

State of Florida



## Public Service Commission

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

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**DATE:** April 23, 2009

**TO:** Office of Commission Clerk (Cole)

**FROM:** Office of Strategic Analysis and Governmental Affairs (Sickel, Lewis, Webb)  
Division of Economic Regulation (Kummer)  
Office of the General Counsel (Hartman)

**RE:** Docket No. 080193-EQ – Petition for approval of renewable energy tariff and standard offer contract, by Florida Power & Light Company.

**AGENDA:** 05/05/09 – Regular Agenda – Post-Hearing Decision – Participation is Limited to Commissioners and Staff

**COMMISSIONERS ASSIGNED:** McMurrian, Edgar, Argenziano

**PREHEARING OFFICER:** Argenziano

**CRITICAL DATES:** 90-Day Time Period Waived Through 5/5/09

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\SGA\WP\080193.RCM.DOC

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### Case Background

Since January 1, 2006, each investor-owned electric utility (IOU), as well as each electric municipal utility subject to the Florida Energy Efficiency and Conservation Act (FEECA), has been required to continuously offer to purchase capacity and energy from specific types of renewable sources. Section 366.91(3), Florida Statutes (F.S.), specifies that the contracts for purchase must be based on the utility's full avoided cost as defined in Section 366.051, F.S., and provide a term of at least ten years. Rules 25-17.200 through 25-17.310, Florida Administrative Code (F.A.C.), implement the statutes.

On April 1, 2008, Florida Power & Light Company (FPL utility, or Company) filed its petition requesting the Commission's approval of a standard offer contract and associated tariffs based on its Ten-Year Site Plan for 2008-2017. While the Ten-Year Site Plan indicates that the West County Combined Cycle generating unit is planned, the Company filed a need determination for that unit on April 8, 2008, thereby removing it from consideration as an avoidable unit. The remaining next avoided unit using fossil fuel is a combined cycle unit with an expected in-service date of June 1, 2014.

On May 21, 2008, FPL filed revised tariff sheets with updated economic and financial assumptions for the Commission's approval. The Company explained that cost projections were updated in working on the costs associated with other projects. These revisions reflect the updated projections and bring the Standard Offer Contract in line with other current filings.

The Commission approved FPL's proposed standard offer contract and associated revised tariffs and found that they were in compliance with Rules 25-17.200 through 25-17.310, F.A.C., by Order No. PSC-08-0544-TRF-EQ, issued August 19, 2008. On September 9, 2008, Wheelabrator Technologies, Inc. (Wheelabrator) timely filed a protest of Order No. PSC-08-0544-TRF-EQ, and petitioned for formal hearing. The formal hearing was held January 22, 2009. Post-hearing briefs were filed on February 26, 2009.

This recommendation addresses the issues and evidence presented at the January 22, 2009 hearing. The Commission has jurisdiction over this matter pursuant to Sections 366.04 through 366.06, and 366.91 and 366.92, F. S.

### **Discussion of Issues**

**Issue 1:** Does Florida Power & Light Company's standard offer contract encourage the development of renewable energy pursuant to Sections 366.91 and 366.92, F.S.?

**Recommendation:** Yes. FPL's standard offer contract encourages the development of renewable energy pursuant to the requirements of the statutes. The standard offer is continuously available exclusively to renewable generators, provides a minimum term of ten years, and allows them to select from an array of payment options. Further, the contract provides valuable pricing information that can be used for subsequent negotiations. (Sickel)

### **Position of the Parties**

**FPL:** Yes. During 2007 the Commission, after an extensive series of workshops and hearings conducted during 2005 and 2006, adopted standard offer contract rules to implement the requirements of Section 366.91, F.S. These rules strongly encourage the development of renewable resources in Florida, and provide a range of unilateral options to the renewable generator. FPL's standard offer contract complies with all of these rules, and hence complies with Sections 366.91 and 366.92, F.S. and encourages the development of renewable generation in the State.

**Wheelabrator:** No, FPL's contract discourages the development of renewable resources. In 2005, the Florida Legislature enacted legislation stating that "it is in the public interest to promote the development of renewable resources in this state" noting the many benefits of renewable resources. The legislature went on to require that each public utility *must* continuously offer a contract to purchase renewable energy. This legislation makes it clear that renewable energy is a valuable resource which should be encouraged.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

The Company contends that FPL's standard offer contract encourages the development of renewable energy pursuant to Sections 366.91 and 366.92, F.S. (TR 33; TR 44; FPL BR at 5) Company witness Dubin provides a detailed account of three distinct ways the contract encourages renewable generation. First, witness Dubin provides a list of specific requirements applicable to standard offer contracts, including:

- \* a continuously available standard offer contract;
- \* contracts will be based on the fossil-fueled units included in the utility's planning;
- \* capacity payments provided under the standard offer contracts will be calculated using a value of deferral methodology based on the utility's full avoided cost and need for power;
- \* expanded payment options to facilitate financing of renewable generation facilities;

- \* reopening of the contract in the event of future carbon taxes;
- \* tradable renewable energy credits remain the exclusive property of the renewable energy provider;
- \* avenues for dispute resolution must be provided; and
- \* annual reporting by each utility

(TR 28 -29, 33-34; FPL BR at 5-6)

Witness Dubin explains that the standard offer contract complies with each of the requirements enumerated, and therefore the offer properly encourages renewable generation in compliance with Section 366.91, F.S. (TR 29) In its brief, FPL recalls the “extensive series of workshops and hearings during 2005 and 2006” undertaken in the process of adopting the rules which implement the statute. (FPL BR at 5) Witness Dubin testifies that these rules encourage renewable generators by providing a range of unilateral options to them. (TR 34)

Second, witness Dubin asserts that FPL has made voluntary revisions to the standard offer contract that are favorable to the renewable energy facilities (REFs). She mentions revisions which provide for no less than 10 business days' notice if the utility requires validation of committed capacity, and updated capacity and energy payments that make for an increased revenue stream to the renewable generator. (FPL BR at 7)

Third, witness Dubin explains that the standard offer contract has repeatedly been used as the starting point for negotiating contracts with several parties. (TR 44, 58; FPL BR at 8-9) She explains that the standard offer contract is not to be based on the characteristics of any particular renewable technology, which means that the standard offer will not be consistent with the needs of particular renewable generating units. Economic and operating accommodations for specific renewable technologies are best accomplished through negotiation. (TR 161)

Wheelabrator witness Dalton alleges that FPL's standard offer contract has been a failure. (TR 122; Wheelabrator BR at 5) The basis for his conclusion is that no standard offer contract has been signed by a renewable producer. (TR 43, 58) The witness believes the standard offer is a barrier to development of renewable energy rather than encouraging it, the standard offer frustrates the realization of benefits offered by renewable energy, the allocation of risk to the renewable provider is inappropriate, and renewable energy providers offer a lower risk to FPL customers than is provided by FPL's own facilities. (TR 87; Wheelabrator BR at 6) He recommends changes to the FPL standard offer contract, which are to be addressed in greater detail in Issues 3, 6, 7, and 10 of this recommendation.

Witness Dalton claims that FPL customers bear more risk as a result of the problems he has identified with the standard offer contract. He concludes that appropriate analysis is a comparison between the risks associated with a renewable provider versus risks associated with FPL self-build generation. He observes that a renewable developer must absorb cost increases that happen during construction, and cannot pass the additional cost through to ratepayers. Also, the payments to the renewable generator will vary with the fuel cost prior to commercial

operation of the avoided unit. Witness Dalton contrasts that situation with fuel cost passed directly to consumers by FPL. He points out that changes in operating costs, such as heat rate degradation, will not reduce revenues collected from the ratepayer. (TR 111-119; Wheelabrator BR at 8-10)

### ANALYSIS

Section 366.91(3), F.S., requires that each public utility continuously offer a purchase contract to producers of renewable energy. The statute requires payment provisions for energy and capacity which are based upon the utility's full avoided costs, as defined in Section 366.051, F.S. The reference provides a definition of "full avoided costs" in non-technical language: the cost for the electric energy or capacity, or both, that is provided by the contracting party is the incremental cost to the utility from its own generation, or from a purchase from another source.

