfcoast adopts the position of PACE.

FIPUG: FIPUG adopts the position of PACE.

PACE: No. FPL inappropriately applied to the bidder's proposals the assumption that a bidder's project would be followed by the construction of a "greenfield" generating unit. Because the greenfield filler unit is more expensive than the FPL-proposed units that the bidders' units would displace, and because more of the relatively expensive greenfield units would be assigned to the shorter proposals than to an expansion plan containing FPL's self-build option, the assumption prejudice the power purchase scenario.

STAFF ANALYSIS: When FPL performs its generation expansion planning studies, additional capacity in the form of filler units is added in future years to maintain FPL's reserve margin criterion. Once FPL identifies the size and type of filler unit to be used, the EGEAS model automatically adds these filler units as needed. If a short-term capacity purchase is considered, EGEAS will add a filler unit earlier than with a long-term purchase or new generating unit. However, EGEAS adds the same filler unit without regard to whether the expansion plan consists of FPL's

self-build plan, the all-outside RFP plan, or a combination of both. (TR 1382-6).

FPL chose a "greenfield" filler unit, a generating unit built on a new, previously undisturbed site. FPL witness Sim testified that this choice was made because FPL would likely run out of brownfield sites before the end of the 30-year expansion plan period. (TR 1383). He believed that the majority of filler units built during the expansion plan period would be at greenfield sites. (TR 1383).

PACE takes issue with FPL's use of a greenfield unit. Since a greenfield unit is typically more costly than a unit built at an existing site (brownfield unit), PACE believes that FPL's choice of a greenfield filler unit was inappropriate. FPL's EGEAS analysis chose the same greenfield filler unit for all expansion plans including the all-FPL self-build plan. Further, FPL witness Taylor testified that the costs associated with FPL's greenfield filler unit were actually less expensive than nine of the thirteen combined cycle proposals submitted in response to FPL's supplemental RFP. (EX 24).

PACE also asserts that some expansion plans having short-term RFP proposals would see more filler units, introduced at earlier points in time, than would FPL's self-build expansion plan. However, it appears that all expansion plans evaluated by FPL contained approximately the same number of filler units. (EX 17).

Based on the above discussion, staff believes that FPL used the appropriate filler unit in its expansion planning studies. Therefore, staff recommends that FPL fairly and appropriately modeled and quantified the costs of projects having different durations.

ISSUE 11(d): When modeling and quantifying the costs of all options, did FPL employ assumptions regarding the gas transportation costs applicable to "filler units" that were fair, reasonable and appropriate?

RECOMMENDATION: Yes. FPL used identical gas transportation cost assumptions for filler units for generation expansion plans containing both FPL's self-build units and the RFP projects. (Haff)

POSITION OF THE PARTIES

FPL: Yes. FPL modeled gas transportation costs for proposals as the bidders specified. FPL modeled gas transportation for the filler units assuming FGT because it is already interconnected with FPL's system, and it serves more of the state. Filler units with FGT costs were used for both the FPL plan and plans including RFP proposals. This assumption did not prejudice the bidders relative to FPL. Mr. Taylor's sensitivity showed that Gulfstream did not change the most economic choice.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: CPV Gulfcoast adopts the position of PACE.

FIPUG: FIPUG adopts the position of PACE.

PACE: No. FPL arbitrarily assumed that the filler units would be served by FGT, the more expensive of the available pipelines, thereby artificially increasing the transportation costs of bidders relative to the FPL self-build options.

STAFF ANALYSIS: PACE asserts that FPL's use of FGT's gas transportation cost assumptions, rather than Gulfstream's, for the filler units was unfairly biased against the RFP projects. This assertion is not supported by the preponderance of the evidence. FPL applied FGT's cost assumptions uniformly to all filler units for generation expansion plans containing FPL's self-build units and the RFP projects. FGT's cost assumptions because FGT's existing system covers a substantially larger part of the state. (TR 1386). Additionally, most RFP bidders stated that they would be served by FGT. (TR 1387). There is no record evidence indicating that FPL inappropriately relied on FGT cost estimates for modeling filler units. For this reason, staff recommends that FPL's assumptions were fair, reasonable and appropriate.

ISSUE 11(e): When modeling and quantifying the costs of all options, including its own, did FPL appropriately and adequately take cycling and start-up costs into account?

RECOMMENDATION: Yes. Further, FPL modeled cycling and start-up costs identically for its self-build units and the RFP projects. (Haff)

POSITION OF THE PARTIES

FPL: Yes. FPL modeled both FPL's and the bidder's combined cycle unit start-up costs exactly the same way. FPL assumed 6 start-ups per year at the cost provided by the bidder and FPL. The impact of start-up costs on the entire analysis is *de minimus*, and bidders with heat rates higher than FPL may have been advantaged by this assumption. Mr. Slater's criticism of the modeling of start-up costs was thoroughly rebutted by Dr. Sim and Mr. Taylor.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: CPV Gulfcoast adopts the position of PACE.

FIPUG: FIPUG adopts the position of PACE.

PACE: No. The EGEAS model is incapable of modeling cycling and start-up costs. FPL had to manually provide rough estimates of such costs. The effect was to introduce imprecision into the modeling.

STAFF ANALYSIS: In its analysis for the initial RFP, FPL did not use EGEAS to calculate start-up costs. (TR 1377). Start-up costs were calculated separately and added to the EGEAS results. However, FPL witness Sim testified that EGEAS was used to model these costs during the supplemental RFP analysis. (TR 1377). He testified that annual start-up costs were calculated based on cost per start-up information submitted by the RFP respondents and was added to each bid's O&M costs and, therefore, modeled by EGEAS. (TR 1377).

FPL uniformly assumed six starts per year for all combined cycle units, both its own and from bidders. FPL witness Taylor testified that units with higher variable costs might be dispatched less, causing more frequently - and costly - starts and stops than normal for a combined cycle unit. (TR 1270-1). For this reason,

staff believes that FPL's approach in modeling start-up and cycling costs may have advantaged certain RFP projects with higher variable costs. In any event, the potential cost impact associated with modeling start-up costs appears to be minuscule. Witness Sim discussed a sensitivity where FPL's units were modeled with six start-ups per year but all RFP projects were modeled with no start-up costs. He testified that this extreme case had a cost impact of less than $800,000 NPV. (TR 1377). As a result, staff believes that variations in modeling start-up costs would not change the results of FPL's analysis.

In summary, staff recommends that FPL appropriately and adequately accounted for cycling and start-up costs when modeling and quantifying the costs of its self-build units and the RFP projects.

ISSUE 11(f): When modeling and quantifying the costs of all options, did FPL appropriately and adequately take into account the impact of seasonal variations on heat rate and unit output?

