

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Florida Power and Light Company for a Determination of Need For a power plant proposed to be located In Martin County

Docket No. 020262-EI

In re: Petition of Florida Power and Light Company for a Determination of Need For a power plant proposed to be located In Manatee County

Docket No. 020263-EI

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BRIEF OF FLORIDA PARTNERSHIP FOR AFFORDABLE COMPETITIVE ENERGY

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Pursuant to Order PSC-02-0992-PCO-EI, the Florida Partnership for Affordable Competitive Energy (“PACE”) submits its Post-Hearing Brief.

PRELIMINARY STATEMENT

As Florida Power & Light Company’s (“FPL”) exhibits establish, five members of Florida Partnership for Affordable Competitive Energy (“PACE”) submitted responses to FPL’s Supplemental Request for Proposals. While PACE has of course participated in these dockets to represent and protect its members’ interest, PACE is fully aware that the Commission will base its decisions on the interests of FPL’s customers. Those interests center on whether FPL has proven that its proposals are the most cost-effective available. That central question – viewed from the customers’ perspective – is the focus of PACE’s brief.

Together, these consolidated dockets involve the largest request for determinations of need ever to come before the Commission. FPL proposes to construct more than 1900 MW at a cost of about \$1 billion, which would be borne by its customers. FPL claims that it has evaluated alternatives and has put forward the most cost-effective options available. The enormity of the proposal and the significant impact of the proposal on customers demand a detailed, rigorous evaluation of alternatives. In this Brief, PACE will demonstrate that FPL’s evaluation fell far short of the standard required to support its petitions.

STATEMENT OF BASIC POSITION

*FPL's flawed economic evaluations were inadequate to prove the cost-effectiveness of Martin 8 and Manatee 3. Further, the "equity penalty" on which FPL relies to distance itself from competitive alternatives is prejudicial and inappropriate.

FPL claims a need in 2005 for 1,122 MW. Manatee 3 (or equivalent) would supply all but 15 MW, yet FPL failed to consider a one-year purchase of 15 MW. The Commission should deny both petitions. At a minimum, the Commission should deny FPL's 789 MW Martin proposal.*

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

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 or 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.*

ARGUMENT

FPL contends that it must add 1,122 MW in 2005 to maintain a reserve margin of at least 20%. Dr. Leonardo Green sponsored FPL's load forecast. In testimony, Dr. Green agreed that economic considerations comprise a significant factor in the preparation of a load forecast. (TR-519). In that regard, it is worth noting that, while Dr. Green prepared his testimony in May-June of 2002, and although FPL obtains economic updates from consultant DRI on a monthly basis, the DRI economic data that Dr. Green used in preparing the forecast that FPL submitted in this case dates to September 2001. (TR-520). Yet, it is on the basis of that aged data -- a view that does not reflect the twelve months of economic malaise that followed -- that Dr. Green announced in testimony the return of FPL to historical trends. (TR-521).

FPL's calculation of its capacity needs for 2005 is driven entirely by its forecast of summer peaks over the planning horizon. Dr. Green presented the forecast of summer peaks in Exhibit 20. Significantly, while Dr. Green testified that the predicted average compound growth rate for the forecast period is 2.1%, he assumes that FPL's summer peak in 2003 would grow by

3.3% from the prior year. Given the predicted average compound growth rate of 2.1%, the assumption of an *immediate leap* to 3.3% in 2003 is at odds with his portrayal of an economic system recovering gradually over time to its historical norm. (TR-508).

Dr. Green predicted that the growth rate in peak demand would exceed the average compound rate during the first years of the forecast, and taper to lower rates during subsequent years. While he disagreed with its application, he acknowledged that the use of a normalized growth rate (instead of the “front end loaded” rate) in the preparation of the forecast would result in a predicted need for capacity in 2005 and 2006 that would be materially lower than 1,122 MW in 2005 and 1,725 MW in 2006. (TR-527). The assumption that the summer peak in 2003 will increase by 3.3% is based entirely on Dr. Green’s assumption that FPL’s recent rate reduction will spark growth of that magnitude in 2003. (TR-524). If the Commission finds this assumption to be unpersuasive, it should adjust downward the predicted 2005 shortfall.

As was mentioned earlier, FPL projects a need for 1,122 MW in 2005. FPL proposes to add 1,107 MW in the form of Manatee 3. In other words, if Manatee 3 (or its equivalent) is added in 2005, that addition will provide all but 15 MW of the capacity that FPL calculates to be necessary to meet a reserve margin of 20%. (TR-213). FPL witness Silva testified that Manatee 3 alone would result in a 2005 reserve margin of 19.92%. (TR-213). PACE submits there are several reasons why the Commission should reject FPL’s contention that additional capacity (i.e., more than Manatee 3 or an equivalent alternative) is needed in 2005. First, as noted above, FPL’s load forecast is based on stale data, and the assumption of a 3.3% jump in summer peak predates the current, persistent economic stagnation. Second, Dr. Green acknowledged that his load forecast model is not accurate within 7 MW (TR-540), and it is questionable whether the forecast would be accurate within 15 MW, given a system peak of over 20,000 MW.

FPL defended its proposal to add 789 MW of incremental capacity at Martin in 2005 (which translates to 1,100 MW of new base load capacity) largely, on the basis that it had no choice other than to adhere rigidly to the minimum 20% reserve margin to which it committed in a voluntary stipulation. Under the circumstances, whether viewed from the perspective of FPL

or the Commission, this approach to the reserve margin criterion is unnecessary. First, in the stipulation of the investor-owned utilities that established a voluntary 20% reserve margin criterion, each investor-owned utility reserved its prerogative to vary from the 20% target. Specifically, this stipulation states:

The IOUs agree to adopt the twenty percent (20%) reserve margin planning criterion with the good faith intention of maintaining that planning criterion for the indefinite future, but each IOU must reserve the prerogative individually to modify its planning criterion to adapt to relevant circumstances.