Section 366.91(3), F.S., further provides that the Commission may adopt rules to administer this section, which led to the adoption of Rules 25-17.250, 25-17.260, 25-17.270, 25-17.280, 25-17.290, 25-17.300, and 25-17.310, F.A.C. The rules provide that standard offer contracts available to renewable generators will have a term of at least 10 years. The rules also require the utility to offer a variety of payment streams, including front-end loaded capacity payments and fixed energy payments. The renewable energy provider chooses the payment stream according to the needs of the renewable facility. Any payment stream offered must not exceed the avoided cost for capacity and energy that is provided by the renewable facility, consistent with Section 366.91, F.S.

Wheelabrator contends that failure to execute a standard offer contract implies that the standard offer contract fails to encourage the development of renewable generation. Staff disagrees. As is discussed in other issues in this recommendation, there is disparity between the performance of the utility's next planned generating unit and the generating units utilized by renewable providers. (See Issue 3) The standard offer contract utilizes the next planned generating unit as a performance benchmark to assure "equal pay for equal performance," and so guards the interests of the ratepayer.

Wheelabrator witness Dalton testifies that the Florida Legislature enacted Section 366.91, F.S., directing Florida's public utilities to promote the development of renewable energy by continuously offering a purchase contract to producers of renewable energy. (TR 121) In contrast, Wheelabrator does not directly address any of the rules which have been enacted to implement the statute. The concerns set out by witness Dalton make no claim of a violation of provisions of Rules 25-17.250, 25-17.260, 25-17.270, 25-17.290, 25-17.300, or 25-17.310, F.A.C. Wheelabrator's objections appear to be intended to lead to a conclusion that the methodology underlying the rules, and the rules themselves, are flawed. However, a re-evaluation of the rules falls outside the scope of this docket.

Commission rules require investor-owned utilities to develop a standard offer contract that is representative of the individual utility's avoided cost. Rule 25-17.200, F.A.C., states:

The purpose of these rules is to promote the development of renewable energy;

protect the economic viability of Florida's existing renewable energy facilities; diversify the types of fuel used to generate electricity in Florida; lessen Florida's dependence on natural gas and fuel oil for the production of electricity; minimize the volatility of fuel costs; encourage investment within the state; improve environmental conditions; and, at the same time, minimize the costs of power supply to electric utilities and their customers. Unless otherwise stated, these rules apply to all investor-owned utilities.

An investor-owned utility has the obligation to encourage development of renewable generation in a vigorously proactive manner. Although beyond the scope of this docket, concerns relating to management practice in this regard are appropriate for review, during a rate case proceeding.

### **CONCLUSION**

The standard offer contract provided by FPL is in compliance with requirements of Commission Rules which implement Sections 366.91 and 366.92, F.S. The standard offer contract is continuously available exclusively to renewable generators, and allows the renewable provider to select from an array of payment options. The information provided in the standard offer contract can readily be used in the negotiation of a contract customized to meet the needs of a specific renewable generator. The standard offer contract encourages the development of renewable energy as required by Sections 366.91 and 366.92, F.S.

**Issue 2:** Does FPL's standard offer contract protect the economic viability of existing renewable facilities pursuant to Section 366.92, F.S.?

**Recommendation:** Yes. FPL's standard offer contract supports the economic viability of renewable generators. The standard offer contract is continuously and exclusively available to renewable generators, allowing them to select from an array of payment options. Further, the contract provides valuable pricing information that may be used for subsequent negotiations. (Sickel)

**Position of the Parties**

**FPL:** Yes. During 2007 the Commission, after an extensive series of workshops and hearings conducted during 2005 and 2006, adopted standard offer contract rules to implement the requirements of Section 366.91, F.S. These rules strongly encourage the development of renewable resources in Florida, and provide a range of unilateral options to the renewable generator. FPL's standard offer contract complies with all of these rules, and hence complies with Section 366.92, F.S., and protects the economic viability of Florida's existing renewable energy facilities.

**Wheelabrator:** No. Not only does the Legislature require FPL to encourage the development of new renewable facilities, it also requires that the economic viability of existing facilities be protected. Wheelabrator has several renewable facilities already built in Florida, but the standard offer contract that FPL offers presents a barrier to such facilities rather than a viable commercial arrangement. No existing renewable facility has signed a standard offer contract with FPL.

**Staff Analysis:**

**PARTIES' ARGUMENTS**

FPL uses identical words in stating its position for both Issue 1 and Issue 2. FPL asserts that the standard offer contract offered by the utility encourages both new and existing renewable development by being continuously offered and providing a menu of payment streams available to the renewable developer. (FPL BR at 9-11; EXH 12 pp. 11-13) Company witness Dubin alleges that points made in response to Issue 1 protect the economic viability of existing renewable facilities and are equally applicable to this issue. (TR 27-29; FPL BR at 10) The renewable generators benefit from the utility's implementation of the provisions in the rules, according to witness Dubin. (TR 34)

In support of the claim that FPL contributes to and supports the economic viability of renewable generators, witness Dubin states that FPL's customers have paid close to a billion dollars to Wheelabrator under the provisions of contracts for purchased power over 20 some odd years. (TR 36) She mentions that renegotiations for continuation are underway before the expiration of the current contracts. (TR 169; FPL BR at 10-11)

Wheelabrator witness Dalton alleges that the standard offer contract has been a failure. (TR 122) The basis for his conclusion is that no standard offer contract has been signed by a renewable producer. (TR 43, 58; Wheelabrator BR at 5) The witness also concludes: the standard offer is a barrier to development of renewable energy rather than encouraging it, the

standard offer frustrates the realization of benefits offered by renewable energy; allocation of risk to the renewable provider is inappropriate; and renewable energy providers offer a lower risk to FPL customers than is provided by FPL's own facilities. (TR 87; Wheelabrator BR at 6) He recommends changes to the FPL standard offer contract, which are to be discussed in greater detail in Issues 3, 6, 7, and 10.

In his comments and analysis, witness Dalton does not refer to the provisions of Rules 25-17.250 through 25-17.310, F.A.C. Only in Issue 10 does Wheelabrator address compliance of the standard offer contract with Rule 25-17.280, F.A.C. The claim made by Wheelabrator is that the standard offer contract is not responsive to Section 366.92, F.S., since no renewable provider has executed a standard offer contract. Wheelabrator witness Dalton testifies: "This lack of market response to FPL's standard offer contract is a clear indication that changes are needed to FPL's standard offer contract if it is to promote the Legislature's objective of promoting the development of renewable energy resources in this state." (TR 123)

Witness Dalton explains his position that FPL customers bear more risk as a result of the problems he has identified with the standard offer contract. He believes that appropriate analysis is a comparison between the risks associated with a renewable provider versus risks associated with FPL self-build generation. (TR 113-117) He observes that a renewable developer must absorb cost increases that happen during construction, and cannot pass the additional cost through to ratepayers. Also, the payments to the renewable generator will vary with the fuel cost prior to commercial operation of the avoided unit. Witness Dalton contrasts that situation with fuel cost passed directly to consumers by FPL. He points out that changes in operating costs, such as heat rate degradation, will not reduce revenues collected from the ratepayer. (TR 111-119; Wheelabrator BR at 8-10)

### ANALYSIS

Section 366.91(3), F.S., requires contract provisions based upon the utility's full avoided costs, as defined in Section 366.051, F.S., which provides:

A utility's "full avoided costs" are the incremental costs to the utility of the electric energy or capacity, or both, which, but for the purchase from cogenerators or small power producers, such utility would generate itself or purchase from another source.

The statute does not authorize a subsidy in price or operating characteristics. Witness Dalton's arguments appear to be an attempt to re-examine the issues investigated in the process of rulemaking. His arguments lack the specificity to form a basis for implication that FPL's tariffs are not in compliance with statutes or Commission rules. In staff's opinion, the objections are intended to lead to a conclusion that the methodology underlying the rules, and the rules themselves, are flawed. Evaluation of alternative regulatory rationales, and re-evaluation of the Commission's rules, falls outside the scope of this docket. Likewise, analysis of the risk comparisons made by witness Dalton is beyond the scope of this docket, since the comparisons are not within or directly related to Rules 25-17.200 through 25-17.310, F.A.C.



Wheelabrator witness Dalton lists four advantages provided by a standard offer contract, in comparison with a negotiated contract: greater certainty as to pricing and terms, reduced administrative costs and time for negotiation, greater certainty that compliance with prerequisites will lead to a contract, and opportunities for a broader range of renewable suppliers to participate. (TR 93; Wheelabrator BR at 7)

In staff's opinion, the advantages of the standard offer contract, as listed by Wheelabrator witness Dalton, are valid. (TR 93) In particular, the standard offer contract offers the advantage of administrative efficiency. However, the standard offer contract must be equally available to all renewable generators, regardless of the operating parameters associated with a particular type of technology. Hence, the standard offer contract cannot be designed to accommodate the particular operating parameters of one renewable technology at the cost of negatively impacting a different renewable technology. For many renewable generators, the convenience of the standard offer contract may not outweigh the need for accommodation, leading to an opportunity to enter into a negotiated contract.