RECOMMENDATION: Yes. Using greater precision to model seasonal variations on heat rate and unit output was unnecessary and would have affected both the FPL self-build units and the RFP projects virtually the same. (Haff)

POSITION OF THE PARTIES

FPL: Yes. Modeling seasonal variation of combined cycle units with similar heat rates was an unnecessary refinement that would have diverted precious computer resources from optimization of the many combinations of bids considered in the analysis. Modeling seasonal variation of similar combined cycle units would not have significantly changed the analysis results, namely the fact that the All FPL plan is $83 million less costly than the next best plan.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: CPV Gulfcoast adopts the position of PACE.

FIPUG: FIPUG adopts the position of PACE.

PACE: No. The impact of FPL's failure to take such seasonal variations into account injected another source of imprecision and error into its modeling.

STAFF ANALYSIS: FPL's self-build units, as well as the vast majority of the RFP projects, are natural gas-fired combined cycle units. (EX 2). FPL witness Sim testified that all combined cycle units, whether owned by FPL or a bidder, would have similar seasonal variations, and that any relative differences would be negligible. (TR 1378). FPL witness Taylor testified that the further precision required to model seasonal variations in a unit's output would not materially affect the outcome of FPL's analysis. (TR 1273). He further testified that greater precision would have only increased the run time of FPL's computer models by a substantial amount. (TR 1273).

PACE asserts that FPL's analysis was imprecise, thus introducing some level of error into the results. However, there

was no record evidence to show that seasonal variations in unit output would materially differ between combined cycle units. PACE witness Slater testified only that there were variations in unit output between summer and winter. (TR 1185).

Staff believes that the preponderance of the evidence clearly indicates that FPL used an acceptable level of precision in modeling its self-build options and the RFP projects. Using greater precision to model seasonal variations on heat rate and unit output was unnecessary and would have affected both the FPL self-build units and the RFP projects virtually the same. Further refinement would have added unnecessary work with minimal, if any, measurable benefit. All expansion plans evaluated by FPL, including the self-build units and the RFP projects, fell within 1.3% of each other on a cumulative present worth revenue requirements basis. (EX 45). Therefore, staff recommends that FPL appropriately and adequately accounted for the impact of seasonal variations on heat rate and unit output in its analysis.

ISSUE 11(g): Did FPL act in a fair, reasonable and appropriate manner in not considering for the short list portfolios that included TECO and other bidders, in part, because TECO's reserve margin requirement might be impaired?

RECOMMENDATION: Yes. FPL considered, but appropriately did not include, TECO on its short list. (Haff)

POSITION OF THE PARTIES

FPL: Yes. None of the bidders comprising the portfolios in question contest FPL's decision not to shortlist TECO and Calpine. The decision was based on two factors: serious concerns about Calpine and concerns about TECO's ability to sell to FPL and preserve 20% reserve margin. FPL was legitimately concerned whether the capacity sold by TECO would be committed to FPL's customers if needed by TECO's customers and could not justify a purchase that would compromise TECO's reserve margin commitment.

FACT ET. AL.: Adopt post-hearing position of PACE.

CPV GULFCOAST: No. FPL decided not to further consider a competing proposal from TECO based on a concern that TECO's reserve margin might be negatively impacted. FPL did not discuss this issue with TECO, but unilaterally made the decision not to move forward with negotiations with TECO, without raising the concern with TECO

FIPUG: No position.

PACE: No position.

STAFF ANALYSIS: FPL identified five RFP projects which made up capacity portfolio combinations whose cost was within $200 million of FPL's self-build plan. (TR 101). FPL witness Silva testified that he presented these five companies to FPL's senior management for possible inclusion in a "short list." (TR 187). The short list was to include companies with which FPL could possibly negotiate to cost-effectively supply FPL's capacity needs. Two RFP respondents, Florida Power Corporation (FPC) and El Paso, were ultimately selected for the short list. Tampa Electric Company (TECO) was contained in a grouping of RFP projects that were originally considered but, ultimately, were not included on the short list. Of the 36 expansion plans modeled by FPL in its analysis, the most competitive portfolio of projects which included TECO's bid was

ranked sixth out of 36 and was approximately $87 million more costly than FPL's self-build expansion plan. (EX 45).

Witness Silva testified that TECO was not included on the short list due to FPL's concern that TECO could not supply the 200 MW contained in its bid and, simultaneously, meet its own 20% reserve margin criterion. (TR 190; 273-4). FPL did not contact TECO to discuss this concern. (TR 191). TECO did not intervene in this case.

CPV Gulfcoast asserts that FPL did not act fairly in excluding TECO from the short list. CPV Gulfcoast's position appears to stem solely from FPL's failure to contact TECO to discuss concerns with TECO's reserve margin. Staff acknowledges that it is TECO's responsibility to maintain the reliability of its own system. However, staff believes that FPL was legitimately concerned that TECO's 200 MW sale might not be firm "in a real sense" (TR 275) if such a sale caused TECO to violate its reliability criterion. For these reasons, staff recommends that FPL acted in a fair, reasonable and appropriate manner in considering, but not including, TECO on the short list.

ISSUE 12: Was Florida Power & Light Company's decision to apply an equity penalty cost to projects filed in response to its Supplemental Request for Proposals appropriate? If so, was the amount properly calculated?

RECOMMENDATION: No. The application of the equity penalty in FPL's evaluation of outside supply options is not appropriate in this case. The Commission should determine the appropriateness of an equity penalty on a case-by-case basis. Even without the implementation of the equity penalty, FPL's self-build option still appears to be the most cost-effective method of adding capacity. (Kenny, Lester)

POSITION OF THE PARTIES

FPL: Yes. Consideration of this cost is necessary if purchased power is to be analyzed consistently with self build options. Without this adjustment, the capital structure resulting from the two options would not be the same. FPL stated in the SRFP that it would recognize this real cost. Investors view capacity payments in firm purchased power contracts as off-balance-sheet obligations that increase a utility's financial leverage. To balance this effect, a utility must offset this imputed debt with equity.

FACT ET. AL.: No. The equity penalty was inappropriate and unfair and unsupported both by the facts of this case and the policy decisions of this, or any other regulatory body. It dramatically disadvantaged all outside bids, some, coupled with other FPL process flaws, so severely to cause them to inappropriately lose.

CPV GULFCOAST: No. The equity penalty is just that, a penalty against outside proposals. Constructing and operating a power plant imposes many risks that can be shifted to an Independent Power Producer and away from the utility's ratepayers through a power purchase contract.

FIPUG: No; it appears that the use of an "equity penalty" unfairly penalized competitive projects and skewed FPL's choice in favor of its self-build option.

PACE: No. Constructing and operating a power plant imposes many risks that can be allocated away from the utility's ratepayers through a power purchase contract. Even if one assumes, *arguendo*, that a power purchase contract increases the utility's financial

risk, to single out that factor while failing to consider the many risks associated with ownership unfairly skews the comparison of cost-effectiveness in favor of the self-build options. In addition, FPL has failed to justify the proposed amount of the penalty.