Order No. PSC-99-2507-S-EU 426, issued in Docket No. 981890-EU on December 22, 1999.

Even more importantly, when it accepted the 20% reserve margin stipulation, the Commission reserved *its* authority to apply the criterion that the Commission finds to be appropriate under the circumstances. The stipulation that the Commission approved stated:

The Commission shall retain the ability and discretion to consider all facts and circumstances applicable to a given utility and/or peninsular Florida. Further, with respect to the evaluation of the adequacy of reserves in peninsula Florida, the Commission may employ any methodology and consider any facts and circumstances it deems appropriate, subject to applicable legal requirements.

Apparently, FPL has chosen, for whatever reason, to proceed by rote. However, common sense dictates that adding 789 MW of base loaded capacity to move from 19.92% to 20% is not in the best interest of FPL's customers. FPL failed to demonstrate why common sense should not prevail.

If the Commission decides to apply the 20% criterion, FPL has not supported its proposal to meet the "15 MW need" by adding the 789 MW of Martin 8 in 2005.

The most obvious question that arises from FPL's proposal to add Martin 8 in 2005 is this: Why not simply purchase 15 MW of inexpensive peaking capacity for one year? FPL witness Silva acknowledged that FPL routinely engages in short-term purchases. (TR-218). Both Mr. Silva and Dr. Sim acknowledged that FPL did not consider a one-year purchase of 15 MW. They testified that no RFP participant proposed such a limited sale, and asserted that it would have been unfair of FPL to look beyond the proposals it received in response to the

supplemental RFP. (TR-276; 479). FPL's explanation of its failure to consider a one year, 15 MW purchase does not hold water. FPL purposely designed the RFP so as to prohibit bidders from offering proposals of fewer than 3 years or less than 50 MW. (TR-216-217; Exhibit 8). FPL never intended to bridge the 15 MW shortfall in 2005 with a short-term purchase, and its attempt to lay its failure to do so at the feet of the bidders is disingenuous.¹

FPL has attempted to portray its petition as relating to the period 2005-2006, but its specific proposal is to have Martin 8 on line in 2005. FPL's own Witness Mr. Yeager testified that FPL has sufficient time to bid any 2006 need prior to proceeding with its own proposal. (TR-1012). As FPC did in 1992 when it sought a determination of need for four units totaling 950 MW (Order No. 25805, issued on February 25, 1992 in Docket No. 910759-EI), in these dockets FPL is overreaching. To grant FPL's petition even if FPL fails to make its case for 2005 would be inappropriate, premature, and unfair to customers and alternative suppliers, as the Commission found in the 1992 FPC case.

Late in the proceeding, FPL attempted to make the case that even if the capacity of Martin 8 is not needed in 2005, the addition of Martin 8 in 2005 would lower customers' bills. For the reasons developed in argument on Issue 3, which PACE hereby incorporates by reference, the Commission should reject that late-arising assertion.

In summary, PACE contends that FPL failed to carry its burden of proof with respect to both petitions. At most, FPL showed a need for the capacity of Manatee 3 or its equivalent. The Commission should deny FPL's request for a determination of need for Martin 8.

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?

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,

¹ Dr. Sim argued that the bidders could have offered proposals that satisfied the minimum terms of the RFP, and then offered a one-year, 15 MW sale as an alternative proposal. His continued attempt to invoke the limited responses to the RFP as an excuse, in the face of the prohibition in the RFP, is particularly lame in light of his acknowledgment that the minimum terms of the RFP constituted some of the "rules of the game" that FPL and bidders were bound to follow. (TR-479).

FPL has failed to support its contention that Manatee 3 is the most cost-effective choice available.*

ARGUMENT

PACE incorporates by reference the above discussion of the questionable load forecast (Issue 1) and of FPL's failure to carry its burden of proof (Issues 10, 11, 12, 15).

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

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.*

ARGUMENT

FPL failed to demonstrate, through sound, reliable evaluation methods and assumptions, that Martin 8 is superior to available alternatives in this regard. PACE incorporates by reference the discussion of Issues 10, 11, 12, and 14.

FPL also failed to prove that adding Martin 8 in 2005 is justified based on economics rather than on a need for capacity.

For approximately 20 years, the Commission has permitted petitioning utilities to justify plants on the basis of "economic need"; yet, FPL did not contend in its case in chief that adding Martin 8 in 2005 would lower customers' bills. This particular contention arrived as an afterthought, after Staff began, through discovery, to probe the decision to add 789 MW of base load capacity to satisfy a 15 MW summer peak need in 2005. The absence of any such assertion in FPL's affirmative case casts doubt on the credibility of the late-arising claims to that effect.

Dr. Sim sponsored Exhibit 16, which was Late Filed Exhibit 3 to his deposition. (TR-444). The exhibit purports to show that, if Martin 8 is added in 2005, the resulting fuel savings will more than offset related expenses. However, this conclusion rests on the assumption that FPL would be required to spend \$24 million on transmission upgrades if Martin 8 is not built in 2005; otherwise, the capital and O&M costs of \$61 million would outweigh estimated fuel savings of \$55 million. Apart from the fact that FPL has not proven that Martin 8 is the most

cost-effective choice in the first place, the assumption of \$24 million in transmission costs in 2005 is unsupported in the record. FPL presented no results from a load flow study that examined the scenario of adding *only* Manatee in 2005. (See Exhibit 23). The closest approximation was a scenario that assumed the addition of Manatee 3 and a 50 MW purchase from FPC. Donald Stillwagon, FPL's load flow witness, testified that it is impossible in such a "multiple addition" case to discern the impact of each addition on the transmission system. (TR-736). He also said the relationship is "not linear." (TR-744). Further, FPL did not prepare any load flow cases that studied 2006. Accordingly, FPL has no basis on which to attribute the \$24 million of transmission upgrades to the construction of Manatee 3.²

While FPL did not quantify the effect in Exhibit 16, FPL claimed on the exhibit that the effect of the recent rate case stipulation would be to provide retail customers with several months of "free" ownership of Martin 8. There is a catch to the offer that FPL failed to mention, and the "benefits" of the stipulation could be illusory -- or worse. The rate case stipulation contains an important "escape clause." It provides that FPL may petition for a rate increase if its earned return in equity falls below 10%. (TR-426). In fact, the addition of *two* large generating units, representing an increase to rate base of approximately \$1 billion, very possibly could have the effect of triggering this provision and precipitating a rate case that otherwise would not occur.