The Commission encourages negotiated contracts as a means to more closely match the contract provisions with the needs of renewable generators. Rule 25-17.0832(2), F.A.C., provides in part: "Utilities and qualifying facilities are encouraged to negotiate contracts for the purchase of firm capacity and energy to avoid or defer the construction of all planned utility generating units." The investor-owned utilities are obligated to be proactive in negotiating and managing contracts with renewable generators for purchased power. Efforts by a Florida utility in this regard are appropriate as part of the review of management practices during a rate case proceeding.

### **CONCLUSION**

As discussed in Issue 1, the standard offer contract provided by FPL supports the viability of renewable generators, pursuant to Section 366.92, F.S., by continuously providing a standard offer contract for purchase of capacity and energy from any renewable generator, in compliance with requirements of the Commission's rules.

**Issue 3:** Is the requirement in FPL's standard offer contract that renewable generators must achieve availability of 97 percent to receive full capacity payments reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832 F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** No. The availability requirement in the standard offer contract should reflect the projected availability of the avoided unit over the term of the contract. The Commission should deny the tariff as submitted. FPL should revise and re-submit the tariff to reflect the availability based on projected performance of the avoided unit over the contract term. In the event of curtailment pursuant to Section 8.4.6 of the standard offer contract, adjustments should be made so that the curtailment period does not impact the renewable generator's calculated availability. (Sickel)

### **Position of the Parties**

**FPL:** Yes. The source of this requirement is that FPL's NPGU, the 2014 combined cycle (CC) unit in question, has a projected annual EAF of 97 percent. By setting the performance requirements to a 97 percent EAF in order for the Qualified Seller (QS) to receive full capacity payments, FPL is ensuring that its customers receive the same level of reliability that they would receive from the CC avoided unit. This complies with applicable rules and regulations and is reasonable.

**Wheelabrator:** No. The standard that must guide the Commission in this docket are the statutory provisions set out in Issues 1 and 2 above. Standard offer contracts must encourage the development of renewable generation and protect the viability of existing renewable facilities. The requirement that a renewable facility achieve a capacity factor of 97 percent fails to meet that standard. The capacity factor to receive full capacity payments should be set at 89 percent.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

FPL witness Dubin testified that the equivalent availability factor (EAF) of the next planned generating unit is 97 percent. The 2008 standard offer was based on manufacturer's design specifications for a Class G combined cycle (CC) unit to be in service in 2014. (TR 30, 160-161, 172-173) FPL asserts that the use of a 97 percent equivalent availability factor for the avoided unit complies with rules and statutes, and is consistent with practice approved in many different Commission orders. (TR 30, 160-161; FPL BR at 12) Witness Dubin testifies that the requirement is within reason, based on performance history associated with several units in the FPL fleet. (TR 172-173; FPL BR at 12)

Witness Dubin contends that the requirements associated with the standard offer contract are intended to ensure that customers do not pay more for capacity and energy under a standard offer contract than would be paid if capacity and energy were to be provided by FPL's next planned generating unit. (TR 160; FPL BR at 12) Witness Dubin points out that actions contrary to the provisions in the rules would mean that FPL customers could pay more for service that is less reliable. (TR 163-164) Further, witness Dubin indicates that the practice whereby the next planned generating unit is the benchmark for the standard offer contract was in effect in 1982.

(TR 171-172; FPL BR at 12-13) Witness Dubin further explains that the equivalent availability factor does not include planned maintenance outages, since they are scheduled for times when system conditions permit. (TR 173)

Witness Dubin explains that the availability factor involved with the generating performance incentive factor (GPIF) requires three years of operating history, thereby excluding any generators installed in the most recent period. Therefore, the GPIF availability is likely to differ significantly from the availability of the next planned generating unit. (TR 172) Witness Dubin also discusses the performance of greenfield generators recently added to FPL's fleet. She says that average availability of recent units exceeds 94 percent, based on "performance to date." (TR 173)

Wheelabrator witness Dalton explains that for renewable generators, capital cost recovery is based on energy actually produced, so the renewable has great incentive to run as many hours as possible, to yield the highest energy output possible. (TR 100) Witness Dalton contends that, due to the nature of their operations, many renewable facilities will have difficulty achieving a capacity factor greater than 80 percent. (TR 100)

Witness Dalton presented two contracts between Wheelabrator and FPL, currently in force. (EXH 15) The witness asserts that FPL and its customers have been well served by these contracts. (TR 48) The capacity factor in those contracts is 70 percent. (TR 48-49) In his testimony, witness Dalton contrasted the 70 percent required in the earlier contracts with the 97 percent required in the 2008 standard offer contract. (TR 51; EXH 16) Witness Dalton stated that renewable generation having capacity factor of less than 50 percent can have significant capacity value. (TR 106; Wheelabrator BR at 12)

Witness Dalton testified that FPL's units do not perform at a 97 percent availability factor. For example, the information provided in the reports associated with the GPIF show that the availability for FPL's combined cycle gas turbine units range from a forecasted 89.5 percent to actual 90.9 percent. From this information, witness Dalton concludes that FPL seeks to hold renewable facilities to standards that its own fleet does not meet. (TR 107; Wheelabrator BR at 13) Also, Wheelabrator objects to the projected 97 percent availability for the avoided unit since the availability of the unit is not proven in an existing installation. Wheelabrator characterizes the projected availability as what FPL "hopes" will be achieved. (TR 190; Wheelabrator BR at 14)

Further, Wheelabrator witness Dalton observes that if the utility exercises the curtailment provision of Section 8.4.6 of the contract, the impact is to actually make the requirement for the availability factor higher than 97 percent. (TR 58, 123)

Wheelabrator offers a comparison of FPL's required capacity factor of 97 percent, with requirements by other utilities. Witness Dalton states that Progress Energy Florida, Inc. (PEF) allows full capacity payments at an on-peak capacity factor of 89 percent and provides capacity payments at a minimum threshold capacity factor of 69 percent. (Wheelabrator BR at 13) Witness Dalton observes that PEF is subject to the same standard offer contract rules as FPL, and alleges that "PEF's avoided unit employs a similar CCGT technology as FPL." (TR 103-104) Witness Dalton suggests that the lower requirements are much more attractive and have resulted

in several renewable contracts being signed. (TR 104) Wheelabrator requests that full capacity payments should be paid by FPL if the renewable generator attains a capacity factor of 89 percent.

### ANALYSIS

Rule 25-17.0832(4)(b), F.A.C., explicitly requires that rates, terms, and conditions of the standard offer contracts shall be based on deferring or avoiding the construction of additional generating capacity or parts thereof. The application of the concept of paying for performance of renewable generators, based on comparison with the avoided unit, is well documented in the record, according to witness Dubin. (TR 160-174)

FPL's standard offer contract proposes a requirement of a 97 percent equivalent availability factor in order for a renewable generator to receive full capacity payment. The proposed requirement is based on the availability specification that is included in the design of the Mitsubishi Class "G" combined cycle unit planned for installation in 2014. Staff accepts the proposed 97 percent availability as a reasonable expectation when the generator is installed, but the record does not support a sustained 97 percent availability over the full term of a standard offer contract. Witness Dubin mentions availability of recently installed generators based on "performance to date." (TR 173) Also, comments by Witness Dubin, in response to mention by witness Dalton of the Generating Performance Incentive Factor, imply that performance is expected to vary over time. (TR 172)

Staff agrees with witness Dubin that the information provided in review of the GPIF is not applicable to the performance of the avoided unit, which is FPL's next planned generating unit. Staff does not agree with the assertion made by witness Dalton that the information provided for review in the GPIF proceeding is tantamount to a showing that FPL seeks to hold renewable facilities to standards that its own fleet does not meet.

The Progress Energy Florida contracts mentioned by Wheelabrator witness Dalton as having 89 percent capacity factor are not described by the witness as being a standard offer contract. Staff agrees that these contracts were not a standard offer, but were negotiated contracts. Further, those contracts do not relate to FPL, but to a different Florida utility.