STAFF ANALYSIS: The equity penalty is a cost that is applied to purchased power agreements (PPAs) to recognize the perceived negative impact those PPAs have on the company's overall capital structure due to their debt-like characteristics. (TR 605, 791, 846). The equity penalty concept was used in FPL's evaluation of outside supply options in response to its Supplemental RFP.

Standard and Poor's (S&P) overall credit assessment of a company is performed on a consolidated basis. (TR 1100). S&P considers the impact PPAs may have on a company's balance sheet. Also, S&P considers the terms associated with a PPA and will assign a risk factor. This risk factor is used to calculate the amount of off-balance sheet debt associated with these contracts. The amount of off-balance sheet debt is used in the calculation of the company's adjusted equity ratio. (TR 1092). It is important to note that this consideration is not done in isolation. (TR 1117). This is only one of many factors S&P considers when performing a credit analysis. (TR 635). There are other risks and benefits that are taken into account both inside and outside of the scope of PPAs. (TR 1103).

FPL has based its calculation of the equity penalty on S&P's methodology of imputing debt. (TR 1231). In order to rebalance its capital structure and to account for the incremental impact purchased power will have on its capital structure, FPL has calculated an equity penalty. The equity penalty was assessed on top of each proposal submitted. (TR 1093).

There is a significant distinction to be made between FPL's equity penalty concept and S&P's methodology for evaluating PPAs. S&P calculates the amount of imputed debt to include in its consolidated credit analysis. FPL developed the equity penalty concept to be used in the evaluation of power supply alternatives. (TR 620).

While the equity penalty is small in comparison to the total cost component of any proposal, the equity penalty is large in comparison to differences between FPL's self-build proposal and

competing proposals. (EX 45). Each proposal still remains within 1.3% of each other. It is important to note that even without the implementation of the equity penalty, FPL's self-build options still appears to be the most cost effective method of adding capacity. (TR 385). The important issue is whether the equity penalty is appropriate.

FPL witness Avera testifies that utilities must offset purchased power obligations with increased equity in order to maintain bond ratings and financial flexibility. (TR 593). He states that purchased power represents approximately 16% of FPL's total capacity resources for 2002. (TR 594). Current PPAs and proposals submitted as part of the Supplemental RFP obligate FPL to make capacity payments. These capacity payments increase fixed charges in a manner similar to long-term debt. (TR 594).

According to witness Avera, major bond rating agencies like S&P and Moody's, recognize that purchased power capacity payments carry risk similar to debt. (TR 595-596). He believes an evaluation of power supply proposals should include the financial risks of entering into a purchased power contract. He notes that the Commission has recognized the financial impacts of purchased power in need determinations such as Florida Power Corporation's approval to construct Hines Unit 2 and FPL's standard offer contract. He also notes that FPL's recent revenue sharing agreement calls for the equity ratio to be adjusted to reflect off-balance sheet obligations related to purchased power. (TR 599-601).

Witness Avera explains S&P's methodology for evaluating purchased power obligations as follows: for a particular electric utility, S&P calculates the net present value of capacity payments arising from a purchased power agreement. S&P then assigns a risk factor, from 0% to 100%, based on its determination of how debt-like the obligation is. The risk factor determines how much of the net present value is added to reported obligations for purposes of financial analysis. Witness Avera notes that S&P assigns take-or-pay contracts a higher risk factor than take-and-pay contracts since S&P considers take-or-pay contracts more debt-like. (TR 603-4). Witness Avera further notes that, in light of the recent Enron tribulations, the investment community is likely to be even more sensitive to the impact of off-balance sheet obligations. (TR 602).

In evaluating the alternative proposals arising from the Supplemental RFP, FPL included an equity penalty in recognition of

off-balance sheet obligations. According to witness Avera, the equity penalty represents the incremental costs in each year that would be required to hold FPL's adjusted equity ratio, which allows for off-balance sheet obligations, at 55%. (TR 605-606; EX 22). The equity penalty was calculated using a risk factor of 40% based on a range of 40% to 60% that S&P specified given the terms of FPL's Supplemental RFP. (TR 607-608). The discount rate was based on FPL's after-tax cost of capital of 8.5%, the debt cost rate was 7.4% and the cost of equity was 11.7%. (TR 607-609).

Witness Avera testifies that investors view PPAs as risky. Due to this negative perception, FPL needs to invoke the equity penalty adjustment to avoid negative implications on their bond ratings, financial flexibility, and creditworthiness by the ratings agencies. (TR 593, 597, 598).

Regarding S&P's methodology of analyzing PPAs, FPL witness Dewhurst agrees with witness Avera. Witness Dewhurst believes that it is appropriate for FPL to calculate an equity penalty during the evaluation of outside power alternatives. Witness Dewhurst believes an equity penalty adjustment is necessary in order to account for the negative impact S&P places on PPAs when performing its credit analysis. (TR 847-848). Witness Dewhurst believes, when a company performs an analysis of outside bid proposals that contain fixed capacity payments, the use of the equity penalty is a concept this Commission has adopted. (TR 851). For similar reasons, FPL witness Taylor also agrees that the equity penalty is appropriate.

Staff witness Maurey disagrees with the imputation of an equity penalty for purposes of this need determination. (TR 1090). He notes that, for FPL, an adjusted equity ratio of 55% equates to an actual equity ratio of 63%. (TR 1091). According to witness Maurey, the adjusted equity ratio is used by S&P as part of its consolidated credit assessment methodology. (TR 1092).

Witness Maurey testifies that the equity penalty as used by FPL is an adjustment to the total cost of each non-FPL proposal submitted in response to the Company's Supplemental RFP. (TR 1093). He notes that the Commission has considered the equity penalty in a need determination for FPC in Docket No. 910759-EI. In that case, FPC contended that further purchased power would have a negative effect on its credit rating. The hearing officer in this case did not find that argument persuasive. (TR 1094). In Docket

No. 990249-EG, the Commission allowed an equity penalty as part of FPL's standard offer contract. Regarding this decision, witness Maurey notes that the Commission was being consistent with a rate case stipulation and avoiding possible double recovery. (TR 1096). In a subsequent need determination, Docket No. 001064-EI, FPC proposed an equity penalty but it was not material and was not the subject of careful financial analysis. (TR 1097). Witness Maurey notes that these previous cases where the Commission considered an equity penalty do not represent precedent for this current need determination. He believes the Commission should consider the equity penalty on a case-by-case basis. (TR 1097).

Witness Maurey notes that, for electric utilities, S&P conducts a qualitative and a quantitative analysis of purchased power contracts. S&P calculates an off-balance sheet obligation based on the present value of capacity payments and a risk factor. The estimated off-balance sheet obligation is added to the balance sheet as additional debt and affects the calculation of coverage and debt-to-capital ratios. (TR 1099).

Staff notes that witnesses Avera and Maurey agree on the basic S&P methodology. The issue is how appropriate and relevant the methodology is to the economic evaluation of power supply alternatives.