Excluding the unsupported assumption regarding transmission impacts, the costs associated with adding Martin 8 in 2005 outweigh the claimed savings. (Exhibit 16).

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?

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

² Even in the form presented by FPL, Exhibit 16 indicates that for at least the first ten years of the scenario where Martin 8 is placed in service in 2005 compared to an in-service date of 2006, the NPVRR is actually more costly to ratepayers.

ARGUMENT

PACE incorporates by reference the arguments below that address Issues 10, 11, 12 and 15.

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?

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.*

ARGUMENT

FPL witness Brandt testified only that FPL could not reasonably be expected to supplant the entire 789 MW of Martin 8 with additional conservation. (TR-578). At the time he wrote his testimony, Mr. Brandt was unaware that less than the full 789 MW is needed to satisfy the 20% criterion. (TR-578). When asked whether FPL could generate an additional 15 MW of conservation, Mr. Brandt repeatedly avoided answering the question by alluding to the purported benefits of adding Martin 8 in 2005. (TR-576). His testimony on cross-examination therefore begs some of the principal questions in the case. As a result, FPL failed to address squarely whether 15 MW of additional conservation could be in place prior to the 2005 summer peak. This constitutes a failure of FPL to meet its burden of proof.

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?

PACE: *No position.*

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

PACE: *No position.*

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

PACE: *No position.*

Issue 9: Did Florida Power & Light Company's supplemental Request For Proposals, issued on April 26, 2002, satisfy the requirements of Rule 25-22.082, Florida Administrative Code?

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.*

ARGUMENT

The supplemental RFP deleted the blatantly outrageous terms that led to the filing of a complaint against FPL and FPL's subsequent decision to revise and reissue the RFP. However, this case provides proof that detailed information concerning the criteria and the proposed manner of evaluation must be included in the RFP before affected parties can ascertain how to structure their bid and whether they will be treated fairly. In violation of the rule, FPL failed to include in the supplemental RFP all criteria that it applied to bids. Examples include: (i) FPL did not disclose that bids less than FPL's full need in any year would be combined with other bids in the evaluation process (TR-192; 195); (ii) FPL did not disclose that the allocation of O&M costs between fixed and variable categories would be an important evaluation factor (TR-1294); (iii) FPL provided no assurances that a bidder who took exceptions to any provisions in the RFP the bidder would not be unfavorably evaluated (TR-1044); (iv) FPL did not disclose that, with respect to bids received from other Florida utilities, a reserve margin assessment would be made to determine if, in FPL's opinion, the utility was able to meet its own 20% reserve margin requirements (TR-192); and (v) FPL provided insufficient information regarding its proposed "equity penalty" factor. (TR-631).

Issue 10: Was the process used by Florida Power & Light Company to evaluate Martin Unit 8, Manatee 3, and projects submitted in response to its Supplemental Request for Proposals, issued on April 26, 2002, 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.*

ARGUMENT

FPL advertised consultant Alan S. Taylor as its “independent evaluator.” However, at most Mr. Taylor was a cross-checker; and his work was anything but independent of FPL’s own evaluation.

While Mr. Taylor did not know the identity of the bidders, FPL’s self-build proposals were identified to him clearly. (TR-812). Mr. Taylor acknowledged that he performed no modeling with EGEAS or any other resource planning or production costing computer models. (TR-813). Instead, his “modeling” work was limited to the use of an Excel spreadsheet.

Because FPL evaluated the alternatives primarily on the basis of total revenue requirements associated with each alternative, it was necessary for Mr. Taylor to incorporate, into his otherwise straightforward calculation of direct contract costs, some semblance of a methodology for calculating production costs. Mr. Taylor derived his estimates of production costs from EGEAS data points that FPL supplied to him. (TR-813). Essentially, FPL provided a series of EGEAS runs in which it varied the size and price of a proxy resource. Mr. Taylor incorporated the results in his spreadsheet and used them to extrapolate estimates of production costs that corresponded to the bidders’ proposals. (TR-813). Therefore, Mr. Taylor’s work was *not* independent of FPL’s evaluation; his estimates of production costs were a function of FPL’s modeling of its system with EGEAS. Further, inasmuch as EGEAS is a screening tool that provides only a simplistic prediction of production costs, the values that Mr. Taylor extrapolated from the FPL-supplied EGEAS data points amounted to a rough approximation of a rough approximation.

FPL made all decisions regarding bidder disqualification, and simply informed Mr. Taylor of its actions. In addition, FPL supplied all transmission integration values to Mr. Taylor, who simply plugged them into his calculations. In short, Mr. Taylor’s work product was drawn

heavily from FPL's own analysis. Mr. Taylor performed no "independent" evaluation. His testimony does not rise to the level of competent, substantial evidence.