The Commission's rules do not authorize any compensation for capacity to a renewable generator based on the utility's generating units that are already installed and operating. Further, payments to the renewable generator are not to be based on generators or technologies that are installed or utilized by parties other than the specific utility providing the tariffed standard offer. Staff does not find credible analytical support in the testimony of witness Dalton for the proposed capacity factor of 89 percent. However, neither is staff persuaded by FPL's testimony that the utility has carried its burden of proof to validate an availability factor of 97 percent over the contract term. While the availability of 97 percent appears reasonable initially, it is not supported as a reasonable estimate of the availability of the avoided unit over the minimum ten-year term of a standard offer contract.

### **CONCLUSION**

The tariff submitted by FPL in this docket is based upon the initial availability of the avoided unit. Over a period several years, the availability of a generating unit may vary. (Wheelabrator BR at 14-15). The Commission should deny the tariff as submitted.

Staff believes that an evaluation of projected availability of the avoided unit over the term of the standard offer contract should be provided by FPL. The tariff should be revised to include the revised projected availability, and both the revised tariff and supporting analysis should be filed for consideration by the Commission. Sections 366.91 and 366.92, F.S., Rule 25-17.0832 F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C., require that the full capacity payment will be based on availability of the avoided unit over the term of the standard offer contract.

As will be discussed in Issue 6, FPL may curtail purchase of energy from the renewable provider if necessary for safety or reliability reasons, or if more cost-effective energy is available. Any period of time when purchase of renewable energy is curtailed as allowed in Section 8.4.6 of the standard offer contract, and the renewable facility is otherwise available to supply energy to the utility, should be included as time that the unit is available to supply energy. Provision for adjustment to records of energy purchases should be included in the standard offer contract, so that the impact of the curtailment does not negatively impact the renewable generator's calculated equivalent availability factor.

**Issue 4:** Is the requirement that the equivalent availability factor (EAF) be based on the expected EAF of FPL's next planned generating unit reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** Yes, the requirement in the standard offer contract that the equivalent availability factor will be based on the expected EAF of FPL's next planned generating unit is reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C. As discussed in Issue 3, FPL's standard offer contract should be revised to reflect the projected availability of the avoided unit over the term of the contract. The appropriate projected availability will comply with requirements of Rules 25-17.200 through 25-17.310 and 25-17.0832, F.A.C., which have been approved to implement Sections 366.051 and 366.91, F.S. (Sickel)

### **Position of the Parties**

**FPL:** Yes. The EAF in FPL's SOC is a performance standard which is expressly based on the performance characteristics of FPL's avoided unit. This is entirely consistent with Rule 25-17.0832(4)(e)8, F.A.C., which expressly requires that the “performance standards [in the Standard Offer Contract] shall approximate the anticipated peak and off-peak availability and capacity factor of the utility's avoided unit over that term of the contract.”

**Wheelabrator:** The overarching principles that must guide the commission in this docket are the statutory provisions set out in Issues 1 and 2 above -- that is that standard offer contracts must encourage the development of renewable generation and protect the viability of existing renewable facilities. A renewable facility is unlikely to meet the standards FPL seeks to impose on it and FPL's own units do not meet such a standard.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

FPL witness Dubin states that the equivalent availability factor (EAF) of 97 percent is a performance standard expressly based on the expected performance of FPL's next planned generating unit, the 2014 CC. (TR 30) Witness Dubin explains that the new generator would be able to provide energy 97 percent of the hours in a year. (TR 30) The provisions of FPL's standard offer contract are designed to ensure the same level of reliability, without regard to the generation being provided by either the next planned generating unit or the renewable provider. (TR 30)

Witness Dubin says that the EAF of 97 percent for the next planned generating unit is reasonable, based upon the use of the Mitsubishi “G” advanced combustion turbines. (TR 172-173) She states that FPL's most recent units at Turkey Point Unit 5, Martin Unit 8, and Manatee Unit have “average to date EAF” of 98.6 percent, 91.3 percent, and 97.6 percent, respectively. (TR 173) She points out that it is not appropriate to compare the availability of the avoided unit with equivalent availability values in the GPIF filings, because timing requirements exclude the most recent generating units from the GPIF filing. (TR 172)

Wheelabrator claims that the availability requirement used in the standard offer contract is too high. In support of that view, Wheelabrator witness Dalton states that “The evidence demonstrated that FPL's CCGTs [sic] rarely achieve the EAF expected of renewable facilities.” (TR 125) Wheelabrator explains that information provided in the reports associated with the generating performance incentive factor show that availability for FPL's CCGTs ranges from forecast 89.5 percent to actual 90.9 percent. (TR 105, 128) From this information, Wheelabrator concludes that FPL seeks to hold renewable facilities to standards its own fleet does not meet. Wheelabrator states that the EAF should be “adjusted to a more reasonable level of 89 percent.” (Wheelabrator BR at 13)

Wheelabrator points to two items of evidence to illustrate the claim that the availability required of the renewable generator should not be based on the expected availability of the next planned generating unit. First, FPL's 2002 Ten-Year Site Plan projected an EAF of 96 percent for Sanford Unit 5. (EXH 20) In contrast, the availability of the unit in actual performance was only 91.5 percent. (TR 195) Second, Wheelabrator identifies performance risks not reflected in the availability requirement of the standard offer contract. As an example, Wheelabrator cites the compressor blade failures that caused significant damage to two fossil generating plants, as reported in FPL's 2007 Form 10K filing. (TR 105) Wheelabrator characterizes the projected performance of the next planned generating unit as “what FPL *hopes* [sic] will be achieved.” (TR 190; Wheelabrator BR at 14)

Wheelabrator alleges that generators do not typically require a long maintenance outage until approximately 40,000 hours of operation. (TR 129; Wheelabrator BR at 15) In addition, Wheelabrator points out that FPL's maintenance outages for the utility are scheduled at times when the particular generator would not be needed, and the utility is not affected. In contrast, the renewable generator is paid only when it runs. (TR 129-130) These alleged differences in treatment of the schedule for operations and maintenance result in undue penalty for the renewable generator. (Wheelabrator BR at 16)

### ANALYSIS

Rule 25-17.0832(4)(e)8, F.A.C., requires that the availability factor in a standard offer contract will be based on the utility's next planned generating unit. The proposal by Wheelabrator that the availability factor in the standard offer contract will be based on some other generator does not meet the requirements of this rule.

As discussed in Issue 3, FPL's standard offer contract should be revised to reflect the projected availability of the avoided unit over the term of the contract. The appropriate projected availability will comply with requirements of Rules 25-17.200 through 25-17.310 and 25-17.0832, F.A.C., which have been approved to implement Sections 366.051 and 366.91, F.S.

**Issue 5:** Is the requirement in FPL's standard offer contract that renewable generators have an annual capacity billing factor (ACBF) of at least 80 percent to receive capacity payments reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** Yes. The requirement of an annual capacity billing factor of at least 80 percent for a renewable energy facility to receive capacity payments reflects the projected performance of FPL's next planned generating unit. The requirement conforms to provisions of Rule 25-17.0832 and Rules 25-17.200 through 25-17.310, F.A.C., and is consistent with Sections 366.91 and 366.92, F.S., as well. (Sickel)

### **Position of the Parties**

**FPL:** Yes. Under Appendix B of FPL's standard offer contract, FPL requires that the REF meet a minimum ACBF of 80 percent to receive any type of capacity payment. In Order 12634 (pp. 15 and 16) in Docket No. 820406-EU the Commission stated that "risk associated with the purchase of QF capacity should be explicitly recognized in the rate of payment so as to reduce the risk to the ratepayers." This provision is reasonable and consistent with applicable rules and statutes.

**Wheelabrator:** No. This requirement ignores the fact that renewable facilities provide capacity value at much lower capacity factors than FPL requires. Section 366.91 provides that capacity payments are not required if the renewable generator is "unlikely to provide any capacity value." Capacity values below those FPL recognizes provide benefits and the renewable generator should be compensated on that basis. A renewable generator should be required to meet a minimum capacity factor of 69 percent to receive capacity payments.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

In direct testimony, FPL witness Dubin states that FPL's standard offer contract is based on the next generation unit planned by the utility and is fully compliant with rules enacted by the Commission to implement Section 366.91, F.S. She explains that the capacity payments that are offered in the standard offer contract are calculated using a value of deferral methodology based on the utility's full avoided costs and need for power, as required by those rules. (TR 28)

FPL witness Dubin testified that the requirement that a renewable energy facility must have an annual capacity billing factor of 80 percent in order to receive a capacity payment provides assurance that the performance of the renewable generator will provide service that is no less reliable than the next planned generating unit. (TR 52, 54) In addition, she comments that this 80 percent threshold requirement allows the renewable generator to "be off" for 73 days a year and still receive a capacity payment. (TR 53) Witness Dubin mentions that FPL employs a "pay for performance sliding scale methodology" that goes back to 1991. She refers to Order No. 24989 in Docket No. 910004-EU, and observes that the arrangement broadens the range of performance for which a renewable provider can receive payment, while encouraging the provider to generate during periods of peak demand.