While S&P imputes an off-balance sheet obligation associated with PPAs for bond rating purposes, it is silent regarding the equity penalty concept. S&P does not specify the use of its methodology for evaluating power supply alternatives. (TR 619, 907, 1099). Witness Maurey states that S&P looks to the interest of bondholders and not the interests of ratepayers or shareholders. In addition, there is no indication that other states use the equity penalty concept. (TR 1099-1100).

Witness Maurey asserts that, if FPL's corporate credit rating is downgraded at some future date, it will not be as a direct result of purchased power contracts. He notes that FPL's bond rating is affected by FPL Group's non-regulated investments in independent power producers. (TR 1101). Regarding FPL, S&P considers regulation in Florida to be supportive. In addition, witness Maurey notes that FPL's reliance on purchased power will significantly decline over the next eight years and that FPL has one of the highest equity ratios in the country. (TR 1103-1104). According to witness Maurey, FPL needs this higher equity ratio to

offset the higher risk of non-regulated investment in power projects. He notes that FPL is concerned about the risk imposed by purchased power but apparently is unconcerned about the effect that non-regulated investment has on risk. (TR 1110).

PACE witness Slater testifies that the assessment of the equity penalty results in a very material amount. The equity penalty accounts for more than $200 million of the difference between FPL's self-build and outside proposals. (TR 1185). Witness Slater is not contesting the inputs used in the calculation of the equity penalty. (TR 1185). He argues that it is wrong for FPL to single out the risks associated with PPAs. (TR 1186). Witness Slater notes that FPL is failing to recognize the risks associated with building and operating its own plant. He asserts that it is not fair for FPL to penalize outside bidders for the risks associated with PPAs and ignore the risks associated with FPL's self-build option. (TR 1186). He points out that some of the risks associated with the self-build option are: construction cost risks, operating cost and performance risk, and risk of obsolescence. (TR 1186). If FPL were to weigh these risks against the risks of PPAs, witness Slater believes they would offset one another, thereby negating the necessity of an equity penalty. (TR 1186).

PPAs currently account for about 16% of FPL's fuel mix. (TR 594). In addition, several of these contracts are due to expire in the near future. (TR 1186). Witness Slater concludes that if FPL were to enter into additional PPAs for this need determination, it would only enhance FPL's balance of capacity options. (TR 1186).

In rebuttal to witness Maurey's testimony, witness Taylor reiterates the negative impact PPAs will have on FPL's balance sheet. Therefore by employing a methodology used by rating agencies, like S&P, FPL was able to formulate a calculation of the appropriate equity penalty to apply. He points out the importance of doing this is to recognize the real cost that will be borne by FPL when entering into PPAs. (TR 1279). Witness Taylor believes this is a construct developed by the ratings agencies, not FPL. (TR 1279). In addition, witness Taylor asserts that certain credit agencies have even made specific reference in their publications that the formulas and assumptions used by FPL to calculate the equity penalty is consistent with their beliefs. (TR 1279).

Witness Taylor agrees that PPAs do contain certain benefits. However, he believes that since it is quite burdensome to quantify these benefits it would not be feasible to incorporate this into the evaluation of alternative supply options. (TR 1279). On the contrary, since one can readily quantify the risks associated with PPA, the equity penalty is an appropriate calculation to use in FPL's evaluation process. (TR 1284).

Witness Taylor has been involved in other cases outside of the state of Florida where the equity penalty concept has been used in the evaluation process. Since the implementation of the equity penalty concept did not result in a major impact on the outcome, the orders issued by the regulatory commissions made no reference to the application of the equity penalty. (TR 1291).

Witness Maurey notes that, although S&P considers purchased power when it evaluates a utility's financial position, FPL has a significant equity cushion for balancing incremental risk. Compared with other electric utilities that have significant purchased power, FPL's actual equity ratio of 63% compares very favorably. He further notes that there are other factors identified by S&P that have a significant impact on FPL's financial flexibility. (TR 1110; EX 38).

Though witness Avera believes credit rating agencies currently have particular concern over off-balance sheet debt, witness Maurey asserts that this concern relates to unregulated energy companies, like Calpine and Dynegy. (TR 1112-1113). Witness Maurey further notes that purchasing power avoids construction risk and that, whether the utility builds or buys, adding capacity means incurring risk. (TR 1114). Finally, witness Maurey notes that FPL recovers a significant portion of its revenue through adjustment clauses on a dollar-for-dollar basis. Witness Maurey believes that credit rating agencies view regulation in Florida as supportive and that the Commission should employ a balanced approach in considering whether to allow an equity penalty in the RFP process. (TR 1115).

In rebuttal, FPL witness Avera responds to the direct testimony of staff witness Maurey and PACE witness Slater. Witness Avera asserts that purchased power imposes a cost, based on increased leverage, on a utility and that the incremental cost should be part of an evaluation of power supply alternatives. (TR 1230-1231). He further asserts that, whatever witness Maurey's views on FPL's financial policies might be, new purchased power

contracts imply an increase in the utility's financial costs. (TR 1233). In rebuttal to witness Maurey offering distinctions between this current need determination and past Commission proceedings that addressed the equity penalty and off-balance sheet debt, witness Avera states that the Commission has recognized that it is reasonable to consider the financial impact that purchased power contracts have on a utility when evaluating supply alternatives. (TR 1233).

Witness Avera agrees with witness Maurey that S&P does not advise state regulators, however, he notes that does not preclude the Commission from using S&P's methodology. Indeed, according to witness Avera, the Commission has recognized the effect that purchased power has on a utility's financial leverage. (TR 1236). Witness Avera agrees with witness Maurey that S&P considers regulation by the Commission to be supportive. However, he notes that this has no bearing on the reasonableness of FPL's proposed equity penalty. (TR 1237). Witness Maurey argues that FPL's bond rating is unlikely to be downgraded as a result of entering into new purchased power contracts. However, witness Avera states that the equity penalty should be part of a meaningful economic evaluation. For similar reasons, witness Avera also disagrees with witness Maurey's assertion that a decline in FPL's purchased power commitments negates the need for an equity penalty. (TR 1239). He notes that he is not advocating the use of an equity penalty to prevent a downgrade of a utility's bonds. (TR 1237-1238).

Though witness Maurey notes that FPL has a high equity ratio compared with other utilities, which have significant purchased power commitments, witness Avera notes that FPL has the highest off-balance sheet liability - $1.2 billion - among the 43 companies in witness Maurey's exhibit. (TR 1242-1243; EX 38). Finally, witness Avera believes that recent events in the power industry have caused increased scrutiny of off-balance sheet obligations by investors. (TR 1244).

Staff notes that purchasing power has benefits for an electric utility. Construction risk is avoided. (TR 650, 1113, 1186, 1245). In addition, through short-term PPAs such as 5 to 10 years, the utility can avoid the risk of technological obsolescence that comes with building a generating unit, and purchased power can enhance the diversification of a utility's fuel mix. (TR 639-640, 1186, 1280).