While the methodology that FPL employed to model FPL's system and calculate the production costs associated with each alternative is treated in more detail in response to Issue 11, the modeling procedure that FPL followed also constitutes a part of the "process" to which Issue 10 refers. The modeling that FPL performed to estimate the production costs associated with each alternative was crude and simplistic. FPL employed its version of the EGEAS computer model for the purpose. EGEAS is a screening tool. It is not capable of detailed, refined modeling of production costs. As measured by FPL's modeling with EGEAS, several of the bidders' alternatives proved to be lower than or close to FPL's costs of its self-build options. With 1900+ MW and a billion dollars of customer-borne construction costs at stake, and with numerous bidders relying on FPL to fairly and accurately consider and compare their 31 proposals, FPL's process for quantifying relative production costs should have included the use of those tools and measures most capable of providing maximum precision and accuracy. Specifically, FPL could have and should have first used EGEAS to identify the best six or eight outside proposals, and then refined the analysis by running them through a detailed production costing model. FPL had at its disposal, POWERSYM, a model having the sophistication necessary to simulate the nuances of the system that give rise to production cost differences. However, instead of examining the best alternatives screened by EGEAS more precisely through the use of a detailed production costing model well suited for the purpose, FPL chose to rely on the separate equity penalty calculation to achieve "separation" from the bidders. As developed in Issue 12, the proposed equity penalty is prejudicial and unjustified.

PACE incorporates by reference the additional exposition of PACE's position on FPL's modeling, which appears in the argument on Issue 11, and its argument on the "equity penalty," which appears in the section on Issue 12.

Early in the RFP process, an FPL employee was asked to devise a procedure for evaluating alternatives. The result was a proposed procedure that explicitly contemplated the

ability of FPL to enter “bid” after “bid” until it “won” the RFP. (Exhibit 32). Even if the procedure was not applied exactly as shown on the exhibit (for instance, the value of deferral methodology described in the exhibit was not adopted) the recommendation reveals a pervasive attitude of self-serving favoritism among the evaluators that undermines the credibility of FPL’s presentation, with respect to the fairness and adequacy of the process it employed.

Issue 11: 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 employ fair and reasonable assumptions and methodologies?

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 miniscule “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.*

ARGUMENT

As an electric utility employs its system of resources to generate electricity and meet customers’ needs, it incurs “production costs.” Using a computer to “model” the system involves replicating mathematically the manner in which such costs are incurred. (TR-369). The more precisely a model emulates the physical system, the more accurate will be the calculation of production costs. (TR-369). In the real, physical world, the utility operator achieves the most economical mix of generation by fluctuating the output of the units on the system over their operating ranges in response to frequent changes in conditions. (TR-370). By contrast, in FPL’s simulations, the EGEAS model simplistically assumed each unit on the system (other than the unit being evaluated) was either on line at full capacity or not in service at all. (TR-371). This did not have to be. While far less detailed than a true production cost model, even FPL’s version of EGEAS has the capability of representing a unit at various levels of output. FPL could have, but did not, enhance somewhat the accuracy of its EGEAS estimates. (TR-1219); TR-1325). FPL unnecessarily created additional imprecision by electing to use the “single segment” unit

representation mode of EGEAS instead of allowing the model to represent each unit at several levels of output. Dr. Sim, the FPL witness who had overall responsibility for the evaluations, was not even aware that EGEAS has this capability. (TR-372).

In the real, physical world, the operator starts and stops units based on economic criteria. (TR-372-373). To accurately portray the system, a model must simulate this aspect of the system. EGEAS is incapable of identifying when and how often each unit on the system should be shut down or started based on the economics of the system. (TR-374).

In the real, physical world, the operator makes dispatch decisions constantly over time. The simplistic EGEAS program does so once *annually*. Programs exist that are capable of modeling such decisions on an hourly, or near hourly basis. In fact, FPL employs such a detailed production costing simulation model (POWERSYM) whenever it wants refined and detailed calculations of production costs. (TR-380). However, Dr. Sim, the person who was responsible for overseeing the evaluations, is unfamiliar with the features and capabilities of POWERSYM. (TR-380).

FPL's EGEAS model has no ability to commit and decommit units. It has no ability to model economic dispatch to any reasonable degree of accuracy. It has no ability to appropriately capture the impacts of unit operating constraints and parameters, such as minimum start-up times, minimum downtimes and start-up costs.

In short, the EGEAS model is not equipped to provide detailed and accurate measurements of production costs where alternatives appear to be close. Furthermore, a simplistic model such as FPL's EGEAS, because it ignores practical unit commitment constraints and even elementary economic dispatch, is inherently "kinder" to large units such as Manatee 3 and Martin 8 than a more detailed and sophisticated production costing model would be. (TR-1194).

The production costs associated with the various alternatives are so huge, and the differentials yielded by EGEAS were so relatively small, that even a tiny change effected by a

more precise and accurate production costing tool could have altered the rankings.³ During the evaluations, several bids – as measured with EGEAS – were better than or close to FPL’s self-build options. (TR-1218). The “bottomline” numbers of the comparisons were a function of, among other things, the FPL system production costs (fuel and O&M) associated with each alternative. The net present value of production costs for the study period was more than \$41 billion. (Exhibit 16). Using an illustration chosen by Dr. Sim from among the actual bids, the net present value of the difference between the all-FPL plan and a plan that included an outside proposal (excluding the equity penalty) was only \$2 million (NPVRR). (TR-386).

FPL could have, and should have, used the EGEAS screening tool to winnow the alternatives and then employed a detailed production costing model to refine the costs of the top several options. (TR-1194; 380). At the hearing, FPL witnesses basically offered two rationales for not having done so. First, FPL argued that, when the equity penalties were included, the differentials were so large that additional refinement was unwarranted. (TR-382). Next, they argued that the application of a detailed production model to a 30-year period yields no greater precision because of the uncertainty associated with fuel price forecasts over such an extended period of time. (TR-387). Neither reason justifies or excuses FPL’s choice of a rough and dirty methodology with which to determine the outcome of such an important evaluation in these dockets.