Wheelabrator quotes Section 366.91(3), F.S., which says that a capacity payment is not required if the renewable provider is unlikely to provide *any* capacity to the utility during the contract term. (TR 106) Wheelabrator witness Dalton believes that biomass projects, such as the ones Wheelabrator offers, clearly have capacity value even though FPL would not recognize capacity value if the annual capacity billing factor is less than 80 percent. (TR 103) Further, the witness proposes that a renewable facility that operates during all on-peak hours has significant capacity value, even though the capacity factor is less than 50 percent. (TR 106)

Finally, Wheelabrator explains that any current reliance on Order No. 24989 issued on August 29, 1991, in Docket No. 910004-EU is misplaced because it predates Sections 366.91 and 366.92, F.S., and does not contemplate renewable energy or any benefits that renewable energy might bring to the state. (Wheelabrator BR at 12)

### **ANALYSIS**

The standard offer contract submitted by FPL is consistent with Section 366.91, F.S., as well as Rules 25-17.0832 and 25-17.200 through 25-17.310, F.A.C., with regard to calculation of the capacity payment based on full avoided costs for the utility's next planned generating unit. The rules require the utility to base the capacity payments on the anticipated peak and off-peak availability and capacity factor of the utility's avoided unit.

Rule 25-17.200, F.A.C., states the purpose of the rules that follow: development of renewable energy, protection of the viability of renewable generators, and diversification of the fuel supply are listed among others. Rule 25-17.250, F.A.C., is titled "Standard Offer Contracts" and defines the minimal provisions that must be included in a standard offer. The capacity payment is to be based on the avoided unit, and calculated as specified in Rule 25-17.0832, F.A.C.

Wheelabrator witness Dalton intended his proposed revisions to "recognize the value of capacity from a renewable generator," but they are not consistent or compatible with the requirements of Rule 25-17.250, F.A.C., and other applicable rules. The standard offer contract minimum performance requirement of an 80 percent annual capacity billing factor is based on FPL's next planned generating unit, as required by Rules 25-17.250 and 25-17.0832, F.A.C.

### **CONCLUSION**

The requirement in FPL's standard offer contract that renewable generators have an annual capacity billing factor of at least 80 percent to receive capacity payments is reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C. The requirement for minimum annual capacity billing factor of 80 percent reflects projected performance of FPL's next planned generating unit. FPL's contract provisions regarding an 80 percent billing factor are in compliance with the rules and should be approved.

**Issue 6:** Are Sections 8.4.6 and 8.4.8 of FPL's standard offer contract, that permit FPL to reduce output or not accept energy from renewable generators reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17-0832, F.A.C., Rules 25-17.200 through 25-17.301, F.A.C.

**Recommendation:** Yes. Reductions allowed by Sections 8.4.6 and 8.4.8 of FPL's standard offer contract are the same reductions that would be made to the dispatch of FPL's next planned generating unit. Reductions made by FPL to the energy purchased from a renewable provider under the provisions of Sections 8.4.6 or 8.4.8 of the standard offer contract should not impact the equivalent availability factor or computation of annual capacity billing factor. The reductions should be mathematically removed from calculations of the equivalent availability factor and the annual capacity billing factor attributed to the renewable provider. (Sickel)

### **Position of the Parties**

**FPL:** Yes. These two contract provisions are almost verbatim provided for under applicable Commission rules and past regulatory decisions. In addition, it is important to remember the concept that FPL's standard offer contract is modeled upon what customers would receive from FPL's NPGU. FPL itself would reduce output or curtail production from its NPGU if necessary for safety or reliability reasons, or due to availability of generation from a more cost-effective generating unit (or purchased power).

**Wheelabrator:** No. As to Section 8.4.6, this provision is too broad and should be carefully crafted so as not to provide FPL with the open-ended ability to refuse to purchase from renewable facilities. Further, to the extent that such provisions remain in the contract, renewable facilities should be compensated during periods of curtailment based on lost energy margins.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

FPL witness Dubin compares the wording of the Section 8.4.6 of FPL's standard offer contract with the wording of the applicable rule.

She quotes Section 8.4.6 of the standard offer contract:

FPL shall not be required to accept or purchase energy from the QS during any period in which, due to operational circumstances, acceptance or purchase of such energy would result in FPL's incurring costs greater than those which it would incur if it did not make such purchases.

She also quotes Commission Rule 25-17.086, F.A.C.:

[w]here purchases from a qualifying facility will impair the utility's ability to give adequate service to the rest of its customers or, due to operational circumstances, purchases from qualifying facilities will result in costs greater than those which the utility would incur if it did not make such purchases, or otherwise place an undue burden on the utility, the utility shall be relieved of its obligation under Rule 25-17.082, F.A.C., to purchase electricity from a qualifying facility.

(TR 165)

Witness Dubin states that the provision in the rule, replicated in Section 8.4.6 of the contract, protects customers by ensuring that customers do not pay more when the utility purchases from a qualifying facility than if the utility provided electric energy from another source. (TR 165-166) The witness explains that FPL uses the least costly units first, then more expensive, less efficient units. (EXH 12, p. 69) On a daily basis, the operations in the control room manage generation so that the customer receives reliable service at the lowest cost. (EXH 12, p. 70) The witness explains that by virtue of this operating methodology, customers do not pay more through a purchased power agreement than they would pay otherwise, as required by Section 366.051, F.S. (EXH 12, p. 72) She explains that the renewable generator would be treated the same as the avoided unit. Either might be backed down for reasons of safety, or reliability, or if the generation was not cost-effective. (TR 57-58)

Witness Dalton acknowledges that Section 8.4.8 provides that the utility is permitted to reduce the level of generation by the renewable provider below the committed capacity level of the renewable unit. He recognizes that the reduction is limited to 18 periods per year, of no more than four hours duration. Witness Dalton alleges that such reduction is “subject to no economic test” but allows the utility to cut back on generation by the renewable provider rather than ramp down its own generation. (TR 101) He observes “This arbitrary power should, at a minimum, be subject to an economic test.” (TR 101) He believes that curtailment is not an appropriate response to the situation where the price from the renewable provider is greater than the price from FPL's marginal unit within the system dispatch order. (TR 99; Wheelabrator BR at 16) He believes that circumstances that involve a “hedged” energy price could place the renewable provider at an unfair disadvantage. (TR 98)

He concludes that all four options for energy payments to a renewable provider ensure that the renewable provider will not be paid more than avoided cost. He recommends that the utility should compensate a renewable provider based on the “lost energy margins” in order to make the renewable facility whole. (TR 101; TR 136; Wheelabrator BR at 17) He alleges that basing renewable energy payments on avoided cost will protect customers from uneconomic purchases. (TR 100) However, his testimony asserts that avoided costs should not be based on a fossil-fueled generator such as FPL's next planned generating unit, but on renewable energy resources. (TR 120)

### **ANALYSIS**

This issue focuses on the circumstances associated with the utility's right to refuse to purchase renewable energy in a case where the energy can be obtained more cheaply from another source. Wheelabrator believes that Section 8.4.6 “gives FPL an open-ended right not to purchase from a renewable facility.” (Wheelabrator BR at 16) That view is not consistent with the testimony of FPL witness Dubin regarding the manner in which FPL provides reliable service at least cost.

Based on the description of FPL's operations provided by witness Dubin, the dispatch of generating units is a function of an on-going evaluation of costs. The decision as to which generators are utilized, and to what extent, depends on many variables that must be combined on

a real-time basis in order to provide reliable service at least cost, in accordance with requirements of Commission rules. The testimony provided by FPL witness Dubin clearly indicates that FPL's standard offer contract is consistent with Commission Rule 25-17.086, F.A.C., which is incorporated by reference in Rule 25-17.250, F.A.C.