An important point is the extent to which the Commission has addressed the issue of an equity penalty and off-balance sheet obligations related to purchased power in past cases. Witness Avera provides several examples: The FPC need determinations in Docket Nos. 910759-EI and 001064-EI and FPL's standard offer contract approved in Docket No. 990249-EI. He also points to FPL's current revenue sharing agreement wherein the equity ratio is calculated using off-balance sheet obligations related to purchased power. (TR 599-600).

Witness Maurey points out that these cases had various circumstances that do not suggest the Commission was making an affirmative statement on the issue of an equity penalty. He believes the Commission has taken a case-by-case approach to the equity penalty concept. (TR 1096-1098).

Staff notes that the risk factor for the standard offer contract was 10% but it is 40% for this case. (TR 668; Order No. PSC-99-1713-TRF-EG, p.8). Therefore, the magnitude of the effect is much more pronounced in this case.

Though the Commission has addressed the issue of off-balance sheet obligations and purchased power in previous cases, its orders for those cases do not reach precedential conclusions and leave open the possibility of further review. This is the first case where the Commission has explored the issue of an equity penalty in depth, with testimony from several witnesses and extensive cross-examination on the issue.

Witness Maurey has testified that he is not aware of any prior cases in which the equity penalty concept was used in the same manner as it is being proposed in this proceeding (TR 1096). Witness Taylor has testified that he has been involved in several cases similar to this one in other states. (TR 816). He notes that in all the cases he has worked on, he is only aware of one case where the equity penalty was considered by a state commission. (TR 817). Witness Taylor also notes that in this one case, there is no mention of the equity penalty concept in any of the orders issued. (TR 818). Based on the testimony regarding decisions of other states, staff concludes that the use of the equity penalty is not a common regulatory practice for evaluating power supply alternatives.

When utilities enter into PPAs, the Commission has recovery clauses in place that allow the utility to fully recover the fuel and capacity payments associated with these contracts. (TR 1102). FPL submitted the basic terms of the PPA reflected in the RFP to S&P for review. S&P stated that given the terms of the RFP, they would likely assign a risk factor in the range of 40-60% when conducting their analysis. (TR 607, 647-648, 850). Staff concludes that even though there are mechanisms established for utilities to recover these costs, S&P still view PPAs as not without risk as part of its overall independent financial review.

In its brief, FPL argues that the use of an equity penalty is supported by Rule 25-22.081(7), Florida Administrative Code. Subsection (7) of the rule reads as follows:

> If the generation addition is the result of a purchased power agreement between an investor-owned utility and a nonutility generator, the petition shall include a discussion of the potential for increases or decreases in the utility's cost of capital, the effect of the seller's financing arrangements on the utility's system reliability, any competitive advantage the financing arrangements may give the seller and the seller's fuel supply adequacy.

Staff disagrees with FPL's conclusion. The rule requires the information to be filed but does not bind the Commission to act on it nor does the rule specify how the information is to be used. Staff believes the rule allows the Commission to consider the financial impact of purchased power on a case-by-case basis.

Witness Maurey believes that FPL has exaggerated the risks associated with PPAs. (TR 1091). He states that ratings agencies will look at a multitude of factors in their evaluation process, not just the risks associated with PPAs. (TR 1103). Witness Maurey believes that FPL will not face a corporate credit rating downgrade as a result of discarding the use of the equity penalty. (TR 1103). Witness Maurey believes there are several off-setting benefits of PPAs that negate the necessity of an equity penalty. (TR 1118). In addition, witness Maurey states that FPL's current equity ratio is very high when compared to other utilities around the country. Witness Maurey concludes that this high equity ratio will help absorb the negative impact PPAs may carry. (TR 1112).

Throughout his testimony, witness Avera emphasizes that because S&P imputes off-balance sheet debt associated with purchased power, the equity penalty represents a real cost. Witness Avera believes this is a real cost that should be recognized. (TR 612-613, 1231). Staff notes that S&P uses the off-balance sheet obligation to adjust financial ratios as part of its bond rating process. Staff also notes that, a flexible range is considered when S&P analyzes these ratios, thereby allowing ratios to fluctuate up and down within specified ranges. (TR 1103). Witness Avera acknowledges that including the equity penalty is not to prevent a downgrade in FPL's bond rating. Rather, the equity penalty is intended to provide for a meaningful analysis of supply alternatives. (TR 596-597, 613, 1238). Witness Maurey testifies that excluding the equity penalty as part of the need determination will not result in a rating downgrade. Staff notes that FPL's actual equity ratio of 63% is comparably high and will provide a cushion against any imputation of off-balance sheet debt. (TR 1111). Therefore, staff believes the real cost of off-balance sheet debt associated with purchased power could be present only when a utility faces a downgrade of its bonds or otherwise experiences a loss of financial flexibility. Staff does not believe FPL will face a downgrade in its bond rating or suffer a loss of financial flexibility if the Commission excludes the equity penalty. Additionally, in this case, the Commission can make a fair comparison of supply alternatives without allowing the equity penalty to be implemented in this case.

Staff believes the equity penalty concept may be appropriate if the utility demonstrates that a bond downgrade is imminent or that an actual loss of financial flexibility could occur. Accordingly, the Commission should consider the financial impact of purchased power on a case-by-case basis.

In addition to their concerns regarding PPAs, S&P has also expressed concern regarding how a utility is negatively affected by the risks associated with non-regulated investments made by the holding company. (TR 1102). Witness Dewhurst points out that FPL does not always agree with S&P's comments or assessment of factors that could impact the company's overall credit assessment. (TR 911). Witness Maurey notes that FPL makes no adjustments to protect ratepayers from the risks surrounding non-regulated investments. (TR 1107). Staff believes that FPL's selective application of which comments made by S&P they wish to acknowledge

and which comments they wish to ignore, demonstrates a lack of consistency.

Witness Dewhurst testifies that in order for a company to maintain a strong financial position, it is important to display financial viability. (TR 853). Financial viability is a beneficial attribute of a company. It can provide assurance to all when making key business decisions. (TR 853). Staff agrees with these points and notes that FPL's current bond rating is "A". An "A" bond rating is a strong indication of financial viability.

Witness Maurey points out that a company's equity ratio can fluctuate within a given range without having any impact on it's bond rating. (TR 1103). He also notes that a company's equity ratio could be between 50%-54% and still maintain an "A" bond rating. (EX 38).

In summary, staff believes that given the circumstances surrounding this case, the imputation of an equity penalty is not appropriate for the following reasons:

- Given the magnitude of additional PPAs addressed in this case and FPL's comparatively high actual equity ratio of 63%, staff does not believe that FPL will suffer a bond downgrade or incur a loss in financial flexibility.