First, the celebrated memorandum describing the equity penalty as (paraphrasing) “not even the icing on the cake, more like the candle” (Exhibit 13) demonstrates the reliance that FPL attached to the equity penalty, even when the evaluations were being conducted.⁴ Rather than performing the more detailed work necessary to refine the differential in production costs to the point at which the Commission and parties could have confident in the results, FPL chose to

³ During the hearing, FPL observed that some of the most competitive bids had since been withdrawn. However, FPL did not know at the time it was performing the evaluations which bidders would remain; and, more importantly, did not know what impact a change in rankings resulting from more detailed modeling would have on bidders’ decisions to stay or go. (TR.1425-1426).

⁴ In Dr. Sim’s illustration, \$81 million of the \$83 million differential was comprised of the equity penalty.

bank on winning the controversial “equity penalty” issue. For the reasons shown in PACE’s argument on Issue 12, the reliance is misplaced. FPL’s evaluations are glaringly lacking.

FPL’s argument concerning the “out years” of the fuel forecast must fail for two reasons. First, it is not necessary to include a consideration of “out years” in order to see the need in this situation for the application of a detailed production cost model. The production costs related to 2005 and 2006 alone amount to more than \$4 billion (nominal), or \$3.6 billion in 2001 dollars. (Exhibit-16). Compared to the \$2 million differential in the example that Dr. Sim described, a difference in the production costs calculated by EGEAS and POWERSYM, respectively, of only about 0.05% within the first two years of analysis would have changed the ranking of the bidders’ proposal relative to the all-FPL scenario. Second, the way to deal with the uncertainty introduced by long-term fuel forecasts is -- not to exclude those years (FPL included them without caveat) -- but to perform sensitivity analyses using different fuel prices as variables. (FPL *did not do* this, even with its own EGEAS modeling). (TR-1336).

During cross-examination, FPL witness Taylor resisted relating the \$2 million differential between FPL and bidder proposals that Dr. Sim identified to the system production costs shown on Exhibit 16. However, the comparison is both appropriate and telling. The total revenue requirements of the scenarios that Dr. Sim compared to calculate the \$2 million differential were a function of, among other things, the production costs that EGEAS calculated for each. It follows that a change in the production cost components -- such as could result from the substitution of a detailed production costing model for simplistic EGEAS -- would also result in a change in the relative revenue requirements. Further, a change in production costs sufficient to offset the \$2 million differential would change the relative rankings of the proposals (excluding the proposed equity penalty, which is addressed below). Dr. Sim’s \$2 million differential is a net present value number. The Exhibit also shows a net present value of production costs -- more than \$41 *billion* -- for the same period that Dr. Sim’s comparison covered. The comparison of the \$2 million differential to the \$41 billion total production cost figure is, therefore, “apples to apples.” On Exhibit 16, the annual entries for 2005 and 2006 are expressed in nominal dollars

(more than \$2 billion in each year), and are also discounted to 2001 (\$3.6 billion for combined 2005 and 2006). The figures for the two yearly entries make this point: The universe of production costs subject to refinement and possible change, *even taking into account only the near term*, are many orders of magnitude greater than the differential between the alternatives, and a “swing” in calculated production costs of no more than a tiny fraction of one per cent over only the first two years of modeled operation would have the effect of reranking the alternatives (exclusive of the proposed equity penalty).

To summarize: Confronted with several alternatives that, according to EGEAS, were serious rivals to its all-FPL plan, FPL was content in this billion dollar case to halt its analysis of all-important production costs at the “rough and dirty” stage. The evidence tantalizes with possible explanations for FPL’s course. Did FPL omit the more detailed analysis because it expected to perform multiple iterations until it won the RFP in any event, so the choice of a model would have no impact on the outcome? Did it stop with the use of EGEAS because, as Mr. Slater put it, EGEAS treats large units more “kindly” than would a detailed model? Was FPL motivated to place in rate base the six turbines for which it remained committed after its renegotiation with GE? Did FPL desire the return earning rate base approach over a non-return earning purchased power approach? Was FPL relying on the proposed equity penalty to carry the day? At the end of the day, for purposes of the Commission’s decision making the *reasons* for FPL’s failure to perform further analyses do not matter. FPL has the burden of proof in this case to prove the cost-effectiveness of its proposals, and its evaluations were inadequate to carry that burden. This conclusion is reinforced by the discussion of certain biases in FPL’s analyses, discussed individually below.

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

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.*

ARGUMENT

FPL's assumed heat rate of 6850 Btu/kWh (average operating conditions) is extremely ambitious for the GE 7FA technology that FPL proposes to employ. (TR-1195). FPL witness Yeager acknowledges this assumption is better than overall industry experience with the same technology. (TR-965). In support of the aggressive assumption, FPL touts its experience with combined cycle units. (TR-963). However, FPL has only one (new) 4 x 1 combined cycle unit, and the "peak firing mode" that FPL plans to incorporate is a brand new offering from GE. (TR-1003; 340).

FPL's availability assumptions translate to an equivalent forced outage rate of only 1% for the basic combined cycle unit. This assumption is very aggressive and optimistic. FPL claims that its overall availability assumption is in line with those of bidders. This assertion is incorrect, and derives from a bit of obfuscation. The value that FPL compared with bidders includes a self imposed 99% unavailability of the peak firing mode, a drag on overall availability that no bidder included in its proposal. (TR-395). To compare FPL's availability *with* peak firing to the proposal of a bidder *without* the peak firing mode is misleading.

FPL attaches to its already aggressive heat rate assumption a second, related assumption that would be physically impossible to implement in the real world but nonetheless operates to extend FPL's unwarranted advantage over alternatives in FPL's modeling exercises. Only FPL identified a "peak firing" proposal. FPL assigned to the 27 MW "peak firing mode" of Manatee 3 and Martin 8 an incremental heat rate of 5660 Btu/kWh. FPL then instructed EGEAS to dispatch this peak firing capacity ahead of any capacity having a higher heat rate -- *including* the 1000+ MW block of the unit that would have to be on line, generating at a higher heat rate, before it would be physically possible to call on the peak firing mode! (TR-395).