In the record of this case, the assessments of Wheelabrator witness Dalton are contradicted by the fact that FPL's decision regarding dispatch of generators is based on marginal cost, which is an ongoing, real-time iterative calculation. (EXH 12 pp. 69-73) The assertion by witness Dalton that avoided cost should be based upon renewable energy resources appears to oppose the concept of service at least cost. Witness Dalton's idea that basing energy payments on avoided costs provides assurance that FPL's customers are protected "from uneconomic purchases" is not supported in the record. (TR 100) Staff does not agree with witness Dalton's view that ratepayers are protected from paying the renewable provider more than avoided cost. The correct calculation of avoided cost at the time a standard offer contract is executed cannot guarantee that no cheaper power will ever be available on an hour-by-hour basis as long as the contract is in force. In staff's opinion, the several observations mentioned by witness Dalton are not related in a fashion that can be used to determine avoided cost or to ensure service at least cost. If Wheelabrator wants to use the renewable provider's cost of generation, a contract could be negotiated allowing FPL to include the renewable generator in the economic dispatch of units, based upon actual cost. However, that arrangement may not mesh with the primary function of a renewable facility, such as waste disposal or processes dictated by manufacturing schedules.

Wheelabrator witness Dalton makes no allegation that FPL's standard offer contract fails to comply with any requirement of Rule 25-17.250, F.A.C. Further, he does not allege that his views or suggestions are consistent with any requirement of that rule. Rather, the position of Wheelabrator appears to reflect segments of Section 366.91 and 366.92, F.S. As staff understands the testimony and exhibits provided by witness Dalton, his interpretation of Sections 366.91 and 366.92, F.S., is not informed by an understanding of the methodology in common use for managing the hour-by-hour decisions utilized to govern generation and provide reliable electric service at least cost. He proposes to "make whole" the renewable generator if power purchase is curtailed, and compensate the renewable provider for "lost margin" at the expense of the ratepayer. The proposals appear to be in direct conflict with the least cost methodology that forms the basis of Rules 25-17.0832, and 25-17.200 through 25-17.310, F.A.C. The scope of the current docket does not include investigation into the specific components of the rationale that may underlie the proposals made by witness Dalton.

### **CONCLUSION**

The provision in FPL's standard offer contract that permits FPL to reduce output or not accept energy from renewable generators is reasonable and consistent with Sections 366.91 and 366.92, F.S., and Rules 25-17.0832, and 25-17.200 through 25-17.310, F.A.C. FPL's contract provisions allowing reduction of purchases from a renewable generator are necessary to provide service at least cost, are in compliance with the rules, and should be approved. Reductions made by FPL to the energy purchased from a renewable provider under the provisions of Sections 8.4.6 or 8.4.8 of the standard offer contract should not impact equivalent availability factor or computation of annual capacity billing factor. The reductions should be mathematically

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removed from calculations of the equivalent availability factor and the annual capacity billing factor attributed to the renewable provider.

**Issue 7:** Is the requirement in FPL's standard offer contract that committed capacity testing procedures be based on a test period of 24 hours reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17-0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** Yes. The committed capacity testing reasonably shows the capability of the renewable generator to make energy available as if it were provided by the next planned generating unit, in compliance with requirements of Rule 25-17.0832, F.A.C., Rules 25-17.200 through 25-17.310, F.A.C., and consistent with Sections 366.91 and 366.92, F.S. (Sickel)

### **Position of the Parties**

**FPL:** Yes. Under Section 6.2 of FPL's standard offer contract, FPL requires the REF to base its Committed Capacity on a test period of 24 hours. This provision is consistent with the committed Capacity testing requirements of FPL's NPGU, which is a modern combined cycle base load unit capable of operating 24 hours per day, 7 days per week. As such, this provision is reasonable and consistent with applicable rules and statutes.

**Wheelabrator:** No. This provision discourages the development of renewable generation because such a requirement fails to recognize that a renewable facility has inherently variable output due to its fuel source. Therefore, the Committed Capacity Test should be based on a short-duration test period that recognizes the intermittent nature of renewable facilities, such as a four-hour test period.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

FPL witness Dubin explains that the requirement for the committed capacity test in FPL's standard offer contract is consistent with the projected performance of the next planned generating unit. She points out that, under provisions of the standard offer contract, money paid to a renewable provider is expected to purchase capacity and energy delivered on a reliability basis comparable to the avoided unit. (TR 167) The witness explains that this requirement is actually less stringent than the reliability testing that would be required of the avoided unit. She says customers should pay less if they receive less. (TR 197-199) Further, the requirement in the standard offer contract is consistent with Commission practice and complies with Commission rules. (TR 167; TR 188)

Wheelabrator witness Dalton mentions that the committed capacity test is based on a test period of 24 hours at the highest sustained net kW rating at which the facility can operate without exceeding the design operating conditions. He pronounces these requirements "overly stringent." The witness goes on to say that "A four-hour test is more than sufficient to evaluate the capability of a generating unit." (TR 124; Wheelabrator BR at 19) In direct testimony, witness Dalton explained that the 24-hour test is not appropriate for a renewable facility where the output is inherently variable. He suggests that "through a diversity of resources, the variability in output can be lessened." (TR 102)

It is the position of Wheelabrator that this requirement is an illustration of the inequity of requirements applied to the renewable generator as compared to the utility. Wheelabrator points

out that, for the utility's generating units, “. . . there is no financial penalty to FPL if the units fail such a test.” (TR 197-198; Wheelabrator BR at 20) Witness Dalton believes that FPL's fleet does not meet the standards required of renewable facilities, based upon his review of historic performance reflected in public documents filed with regulatory agencies. (TR 104-105)

### **ANALYSIS**

FPL witness Dubin explains a fundamental basis of the standard offer contract: the contract is based upon the next planned generating unit, which includes the cost and reliability advantages associated with that unit. (TR 167) Witness Dalton's position implies that having the renewable generator demonstrate capability to produce a given capacity -- the “committed capacity” -- for four hours should be sufficient. (TR 124) He points out that the output from a renewable generator is inherently variable and suggests that “diversity of resources” can be utilized to lessen the impact of variability. (TR 102)

The concerns stated by Wheelabrator as to the “capacity test” for the next planned generating unit, and claims that FPL suffers no penalty if the planned unit does not perform as expected are misplaced. (TR 197-198; Wheelabrator BR at 20) As a regulated utility, FPL is expected to show consistent performance by all units planned, authorized, and brought into reliable service, subject to verification by audit. The specifications and protocol for verification of performance by FPL's generators is not addressed in this case. Also, performance of older units operated by FPL is a complex and weather-sensitive matter, and is not under scrutiny in the current case.

### **CONCLUSION**

Staff believes that performance reliability of a generator is a primary factor in the cost for a utility to provide the energy needed to meet demand, hour upon hour. The contrast between the positions of the witnesses can be understood if we switch the parameters attributed to the renewable generator and the next planned generating unit: if the planned generating unit were only available for four hours at the rated capacity, what impact would this have on FPL's customers? What if the next planned generating unit were variable in output, so that for half of each day, the output would be a fraction of the rated capacity? This hypothetical situation implies an increase in costs to customers because more costly generation would be required whenever the next planned generating unit cannot supply the needed energy.

If committed capacity of a renewable generator is fully available for only a few hours per day, the payment to the renewable provider should reflect that fact. From an operational standpoint, committed capacity available for four hours cannot be valued or priced as if that capacity were regularly available for twenty-four hours. Staff does not believe that performance disparity can be ignored in the design of requirements included in a standard offer contract.

The requirement in FPL's standard offer contract for committed capacity testing over a period of 24 hours is reasonable and consistent with Sections 366.91 and 366.92, F.S., and Rules 25-17.0832, F.A.C., and 25-17.200 through 25-17.310, F.A.C.

**Issue 8:** Are the maintenance requirements in FPL's standard offer contract reasonable and consistent with Sections 366.91 and 366.92, F.S., and Rules 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** Yes. The maintenance requirements in FPL's standard offer contract are reasonable and consistent with Sections 366.91 and 366.92, F.S., and Rules 25-17.0832 and 25-17.200 through 25-17.310, F.A.C. (Sickel)

**Position of the Parties**

**FPL:** Yes. FPL's maintenance requirements are based on those of FPL's NPGU. This provision is also supported by the Commission's statement in order No. 24989 (p. 19) in Docket No. 910004-EU that: "FPL must have the ultimate ability to reject a QF's maintenance schedule to prevent planned outages when FPL needs the capacity." This provision is reasonable and consistent with the applicable rules and statutes."