- FPL's reliance on PPA's will significantly and gradually decline over the next eight years. Staff believes that the additional PPAs considered in this case will not negatively impact its financial ratios.

- The offsetting benefits of buying power was not considered. Benefits include: avoiding construction risk and demand uncertainty, and increasing fuel-supply diversity and flexibility.

- The use of an equity penalty for evaluating power supply alternatives does not appear to be a common regulatory practice.

An equity penalty may be appropriate if a company can provide evidence that it will face a downgrade in its bond rating. Otherwise, staff believes the Commission should reject this concept as part of the generic evaluation of outside supply options.

ISSUE 13: In its evaluation of Martin Unit 8, Manatee Unit 3, and projects filed in response to its Supplemental Request for Proposals, issued on April 26, 2002, did Florida Power & Light Company properly and accurately evaluate transmission interconnection and integration costs?

RECOMMENDATION: Yes. FPL properly and accurately evaluated transmission-related costs for the RFP projects and FPL's self-build options. (Haff)

POSITION OF THE PARTIES

FPL: Yes. FPL properly calculated and evaluated transmission interconnection and integration costs in its analysis. Interconnection costs were evaluated in the EGEAS modeling for each power supply option as provided by the bidder and FPL. After FPL identified top ranked portfolios of options, transmission integration costs for each portfolio were calculated based upon load flow studies to assess required transmission upgrades. Integration costs were then included in the total costs of each of the top ranked portfolios.

FACT ET. AL.: No position.

CPV GULFCOAST: FPL did not break out the transmission and integration cost for each proposed facility. Thus, the actual cost for transmission and integration for each unit which is the subject of these proceedings cannot be ascertained with certainty, and, consequently, these costs were not properly and accurately evaluated.

FIPUG: No position.

PACE: No position.

STAFF ANALYSIS: The capital costs for the RFP projects and FPL's self-build options included a cost for interconnecting the units to FPL's transmission system. (TR 317). FPL witness Sim testified that interconnection costs are "the transmission capital cost needed to simply interconnect that unit with the electrical grid" (TR 317-8), and that integration costs are "the transmission capital costs necessary to deliver that unit's power output throughout the grid." (TR 318).

FPL performed load flow studies to assess what new transmission facilities or system upgrades were needed to integrate each capacity portfolio. (TR 716). FPL then developed cost estimates for each of these transmission facilities. (TR 717). Finally, FPL compiled total transmission integration costs for each portfolio, as well as an estimated monthly cash flow of the costs for these projects. (TR 717; EX 3, Appendix M).

FPL witness Stillwagon testified that, due to the limited existing capability to transfer power between Florida's east coast and west coast, the simultaneous addition of capacity resources on both coasts may balance power flows within the state. (TR 740-1). As a result, fewer transmission additions or upgrades may be required in these instances, resulting in lower transmission integration costs. Witness Stillwagon testified that the capacity portfolios requiring the least amount of transmission integration costs consisted of a relative balance of east coast versus west coast capacity additions, or were predominately on the east coast. (TR 721).

PACE, FIPUG, and FACT et. al. did not take a position on this issue. CPV Gulfcoast appears to have no issue with how FPL evaluated transmission interconnection costs. However, CPV Gulfcoast asserts that FPL did not properly evaluate transmission integration costs because these costs were not broken out for each proposed facility. FPL witness Stillwagon testified that it was not possible to designate transmission integration costs for each separate facility. (TR 735-6). As stated above, the simultaneous addition of more than one capacity resource may stabilize power flows on the transmission system, resulting in the need for fewer new transmission facilities or upgrades. As stated by witness Stillwagon, when a utility plans to add more than one capacity resource in a single year, the only proper way to evaluate the impact of these resources on the transmission system is to study them as a group. (TR 736).

There is no evidence in the record to indicate that FPL did not correctly evaluate transmission-related costs for the RFP projects and FPL's self-build options. Staff concurs with FPL's analysis. Therefore, staff recommends that FPL properly and accurately evaluated transmission interconnection and integration costs in its analysis.

ISSUE 14: Is Florida Power & Light Company's Martin Unit 8 the most cost-effective alternative available?

RECOMMENDATION: FPL's base-case self-build plan, in which both Martin Unit 8 and Manatee Unit 3 enter service in Summer, 2005, appears to be the most cost-effective alternative. Deferring Martin Unit 8 by one year is more costly than FPL's base-case self-build plan. The Commission's decision on Issue 12 (equity penalty) will affect the level of the cost-effectiveness of FPL's base-case self-build plan. (Haff, Kenny, Lester)

POSITION OF THE PARTIES

FPL: Yes. FPL's rigorous and detailed economic analysis determined that the Martin 8/Manatee 3 plan is the most cost-effective portfolio to meet FPL's resource needs by at least $83 million. It is more cost effective than the best all outside plan by $497 million. FPL's analysis was confirmed by the independent evaluator, who determined that the Martin 8/Manatee 3 plan is the most cost-effective alternative available by $135 million (or $423 million, relative to the best all outside plan.)

FACT ET. AL.: No. Adopt post-hearing position of PACE as to specifics.

CPV GULFCOAST: It cannot be determined that the Martin Unit 8 is the most cost effective alternative available, as the RFP was not conducted in a fair and impartial manner and FPL's self-build cost estimates are not based on firm numbers but are aggressive estimates.

FIPUG: Because the bidding process was unfairly skewed in favor of FPL's own proposal, the Commission cannot reach this conclusion at this time.

PACE: FPL has failed to support its petition with an adequate basis on which the Commission can conclude that the 789 MW of Martin Unit 8 is the most cost-effective alternative available to meet FPL's need for 15 MW in 2005. (The 15 MW figure assumes that an amount of capacity equivalent to Manatee 3 is added in 2005.)

STAFF ANALYSIS: Due to the substantial size of FPL's capacity need, FPL performed its cost-effectiveness analysis on portfolios of capacity alternatives, including an all-FPL plan including both

Martin Unit 8 and Manatee Unit 3. For this reason, the following staff analysis will address the cost-effectiveness of both Martin Unit 8 and Manatee Unit 3.

FPL modeled a total of 36 expansion plans containing portfolios of capacity alternatives. These plans contained combinations of Martin Unit 8, Manatee Unit 3, and the RFP projects. There was an approximately $535 million cost differential between the least-cost FPL self-build plan and the highest-cost all-outside plan. (EX 45). However, all of the expansion plans evaluated by FPL fell within 1.3% of each other on a cumulative present worth revenue requirements basis. (EX 45).

In Issue 12, staff recommends that FPL should not have applied an equity penalty to RFP projects submitted by outside parties. The outcome of the Commission's decision on Issue 12 will have an impact on the level, but not the outcome, of the cost-effectiveness of Martin Unit 8 and Manatee Unit 3. As a result, there are two scenarios for cost-effectiveness:

- **If FPL's equity penalty is denied.** Staff believes that the record evidence shows FPL's base-case self-build plan to be approximately $2 million more cost-effective than the most competitive expansion plan containing at least one bidder's project. (EX 45). The most competitive expansion plan contains FPL's Manatee Unit 3; a three-year, 50 MW capacity purchase from FPC; and a 25-year, 708 MW capacity purchase from El Paso. (EX 2, 45). FPL's base-case self-build plan is approximately $320 million less costly than the best expansion plan containing all outside bids. (EX 45).