It is inherently unfair to customers for FPL to submit assumptions that are so aggressive as to be unrealistic and then not agree to live with them for ratemaking purposes. What if FPL

wins the RFP, based at least in part on its aggressive assumptions, then experiences performance in these areas that is in line with industry averages? FPL likely would resist any disallowance because its industry-matching performance, while below its optimistic, RFP-winning projections, arguably would not qualify as “imprudent.” Fairness requires either that the Commission impute more reasonable assumptions for FPL’s proposal or factor into its analysis FPL’s refusal to be held to its aggressive projections.

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

PACE: *No. FPL attributed only 3.7¢/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.*

ARGUMENT

FPL, like other utilities, utilizes the principle of “economic dispatch” to minimize production costs. Under this principle, FPL calls on its fleet of units to meet customers’ demand in the order of ascending variable costs, chiefly fuel and variable O&M. In the supplemental RFP, participants were called on to specify the fixed and variable O&M costs for which they would seek reimbursement in the form of contract payments. Most specified variable O&M (the costs of running a power plant that increase with operation time and output level) of \$2/MWH or more.

However, FPL used the O&M values not only to calculate the direct costs of the proposals, but as one input in the calculation of overall system production costs. The variable O&M quoted by each participant became part of the proposal’s “dispatch price” for purposes of modeling the proposed unit’s interaction with other units on the system. The lower the dispatch price, the more the unit will run, and the greater the favorable impact it will have on system production costs.

FPL attributed to Manatee 3 and Martin 8 -- including the maintenance-intensive “peak firing” mode of each unit -- only 3.7¢/MWH for variable O&M.

To implement the principle of recovering costs through charges that reflect the factors that cause them to be incurred, those costs that vary with the amount of power that the unit produces should be built into the variable charge, while those that are incurred regardless of the level of output should be placed in the fixed charge. In this manner, overcollection or undercollection -- of O&M expense is minimized. FPL does not pretend that the 3.7¢ MWH would cover the actual variable costs of maintaining and operating its units. Instead, FPL says only that bidders and FPL were free to divide the O&M dollars into the fixed and variable “buckets” in any manner they chose. (TR-377). In other words, FPL says it is all right for FPL to manipulate the process if others had the same opportunity and chose not to do so. The Commission should see the absurdly low assignment of variable O&M to Manatee 3 and Martin 8 for the self-serving fudge that it is, and regard it as one of several examples of discriminatory treatments within the evaluations.

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?

PACE: *No. FPL inappropriately applied to the bidders’ 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’ proposals 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 prejudices the power purchase scenario.*

ARGUMENT

When modeling alternatives, FPL assumed that an expiring power purchase contract would be replaced by a greenfield combined cycle plant. The choice is counterintuitive, and has the effect of biasing the analysis against outside alternatives. If a bidder’s proposal is selected, logically the “self-build” plant that FPL proposed should become the “filler” unit. In this case, that means the “filler” would be a brownfield unit having the characteristics assigned FPL to

self-build units. This is important because FPL states that the “greenfield” filler plant carries with it assumptions of higher construction costs and higher O&M expense than FPL’s self-build brownfield options. (TR-1187). As a result, FPL’s inappropriate assumption yields greater costs for outside proposals, which, because of their shorter contract duration period, would see more filler units, introduced at earlier points in time, than would an expansion plan based upon FPL construction.

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?

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.*

ARGUMENT

During the evaluation process, FPL assumed that filler units would be served by Florida Gas Transmission (“FGT”) rather than by Gulfstream. FPL assumes that transportation service by FGT would be more expensive than with the new Gulfstream pipeline. FPL contends that the assumption of FGT service is appropriate because the location of a greenfield filler unit is unknown, and Gulfstream has less reach within the state than does FGT. The flaw in this logic stems from the same mistaken assumption discussed in response to Issue 11(c). That is, if a bidders’ proposal is selected, it will necessarily displace FPL’s brownfield construction alternative, which should then become the filler unit. Because FPL assumed that its units would be served by Gulfstream, it follows that the brownfield filler unit that should be assigned as the bidders’ filler should also be served by Gulfstream. The substitution of the brownfield filler for the greenfield filler that FPL used would have the effect of lowering construction costs and fuel transportation costs of the power purchase alternatives evaluated by FPL, thereby increasing their cost-effectiveness relative to FPL’s self-build proposals.

(Issues 11(e) and 11(f) will be treated together.)

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?

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.*

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?

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.*

ARGUMENT

The EGEAS model employed by FPL is incapable of modeling cycling and startup costs. (TR-1184-1185). Rather than using a more detailed production costing model that would more accurately simulate the system, FPL instead used crude "off-line" estimates of the number of startups. PACE witness Kenneth Slater said, "Because of the relatively 'thin' margin in favor of its own self-build options, these simplistic modeling efforts could be significant." (TR-1185). By contrast, FPL's witness dismissed the matter as immaterial in the scheme of things.

Similarly, Mr. Slater pointed out that seasonal variations affect the output of combined cycle units in ways that FPL made no attempt to model. Again, FPL was dismissive of the impact of the resulting imprecision to its results. (TR-1185).

FPL's indifference to these and other sources of error and imprecision is symptomatic of its approach to the entire evaluation process. The huge outlay of dollars associated with this project; the significance to ratepayers, who would bear this cost; the fact that the proposals, including FPL's, were "awfully close" (TR-1218); and FPL's responsibility to evaluate outside alternatives fairly should have motivated FPL to seek the greatest degree of precision and accuracy possible. Instead, FPL performed the task with complacency and conscious

imprecision, relying on an unjustified equity penalty calculation to obscure the effects of its poor evaluation methodology.