**Wheelabrator:** No. The maintenance requirements in FPL's standard offer contract fail to take into account the nature of renewable generation. FPL should not be given the unilateral ability to dictate maintenance schedules. A renewable facility should be required to inform FPL before October 1<sup>st</sup> of each year of the duration and magnitude of planned outages. The renewable generator should be required to promptly update this schedule when changes are necessary and use best efforts to coordinate its scheduled outages with FPL.

**Staff Analysis:**

**PARTIES' ARGUMENTS**

FPL asserts that the maintenance requirements in FPL's standard offer contract are consistent with manufacturer's recommendations and FPL's operating and maintenance practices. (TR 172) The standard offer contract is based on FPL's next planned generating unit. (FPL BR at 27) Witness Dubin points out that it makes sense to schedule maintenance at those times when customer demand would be less. (TR 62) She explains that maintenance planning for the next planned generating unit will be scheduled on the same basis, so that customers get the same benefit from the standard offer contract as from the next planned generating unit. Witness Dubin points out that the equivalent availability factor does not include planned maintenance outages, since they are scheduled for times when system conditions permit. (TR 173)

Wheelabrator suggests that the standard offer contract should contain provisions similar to those in the contracts currently in force between FPL and Wheelabrator. Three provisions of the current contracts are cited: (1) expected generation by month for the next calendar year is to be provided to FPL by October 1; (2) Wheelabrator will promptly update the generation and maintenance schedule if changes are necessary; and (3) Wheelabrator will coordinate scheduled facility outages with FPL. (Wheelabrator BR at 21; EXH 15, p. 5) Both parties agree that the provisions have worked for the current contracts between FPL and Wheelabrator. (TR 61)

Wheelabrator requires the ability to set and maintain an outage schedule according to the requirements of the generating equipment and its solid waste customer base. (Wheelabrator BR at 21)



### **ANALYSIS**

FPL's use of the next planned generating unit as the basis for provisions in the standard offer contract is consistent with Rule 25-17.250(1), F.A.C. Witness Dubin points out that the provisions of the contract, such as the maintenance schedule, are needed to ensure reliable service to FPL's customers. (TR 21) In deposition, witness Dubin explained that the standard offer contract must be available to all types of generators. Further, she explained that a different schedule may be negotiated, based on characteristics of a renewable provider's specific technology. (EXH 12, p. 21)

Recognizing the agreement of the parties that specific terms have been effective for them, staff also recognizes that the agreed-upon terms appear somewhat different than what will be required by FPL's next planned generating unit. This observation is based upon the testimony regarding the maintenance intervals for combined cycle units. (TR 129-132) Using provisions that are customized to suit the maintenance needs of a particular renewable provider would not necessarily be an improvement in the standard offer contract, because such an arrangement might not meet the needs of other renewable providers. The terms relating to maintenance that would be needed by the next renewable provider might be more like FPL's next planned generating unit than like the terms that work well for the Wheelabrator generators.

### **CONCLUSION**

Staff believes that provisions for maintenance schedules in the standard offer contract should reflect the next planned generating unit for the utility that provides the standard offer contract. Staff recommends that the maintenance requirements in FPL's standard offer contract are reasonable and consistent with Sections 366.91 and 366.92, F.S., and Rules 25-17.0832, F.A.C., and 25-17.200 through 25-17.310, F.A.C.

**Issue 9:** Are the trip test requirements in FPL's standard offer contract reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** Yes. The provisions included in the standard offer contract reflect the next planned generating unit and the recommended maintenance and testing procedures provided by appropriate equipment manufacturers, and are reasonable and consistent with Sections 366.91 and 366.92, F.S., and Commission rules. (Sickel)

### **Position of the Parties**

**FPL:** Yes. These requirements are consistent with manufacturers' recommendations and FPL's operating and maintenance practices for combined cycle units like FPL's NPGU, which is the basis of FPL's standard offer contract as required by the referenced Commission rules. As such, this provision is reasonable and consistent with applicable rules and statutes.

**Wheelabrator:** No, the trip test requirements in FPL's standard offer contract discourage renewable generation and are unnecessary.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

The standard offer contract offered by FPL includes a requirement in Section 8.4.2 for a unit functional trip test to be performed after each overhaul of the facility's turbine, generator or boilers and specifies that the results shall be provided to FPL prior to returning the equipment to service. Further, specifics of the trip test are to be consistent with good engineering and operating practices. (EXH 16, p. 9.035) Witness Dubin points out that the trip test requirement in the standard offer contract is consistent with FPL's operating and maintenance practices. (TR 172) The witness acknowledges that trip test requirements have not been included in the current contracts with Wheelabrator. (TR 68)

In its brief, FPL summarized the Company's view of the trip test issue as follows: Wheelabrator offered no evidence suggesting that trip test requirements are not based on the next planned generating unit, but only suggested that the trip test requirements in FPL's standard offer contract "discourage renewable generation because they fail to take into account the nature of such facilities." FPL's brief mentions the absence of trip test requirements and lack of problem history in the contracts currently in force. (FPL BR at 30; TR 68; EXH 12 pp. 21-22)

Wheelabrator questioned witness Dubin as to the implications of trip test results. (TR 67-69) After pointing out that current contracts don't have a trip test requirement, the witness was questioned regarding the implications to FPL if a unit does not perform in a trip test. The response by witness Dubin is that the non-performing unit would not be running. (TR 68-69)

Wheelabrator claims that a renewable generator would be in contract default if it does not pass a trip test. (TR 69; Wheelabrator BR at 22) Payments to the renewable generator can be reduced as a result of the default, but FPL would face no penalty under circumstances of a similar generator failure. (Wheelabrator BR at 22) Wheelabrator contends that the trip test is

“essentially a test of the turbine” and is an unnecessary burden on the renewable generator. Further, Wheelabrator claims that absence of problems in existing contracts shows that the trip tests need not be included in the standard offer contract. (Wheelabrator BR at 22) Wheelabrator claims that trip test requirements in the standard offer contract constitute inequitable treatment and that FPL does not hold its own units to the same trip test requirements demanded of renewable generators. (Wheelabrator BR at 22)

### **ANALYSIS**

Wheelabrator believes that a trip test should not be required in the standard offer contract. In support of its position, Wheelabrator points out that no problems have developed within the operations under the contracts currently in force, and those contracts do not include requirements for trip tests. (TR 68; Wheelabrator BR at 22) Wheelabrator's position states that “the trip tests requirements in FPL's standard offer contract discourage renewable generation and are unnecessary.” (Wheelabrator BR at 22)

Wheelabrator objects to the requirement for use of the trip test. Wheelabrator says that a renewable generator is in default if the renewable unit fails a trip test. (TR 68) Wheelabrator claims inequity in the situations of the parties: if the renewable unit fails a trip test, the renewable provider is in default; but if an FPL unit fails a trip test, FPL would face no penalty. Wheelabrator says that “FPL does not hold its units to the same trip test requirements to which it seeks to hold renewable generators.” (Wheelabrator BR at 22) Wheelabrator's position is based on a view that the test itself is an unnecessary burden.

However, Wheelabrator does not claim that the renewable generators have been operated without utilizing trip test procedures. (TR 67-68) In its objection to requirements for the test, Wheelabrator does not refer to any manufacturer or resource having recognized technical credentials. The Wheelabrator request to eliminate the trip test requirement lacks a credible foundation.

FPL witness Dubin agrees that requirements relating to trip tests are not part of the currently operating contracts. However, witness Dubin testifies that a unit of the FPL fleet would not be running if it failed a trip test. (TR 69) Staff believes that following a manufacturer's recommendations as to maintenance and testing procedures is a vital part of the reliable operation of generating facilities, regardless of the ownership of the facilities. FPL presents the use of trip tests as a maintenance operation based on manufacturers recommendations or requirements. (TR 69; FPL BR at 22)

### **CONCLUSION**

Staff recommends that the trip test requirements in FPL's standard offer contract appear reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C. Specific maintenance and testing protocols needed by the utility or the renewable generator, and those necessary for reliable grid operation, may be included in the provisions of a standard offer contract, and are in compliance with the requirements of the rules and statutes.

**Issue 10:** Is the requirement in FPL's standard offer contract giving it a right of first refusal as to tradable renewable energy credits (TRECs) reasonable and consistent with Sections 366.91 and 366.92, F.S., Rule 25-17.0832, F.A.C., and Rules 25-17.200 through 25-17.310, F.A.C.?