- **If FPL's equity penalty is approved.** Staff believes that the record evidence clearly indicates that the addition of both Martin Unit 8 and Manatee Unit 3 in Summer, 2005 is cost-effective by approximately $83 million. (TR 323, 326, 332, 457, 1375-6, 1398; EX 2, 45). The most competitive expansion plan contains FPL's Manatee Unit 3; a three-year, 50 MW capacity purchase from FPC; and a 25-year, 708 MW capacity purchase from El Paso. (EX 2, 45). FPL's base-case self-build plan is approximately $497 million less costly than the best expansion plan containing all outside bids. (EX 45).

In addition, staff requested FPL to evaluate a sensitivity plan in which only Manatee Unit 3 enters service in Summer, 2005

but Martin Unit 8 is deferred by one year. No equity penalty was applied to this sensitivity since it contains only FPL-constructed generation. FPL's analysis showed that deferral of Martin Unit 8 by one year was $18 million more costly than FPL's base-case plan. (TR 447, 459, 479-80; EX 16).

FPL's financial assumptions include a capital structure consisting of 55% equity and 45% debt, a 7.4% cost rate for debt, and an 11.7% cost rate for equity. The assumptions also include a discount rate of 8.5%. (EX 3, Appendix I; EX 37). FPL witness Avera stated that he found FPL's financial assumptions to be reasonable. (TR 609). In addition, staff witness Maurey reviewed FPL's financial assumptions and agreed that the financial assumptions appeared to be reasonable. (TR 1093). Based on this review, staff concludes that the financial assumptions used for FPL's self-build option are reasonable.

To perform its generation expansion planning analysis, FPL used the Electric Generation Expansion and Analysis System (EGEAS) resource optimization model, written by Stone & Webster for the Electric Power Research Institute. (TR 303, 370). EGEAS combines multiple capacity options to come up with a series of expansion plans that satisfy a utility's capacity need, with the associated cumulative present worth revenue requirements (CPWRR) for each expansion plan. FPL used EGEAS to evaluate 31 proposals from 13 bidders, plus the two FPL self-build units. Witness Sim testified that EGEAS can run a maximum of 50 supply options in one "run." (TR 309-10). However, due to substantial time requirements for EGEAS to perform such large runs for a thirty-year forecast period, a practical limitation of 20 options was set for each EGEAS run. (TR 310). As a result, FPL performed hundreds of EGEAS runs which resulted in thousands of capacity combinations. After the EGEAS analysis was completed, FPL added equity penalty calculations and transmission integration costs for each expansion plan. The appropriateness of these two items is discussed in greater detail in Issues 12 and 13.

FPL witness Sim testified that FPL has used EGEAS for approximately ten years, since it was first developed. (TR 303, 486). FPL witness Taylor, of Sedway Consulting, testified that FPL's existing planning process is rigorous, and that FPL's use of EGEAS is correct. (TR 1335). PACE asserts that an hourly production cost model such as POWERSYM would have given FPL more accurate results than an annual model such as EGEAS. However,

witness Sim testified that POWERSYM would take substantially more time to produce 30 years' worth of hourly calculations, and that POWERSYM is more appropriate for short-term studies such as the fuel adjustment filing. (TR 380, 387-8). Witness Sim testified that use of a different production cost model will change only the fuel cost, and that the different model would not have mattered in the Supplemental RFP analysis because the fuel cost and heat rates for both FPL's and the bidders' units were close. (TR 382). Witness Sim further testified that any inaccuracies in the input data would be multiplied by use of an hourly production cost model over a 25-30 year period. (TR 487). Staff believes that the record contains no credible evidence to contradict FPL's use of EGEAS to perform its generation expansion planning studies.

FPL's cost-effectiveness analysis did not incorporate items that typically favor self-build options. If the cost or benefit of items had been evaluated as part of FPL's analysis, the combination of Martin Unit 8 and Manatee Unit 3 would have been even more cost-effective. These items include:

- **Revenues from off-system sales.** By owning its units rather than purchasing power, FPL has opportunities to make off-system sales to other utilities. The revenues gained by FPL from these sales are passed on to customers through the fuel adjustment clause. Although minimal in comparison to the total system fuel costs estimated by EGEAS, revenues from off-system sales lowers customer costs.

- **Deferral of base rate recovery.** When utilities purchase firm capacity, there is immediate recovery of firm payments through the capacity cost recovery clause. However, fixed costs for self-generation are recovered through a utility's base rates, and there is typically a time lag between the in-service date of a generating unit and the subsequent adjustment to a utility's base rates. Additionally, due to its revenue sharing agreement with Public Counsel, FPL cannot modify its base rates until January, 2006 at the earliest. (TR 241; EX 16). Martin Unit 8 and Manatee Unit 3 are expected to enter commercial service seven months prior to the end of the revenue sharing agreement.

The majority of testimony from the only two intervenor witnesses, CPV Gulfcoast witness Finnerty and PACE witness Slater, is that FPL's RFP violated the RFP Rule, that the process used by

FPL was not conducted fairly and favored FPL's own units, and that FPL did not properly evaluate the bids. As a result of these perceived flaws, according to CPV Gulfcoast, PACE, FIPUG, and FACT et. al., the Commission cannot conclude that Martin Unit 8 and Manatee Unit 3 are the most cost-effective alternatives available to FPL. Staff disagrees with these assertions, which are discussed in greater detail in Issues 9, 10, and 11.

No party offered any evidence that an RFP bid was more cost-effective than FPL's units. In fact, CPV Gulfcoast witness Finnerty testified that he examined all bids from the supplemental RFP, and that his project was not the most cost-effective alternative available to FPL. (TR 1049-50). Witness Finnerty admitted that CPV Gulfcoast's project at or near the bottom of all the bids. (TR 1052).

In summary, staff believes that FPL properly used EGEAS to perform its expansion planning work. If the Commission adopts staff's recommendation not to consider the equity penalty in Issue 12, FPL's base-case self-build plan appears to be approximately $2 million more cost-effective than the next-best plan containing at least one outside bid. If the Commission does not adopt staff's recommendation on the equity penalty, FPL's base-case self-build plan appears to be the most cost-effective alternative by $83 million. Further, a sensitivity requested by staff, in which only Manatee Unit 3 enters service in Summer, 2005 but Martin Unit 8 is deferred by one year, is approximately $18 million more costly than FPL's base-case plan. All of the expansion plans evaluated by FPL fell within 1.3% of each other on a cumulative present worth revenue requirements basis. There is no evidence that an outside bidder's proposal could be made more cost-effective using a different evaluation process or set of assumptions. Therefore, staff recommends that FPL's plan to place Martin Unit 8 and Manatee Unit 3 into service in Summer, 2005 appears to the most cost-effective alternative.