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?

PACE: *No position.*

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?

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 penalty.*

ARGUMENT

During cross-examination, Dr. Sim alluded to one of the actual comparisons FPL made between its self-build proposal to an alternative that included a bidder’s alternative. Because the FPL plan was \$83 million (NPVRR) cheaper, he said, the measures identified by PACE that would have added greater precision and refinement to his rough calculations were unnecessary. (TR-380). However, cross-examination revealed that, of the \$83 million differential cited by Dr. Sim, \$81 million -- or 97.6% -- was comprised of the “equity penalty,” and only \$2 million represented the difference between direct and indirect costs of the self-build plan and the plan containing the bidder’s proposal. Clearly, the equity penalty is critical to FPL’s claim that its proposed units are more cost-effective than alternatives. However, the equity penalty is prejudicial and inappropriate. The Commission should reject it.

FPL will argue that its use of the equity penalty has already been sanctioned by Commission policy and practice. This is not the case. Staff witness Andrew Maurey pointed

out, in his excellent and comprehensive analysis of the subject, that in past proceedings the Commission was careful to state that the full ramifications of the subject had not been analyzed, and that the Commission had not formulated a policy on the subject. An analysis of the *merits* of the penalty proposed by FPL reveals that it is unwarranted and prejudicial.

Rating agencies (and presumably investors) are concerned with assessing the risks associated with investing in a company. A utility encounters risks whether it builds a unit or whether it instead contracts to purchase power. (TR-151, 152). If the utility builds a power plant, it will face construction risk, operation risk, the risk of technological obsolescence, and the risk of not recovering its costs if and when the regulatory framework changes. All of these risks will be considered by the rating agency.

Not surprisingly, a power purchase contract also presents a risk profile, *one aspect* of which is the risk that the purchasing utility will not be allowed to recover from retail customers the payments it becomes contractually obligated to pay to the seller. The rating agencies have chosen to characterize the obligations as debt-like. *One* of the rating agencies employs a formulaic approach to quantify “imputed debt” associated with a utility’s purchased power obligations. However, (and here is where FPL’s argument quickly breaks down) rating agencies *do not assess risk on the basis of imputed debt of a purchased power contract alone*. Instead, just as rating agencies assess the business of the utility in its entirety, they examine the purchased power component of the business in its entirety. For instance, the power purchase agreement shifts away from the utility, and onto the seller, many of the risks that the rating agency would otherwise assign to the utility’s ownership and operation of the power plant. The power purchase agreement reduces the utility’s construction risk (that is, risk of completion, risk of uncompensated cost overruns), and the utility’s operation risk (risk of outages, risk of damaged equipment). By providing short-term flexibility, a power purchase contract can reduce the risk that a utility-owned power plant will become obsolete during the 30-40 years it is owned by the utility. It reduces the risk that could be occasioned by a decision of lawmakers or regulators to alter the regulatory scheme. (TR-1114). Finally, as Staff witness Maurey pointed out, given the

regulatory environment in which the utility operates, cost recovery of purchased power payments may not even be considered risky at all. Rating agencies and investors, risk-conscious and risk-averse beings that they are, pay careful attention to *all* factors that affect risk. The conspicuous flaw in FPL's approach is that FPL wants to seize on one of the myriad of risk factors, to the exclusion of many others that would operate to reduce the overall risk perceived by rating agencies. The Commission should see the "equity penalty" for the one-sided and prejudicial ploy that it is.

There is nothing theoretical about the proposition that a power purchase contract can impart real and distinct benefits to the purchasing utility's risk profile. *The rating agencies say so.* Staff analyst Andrew Maurey included in his testimony quotations from rating agencies' reports that clearly recognize the benefits (from the perspective of risk analysis) of power purchase contracts -- all of which were ignored by FPL in its presentation. (TR-1113-1114; 1119-1120).

Mr. Maurey also identified a revealing—and *fatal*—double standard in FPL's approach. With respect to off-balance sheet transactions, the interest of rating agencies is not limited to power purchase transactions. They care equally, for instance, about investments by FPL's parent in unregulated activities that are also "debt like." However, as Mr. Maurey effectively pointed out, FPL did not advocate in this case an explicit adjustment to "correct" its capital structure in light of the perceived risk associated with its affiliates' unregulated activities. (TR-1102).

The testimony of Dr. Avera, FPL's chief advocate for its proposed equity adjustment, was not credible. While rating agencies view power purchase agreements in both positive and negative lights, Dr. Avera agreed in cross-examination that 100% of the references to power purchase agreements in his testimony were to negative aspects. (TR-642). He explained that his objective was to focus solely on the subject of debt imputation -- but *that is the very problem with his testimony.* Rating agencies do not view the subject of debt imputation in isolation of other relevant factors, as Dr. Avera and FPL hope the Commission will do when examining the cost-effectiveness of FPL's enormous self-build proposal.

In his testimony, Dr. Avera asserted that FPL is simply making the same adjustment that the “investment community” makes. (TR-641). Dr. Avera overstates his case. Only one rating agency -- Standard and Poor’s -- espouses a formulaic approach to the risk that a purchasing utility may not recover contract payments. (TR-644). Others use a more qualitative approach, and *none -- including Standard and Poor’s* -- calculate an “equity penalty” applicable to a specific power purchase contract. (TR-644).

Dr. Avera’s attempt to portray power purchase agreements as wholly negative is belied by his statement to Commissioner Palecki that diversity (among owned and purchased resources) has value for the utility. (TR-640) His statement that contracts having minimum availability standards are riskier than those that don’t (TR-661) does not withstand inspection. According to his logic, the higher the performance standard required of sellers, the greater the likelihood that the sellers will maximize performance, and the riskier the contract becomes! By extension of Dr. Avera’s logic, a contract imposing an availability requirement of 100% would be riskiest of all, because sellers would be more likely to meet that standard than any other and would be entitled to full payment.