**Recommendation:** No. Rule 25-17.280, F.A.C., provides that tradable renewable energy credits shall remain the exclusive property of the renewable generating facility. The Commission should deny FPL's tariff, with respect to a right of first refusal for purchase of TRECs. All arrangements between the renewable provider and any other party, with regard to any renewable attributes, should be the subject of negotiated contractual provisions, at the discretion of the renewable provider. (Sickel)

### **Position of the Parties**

**FPL:** Yes. The TREC provision is a valuable right protecting FPL's customers. In Order PSC-07-0492-TRF-EQ (p. 5) in Docket 070234-EQ, the Commission notes that a right of first refusal "will insure that Florida's ratepayers enjoy all of the attributes associated with renewable generation without imposing a financial penalty to the owner of the renewable generation facility." FPL's right of first refusal provision is reasonable and is consistent with applicable rules and statutes.

**Wheelabrator:** No, this provision is in direct conflict with Rule 25-17.280, Florida Administrative Code. FPL's attempt to encumber the tradable renewable energy credit with 30-day right of first refusal should be rejected. It adversely affects the values of the TREC and will make it more difficult for a renewable provider to receive full market value for the TREC.

### **Staff Analysis:**

### **PARTIES' ARGUMENTS**

FPL witness Dubin quotes from Order PSC-07-0492-TRF-EQ, in Docket No. 070234-EQ, where the Commission notes that the right of first refusal will insure that Florida's ratepayers enjoy all the attributes of renewable generation without imposing a financial penalty to the owner of the renewable generation facility. (TR 32)

Witness Dubin describes the 30-day period as a reasonable period of time to conduct due diligence and assess the value of bona fide offers for TRECs and respond to the seller. (TR 175) However, witness Dubin acknowledges that if a generator had an opportunity to make a TREC sale within a ten day period, the transaction would likely not be possible within the first refusal provision. (TR 71)

FPL points out that the Commission specifically considered the inclusion of right of first refusal in rulemaking and in previous standard offer contract dockets. (FPL BR at 32) The record shows that both Wheelabrator and FPL recognize agreement of all parties in earlier proceedings to include the right of first refusal in the standard offer contract. (TR 140; FPL BR at 32) FPL alleges that Wheelabrator has previously agreed that inclusion of the right of first refusal was acceptable. (EXH 19; FPL BR at 32)

Wheelabrator witness Dalton provides some insight into trading operations in the current TREC market. He explains that the current request for proposal processes where TRECs are bought and sold do not typically accommodate a seller withdrawing an offer after a purchase is exercised. Further, the witness alleges that many request for proposal processes do not provide sufficient time for a 30-day right of first refusal. An example of a TREC sale by bids, dating from February 2008, was conducted over a period of less than 48 hours. (TR 204-205; EXH 21)

### **ANALYSIS**

Rule 25-17.280, F.A.C., provides that tradable renewable energy credits shall remain the exclusive property of the renewable generating facility. The evidence in the record makes clear that the interests of the renewable provider are negatively impacted by this provision at the present time. The rights of ownership, including the right to sell freely in the appropriate marketplace, are clearly impaired by imposing a 30-day waiting period when trades are completed in less than 3 days. From the exhibits that describe current market operations, even the requirement of examination of a “bona fide offer” by a second party creates a market impairment. Current practices among marketplace buyers and sellers do not allow time or opportunity for the renewable provider to obtain a consultation with the utility. Unless the renewable provider can put forth offers and respond to buyers unimpeded, the provider's ownership rights are impaired.

### **CONCLUSION**

The Commission should deny FPL's tariff, with respect to a right of first refusal for purchase of TRECs. In order to comply with provisions of ownership rights in Rule 25-17.280, F.A.C., the provision giving FPL right of first refusal to purchase TRECs from the renewable provider should not be included in the standard offer contract. The standard offer contract should not provide any unique benefit or advantage to the utility as to notification or review of price, availability, or any other aspect of TRECs, or any other renewable attributes. All arrangements between the renewable provider and any other party, with regard to any renewable attributes, should be the subject of negotiated contractual provisions.

**Issue 11:** Should the standard offer contract filed by Florida Power & Light Company be approved?

**Recommendation:** No. The tariff should be denied as filed. If the Commission approves staff recommendations in Issues 3 and 10, FPL should file within 90 days a revised standard offer contract in accord with the Commission's decision. If the revised tariff complies with the Commission's decision, staff should be granted the administrative authority to approve the revised tariff. (Sickel, Hartman)

**Position of the Parties**

**FPL:** Yes. As discussed with respect to each of the issues listed above, FPL's standard offer contract complies fully with applicable statutes and Commission rules, and is reasonable.

**Wheelabrator:** No. FPL's standard offer contract should not be approved. Rather, the Commission should require FPL to make the changes outlined above and in the testimony of Mr. Dalton and submit the contract for approval.

**Staff Analysis:**

**PARTIES' ARGUMENTS**

The view of FPL is entirely contained in its position statement. FPL perceives that, with respect to each of the issues listed above, FPL's standard offer contract complies fully with applicable statutes and Commission rules, and is reasonable. (FPL BR at 34)

Wheelabrator claims that the standard offer contract fails to implement legislative intent and protect existing renewable generation. Wheelabrator notes that this docket provided for a detailed review of the problems identified by Wheelabrator as reasons for the failure. Wheelabrator summarizes changes that would encourage new renewable generation and protect existing renewable generation, in the view of Wheelabrator:

- \* Eliminate the open-ended right of FPL to not purchase power under certain operating conditions and compensate renewable providers when they are required to back down their facilities.
- \* The committed capacity test period should be reduced from twenty-four hours to four hours.
- \* The renewable energy facility should be paid full capacity payments if a capacity factor of 89 percent is achieved; the renewable facility should receive partial capacity payments for capacity factor of 69 percent and above.
- \* The trip test requirement (Section 8.4.2) should be eliminated.
- \* The maintenance provision (in Section 8.2) should be eliminated and require parties to work cooperatively to schedule maintenance.
- \* The right of first refusal (in Section 17.6.2) should be eliminated.

(Wheelabrator BR at 26)

Wheelabrator contends that these are simple changes which will result in a more reasonable standard offer contract to fulfill the Legislature's goals. (Wheelabrator BR at 26)

### **ANALYSIS**

Staff has reviewed each suggested change in light of the increasing efforts in the state to utilize renewable resources to the maximum extent possible, as well as the requirements imposed upon regulated utilities in Florida. The issue specific recommendations by Staff include the most up to date information, as provided in the record of the case. The analysis and conclusion for each issue provide support for the recommendations made with regard to each.

The equivalent availability requirement in the standard offer contract should be based on the projected availability of the next planned generating unit over the term of the contract, as detailed in Issue 3. Also, staff believes that no negative impact should flow to the renewable generator should as a result of the utility's need to forgo purchase or back down the output from the renewable generator. In situations where Sections 8.4.6 and 8.4.8 of the contract are implemented, the calculations of renewable generator availability and capacity factor should be adjusted accordingly.

As set out in Issue 10, staff believes that recent market developments render the utility's first right of refusal for purchase of the environmental attributes an impairment of the ownership rights of the renewable generator. Recognizing that the first rights were previously approved as a way to guard the rights of the ratepayer while giving ownership rights to the renewable provider, staff recommendation reflects current Commission thinking and market operation.

### **CONCLUSION**

The tariff should be denied as filed. If the Commission approves staff recommendations in Issues 3 and 10, FPL should file within 90 days a revised standard offer contract in accord with the Commission's decision. If the revised tariff complies with the Commission's decision, staff should be granted the administrative authority to approve the revised tariff.

Docket No. 080193-EQ

Date: April 23, 2009

**Issue 12:** Should this docket be closed?

**Recommendation:** If the Commission approves staff's recommendations, FPL should file a revised standard offer contract within 90 days in accordance with the Commission's decision. This docket should be administratively closed by staff after review and approval of the revised contract. (Hartman)

**Position of the Parties**

**FPL:** Yes.

**WHEELABRATOR:** The docket should be closed after FPL has revised its standard offer contract in the manner Wheelabrator has outlined and the Commission has approved it.

**Staff Analysis:**

If the Commission approves staff's recommendations, FPL should file a revised standard offer contract within 90 days in accordance with the Commission's decision. This docket should be administratively closed by staff after review and approval of the revised contract.