ISSUE 15: Is Florida Power & Light Company's Manatee Unit 3 the most cost-effective alternative available?

RECOMMENDATION: See staff recommendation on Issue 14. (Haff, Kenny, Lester)

POSITION OF THE PARTIES

FPL: Yes. FPL's rigorous and detailed economic analysis determined that the Martin 8/Manatee 3 plan is the most cost-effective portfolio to meet FPL's resource needs by at least $83 million. It is more cost effective than the best all outside plan by $497 million. FPL's analysis was confirmed by the independent evaluator, who determined that the Martin 8/Manatee 3 plan is the most cost-effective alternative available by $135 million (or $423 million, relative to the best all outside plan.)

FACT ET. AL.: No. Adopt post-hearing position of PACE as to specifics.

CPV GULFCOAST: No.

FIPUG: Because the bidding process was unfairly skewed in favor of FPL's own proposal, the Commission cannot reach this conclusion at this time.

PACE: FPL has failed to support its petition with a showing on which the Commission can reasonably conclude that Manatee 3 is the most cost-effective alterative available.

STAFF ANALYSIS: See staff analysis on Issue 14.

ISSUE 16: Based on the resolution of the foregoing issues, should the commission grant Florida Power & Light Company's petition for determination of need for Martin Unit 8?

RECOMMENDATION: Yes. FPL's Petition for Determination of Need for Martin Unit 8 satisfies the statutory requirements of Section 403.519, Florida Statutes, and, therefore, should be approved. (Haff, Hewitt, Kenny, Lester, Sickel, Futrell, Makin, M. Brown, L. Harris)

POSITION OF THE PARTIES

FPL: Yes. The combination of Martin Unit 8 and Manatee Unit 3 is the best, most cost-effective alternative available to meet FPL's resource needs. There is no reasonably achievable DSM available to avoid the need for those units. Additionally, these units will provide adequate electricity at a reasonable cost and are necessary for FPL's system integrity and reliability in 2005 and 2006. Accordingly, the requested determinations of need should be granted.

FACT ET. AL.: No.

CPV GULFCOAST: No. The Commission should deny the Petition and move to require a fair and unbiased selection process that will provide outcomes in which the Commission and utility's rate payers can have confidence. FPL to rebid the capacity represented by Manatee Unit 3.

FIPUG: No. The commission should require the needed capacity to be expeditiously rebid.

PACE: No. FPL has not demonstrated the need or cost-effectiveness of proposed Matin 8. The Commission should deny FPL's petition.

STAFF ANALYSIS: FPL's Petition for Determination of Need for Martin Unit 8 meets the statutory requirements of Section 403.519, Florida Statutes, as discussed in prior issues and summarized below:

- FPL does not have a reliability need for the full 789 MW of capacity from Martin Unit 8 in Summer, 2005. However, the addition of Martin Unit 8 in Summer, 2005 appears to be cost-

effective and will enhance the reliability and integrity of FPL's electric system by allowing FPL to substantially exceed its 20% reserve margin criterion.

- The addition of Martin Unit 8 in Summer, 2005 will contribute to the provision of adequate electricity at reasonable cost. FPL's cost and performance parameters for Martin Unit 8 appear reasonable for a unit of this type.

- FPL's evaluation of RFP projects, DSM options, and its own generating proposals shows that the combination of Martin Unit 8 and Manatee Unit 3, added together in Summer, 2005, appears to be the most cost-effective alternative available.

- There are no known additional cost-effective conservation measures taken by or reasonably available to FPL which might mitigate the need for Martin Unit 8.

Based on the discussion above, which summarizes other issues within this recommendation, staff believes FPL's petition satisfies the statutory criteria. Therefore, staff recommends that FPL's Petition for Determination of Need for Martin Unit 8 be granted.

ISSUE 17: Based on the resolution of the foregoing issues, should the commission grant Florida Power & Light Company's petition for determination of need for Manatee Unit 3?

RECOMMENDATION: Yes. FPL's Petition for Determination of Need for Manatee Unit 3 satisfies the statutory requirements of Section 403.519, Florida Statutes, and, therefore, should be approved. (Haff, Hewitt, Kenny, Lester, Sickel, Futrell, Makin, M. Brown, L. Harris)

POSITION OF THE PARTIES

FPL: Yes. The combination of Martin Unit 8 and Manatee Unit 3 is the best, most cost-effective alternative available to meet FPL's resource needs. There is no reasonably achievable cost-effective DSM available to avoid the need for those units. Additionally, these units will provide adequate electricity at a reasonable cost and are necessary for FPL's system integrity and reliability in 2005 and 2006. Accordingly, the requested determinations of need should be granted.

FACT ET. AL.: No.

CPV GULFCOAST: No. The Commission should deny the Petition and move to require a fair and unbiased selection process that will provide outcomes in which the Commission and utility's rate payers can have confidence. FPL to rebid the capacity represented by Manatee Unit 3.

FIPUG: No. The commission should require the needed capacity to be expeditiously rebid.

PACE: No. FPL has failed to carry its burden of proof to demonstrate that Manatee 3 is the most cost-effective alternative.

STAFF ANALYSIS: FPL's Petition for Determination of Need for Manatee Unit 3 meets the statutory requirements of Section 403.519, Florida Statutes, as discussed in prior issues and summarized below:

- The addition of Manatee Unit 3 will contribute to the reliability and integrity of FPL's electric system by contributing nearly all of FPL's identified capacity need for

2005. FPL's Summer, 2005 reserve margin is forecasted to be 19.92% with the addition only of Manatee Unit 3.

- The addition of Manatee Unit 3 will contribute to the provision of adequate electricity at reasonable cost. FPL's cost and performance parameters for Manatee Unit 3 appear reasonable for a unit of this type.

- FPL's evaluation of RFP projects, DSM options, and its own generating proposals shows that the combination of Manatee Unit 3 and Martin Unit 8, added together in Summer, 2005, appears to be the most cost-effective alternative available.

- There are no known additional cost-effective conservation measures taken by or reasonably available to FPL which might mitigate the need for Manatee Unit 3.

Based on the discussion above, which summarizes other issues within this recommendation, staff believes FPL's petition satisfies the statutory criteria. Therefore, staff recommends that FPL's Petition for Determination of Need for Manatee Unit 3 be granted.

ISSUE 18: Should Docket Nos. 020262-EI and 020263-EI be closed?

RECOMMENDATION: Yes. These dockets should be closed after the time for filing an appeal has run. (M. Brown, L. Harris)

STAFF ANALYSIS: Upon expiration of the appeal period, if no party has timely appealed the order, these dockets should be closed.