During cross-examination, Dr. Avera resisted the point that a utility facing a large construction program would also be perceived by rating agencies as risky. (TR-649-650). The validity of the point is virtually self-evident. The Commission needs only to review the numerous occasions when *Florida* utilities facing large construction programs came to the Commission for relief, armed with relating to arguments on earnings consisting of AFUDC, diminishing coverage ratios, and demands to place CWIP in rate base, to understand that Dr. Avera’s testimony on this point was not credible.

Finally, Dr. Avera’s comments regarding a scenario involving no self-build option further erode the credibility of his testimony. If only two purchased power proposals are being considered, said Dr. Avera, in his opinion no equity penalty adjustment would be necessary. (TR-707). In other words, if there is no self-build proposal to be protected, Dr. Avera’s fear of a negative reaction by rating agencies associated with the addition of purchased power and his

concern over a possible downgrading in the absence of a costly change in capital structure suddenly vanish.

PACE witness Ken Slater observed that, to be evenhanded in its evaluation, FPL should either quantify *all* risk factors, or it should recognize that the utility's risk profile consists of considerations that flow in both directions. Mr. Slater testified that the utility should seek to manage the competing risk factors through a portfolio of resources that balances the risk considerations by incorporating some resources of each category. (TR-1195). PACE commends this reasonable and pragmatic approach to the Commission. Given that purchased power comprises only 16% of FPL's portfolio, and given that FPL contracts representing 763 MW of purchased power will expire in 2006, (TR-133), the "risk" associated with purchased power is a non-issue in this case.

As the Commission is very much aware, while the function of the Commission is to protect all of FPL's customers, the rating agencies serve a very different "constituency"-- the interests of investors. Rating agencies would be tickled with an ROE of 20% and interest coverage ratios in the double digits, but such measures would not be in customers' interests. The Commission has over time established a reputation for reasonable regulation. (TR-1115). It has established for FPL a fair return on equity, designed to reflect and compensate for ALL of the utility's business and financial risks. It has based its ratemaking on an allowed capital structure that includes a liberal equity component. (TR-1104-1105). Most importantly, it allows FPL to recover capacity and energy payments made to sellers of power on a current basis through cost recovery clauses that incorporate true-up mechanisms. (TR-1102-1103). If, notwithstanding all of those measures, rating agencies nevertheless insist on characterizing FPL's power purchases as "risky" from the standpoint of cost recovery, PACE submits there is nothing more the Commission can reasonably do to appease them without sacrificing customers' interests. Those interests include requiring FPL to avail itself of alternative power purchase opportunities where those opportunities are cost-effective.

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?

PACE: *No position.*

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

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

ARGUMENT

PACE incorporates by reference the argument presented in response to Issues 3 and 15.

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

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 alternative available.*

ARGUMENT

While FPL says it aspires to excel in other areas, the record demonstrates that the computer modeling and resource evaluation techniques it employed to assess cost-effectiveness in this multi-billion dollar case were unacceptably poor. There are available to FPL tools (such as POWERSYM) that would allow a much more thorough and robust examination of cost alternatives than EGEAS. FPL did not even utilize all the features of its version of EGEAS, such as multi-segment modeling. Moreover, the utility industry typically avails itself of traditional decision analysis techniques that employ at a minimum a sensitivity analysis of key variables such as fuel cost, O&M expense (and allocation between fixed and variable), and

financial parameters such as discount rate. FPL chose to do none of these things. Instead, FPL chose the route that would yield the desired answer it identified at the beginning of the RFP exercises: Bias all variables, modeling assumptions, and analytical techniques to ensure that the self-build option would appear to be the most cost-effective alternative. The Commission has no adequate basis on which it may conclude that proposed Manatee 3 and/or Martin 8 are the most cost-effective options for the following reasons:

- (a) A corporate philosophy that FPL should believes FPL should be allowed to “rebid” until it “wins”;
- (b) Failure to utilize EGEAS solely as a screening tool to narrow alternatives;
- (c) Failure to utilize a detailed production cost model such as POWERSYM to refine the analysis;
- (d) Assumptions and omissions in modeling that bias the result in favor of FPL’s self-build options;
- (e) Heat rate and outage rates too optimistic for a unit projected to have a 30-year life utilizing duct-firing and peaking operation;
- (f) FPL’s unwillingness to be held to these aggressive assumptions, which it used to attempt to demonstrate that its proposed units were the most cost-effective alternatives, in future ratemaking proceedings;
- (g) Unrealistic O&M assumptions that bias the dispatch in EGEAS in favor of FPL’s units; and
- (h) Inclusion of an equity penalty for all purchased power options without any credit given for the benefits of purchased power, namely shifting of construction and operating risk away from FPL.

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?

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

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 3?

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

CONCLUSION

These consolidated dockets involve a proposal by FPL to spend \$1 billion on plants that its customers will be called on to support for 30 years. FPL's RFP led to numerous proposals that, in the words of expert Ken Slater, were "awfully close" to the costs of FPL's proposals. Yet, FPL performed evaluations that were (a) crude and simplistic and (b) rife with self-serving assumptions and biases. FPL had the means with which to perform the type of detailed and vigorous analysis which the significance of the occasion demanded, but failed to do so. FPL failed to carry its burden of proof, and failed to demonstrate that its proposals are the most cost-effective available. Its petitions must be denied.



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I HEREBY CERTIFY that a true and correct copy of Brief of Florida Partnership for Affordable Competitive Energy was on this 14th day of October, served via (*) Hand delivery, (**) electronically and U.S. Mail to the following:

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