# State of Florida



# Public Service Commission

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

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

DATE:

January 17, 2008

TO:

Office of Commission Clerk (Cole)

FROM:

Division of Economic Regulation (Sickel, Graves)

Office of the General Counsel (Hartman)

RE:

Docket No. 070677-EQ – Petition for approval of negotiated renewable energy

contract with Manatee Green Power, LLC, by Florida Power & Light Company.

**AGENDA:** 01/29/08– Regular Agenda – Proposed Agency Action – Interested Persons May

Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

PREHEARING OFFICER:

McMurrian

**CRITICAL DATES:** 

None

**SPECIAL INSTRUCTIONS:** 

None

FILE NAME AND LOCATION:

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## Case Background

On November 7, 2007, Florida Power and Light Company (FPL) filed a petition for Commission approval of a negotiated contract for the purchase of firm capacity and energy, as well as "Green Attributes," from Manatee Green Power, LLC (Manatee). The agreement was signed October 31, 2007. Under the contract, Manatee will deliver firm capacity of 5.25 MW beginning January 1, 2009 for a term of 15 years. The facility will use landfill gas from the Lena Road Landfill in Manatee County, Florida, for fuel. Planning by Manatee includes the installation and operation of the facility by December, 2008, in order to be eligible for federal tax credits.

DOCUMENT NUMBER DATE

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Negotiations between FPL and Manatee began in 2006, and were based on the 160 MW combustion turbine (CT) scheduled to be in-service in 2008, as reflected in the FPL 2006 Ten-Year Site Plan. FPL's 2006 Standard Offer contract used that unit as the avoided unit and this avoided unit was used throughout negotiations for this contract.

In addition to purchase of capacity and energy, the contract provides a specified price for the purchase by FPL of "Green Attributes" associated with the generation of electricity from the facility.

The Commission has jurisdiction over this matter pursuant to Sections 366.051 and 366.81, Florida Statutes.

#### Discussion of Issues

<u>Issue 1</u>: Should the Commission approve the requested clause recovery for capacity and energy payments incurred under the negotiated contract between Florida Power & Light Company (FPL) and Manatee Green Power, LLC (Manatee)?

Recommendation: Yes. When consideration is given to the baseload characteristics of the capacity and energy to be delivered under the contract, payments for capacity and energy are not expected to exceed FPL's avoided costs. The performance requirements under the contract are uniquely suited to the Manatee project. As part of the approval process, the Commission may consider the "characteristics of the capacity and energy to be delivered under the contract" pursuant to Rule 25-17.240(2), F.A.C. (Sickel, Graves)

<u>Staff Analysis</u>: When negotiations for this installation began in 2006, the planning by FPL included a 160 MW combustion turbine (CT) that would come into service June, 2008. That CT was used as the avoided unit in FPL's 2006 Standard Offer Contract. By the time FPL submitted a Ten-Year Site Plan for 2007, the 2008 unit had been removed from FPL's planning process. FPL's 2007 Standard Offer contract was based on a combined cycle unit with an in-service date of 2015. On June 11, 2007, the Commission approved FPL's 2007 Standard Offer Contract. On July 2, 2007, the order approving FPL's Standard Offer contract was protested.

The continuing sessions of negotiation between FPL and Manatee were based upon the 2008 CT because Manatee was trying to meet an in-service date of December, 2008, in order to be eligible for federal tax credits. The contract signed on October 31, 2007, is for 5.25 MW of capacity and energy from a landfill gas generator in Manatee County. The in-service date of the renewable generator is January 1, 2009, and the term of the contract is 15 years.

Rule 25-17.0832(3), Florida Administrative Code, states that in reviewing a negotiated firm capacity and energy contract for the purpose of cost recovery, the Commission shall consider factors relating to the contract that would impact the utility's general body of retail and wholesale customers including: a need for power, the cost-effectiveness of the contract, security provisions for capacity payments, and performance guarantees associated with the generating facility. Each of these factors is evaluated below.

#### a. Need for Power

From a reliability perspective, one could argue that the proposed contract would not defer the need for any additional capacity on FPL's system due to the small size of the renewable generator and the mismatch of in-service dates between the contract and the current "avoided unit." The size and in-service date of a renewable generator are based on the business plan of the owner, not the utility. Therefore, it is rare that the size and timing of a renewable generator match the needs of a utility.

<sup>&</sup>lt;sup>1</sup> See Order No. PSC-07-0492-TRF-EQ, issued June 11, 2007, in Docket No. 070234-EQ, <u>In re: Petition for approval of renewable energy tariff standard offer contract, by Florida Power & Light Company</u>.

Pursuant to Federal and State laws, the Commission supports the development of cogeneration.<sup>2</sup> The Commission has recognized that advancement of cogeneration may create market imperfections resulting in a utility paying twice for the same capacity.<sup>3</sup> This circumstance would develop when the capacity from the cogenerator duplicates capacity that is otherwise available from a utility's resources.<sup>4</sup> The Commission has also recognized that the potential subsidy can be mitigated by the utility's opportunity to sell any surplus capacity on the wholesale market.<sup>5</sup> Thus, the Commission seeks to "balance market imperfections with the existing policy of promoting qualifying facilities."

According to FPL's filing in Docket No. 070650-EI (FPL's need petition for Turkey Point Units 6&7), FPL projects that its summer reserve margin will drop to 19.2% by 2012. FPL has issued a Request for Proposals for a 2011 combined cycle unit to satisfy this identified need. As FPL's system continues to grow, there is a projected need for additional generation capacity on FPL's system during the life of the contract.

The addition of 5.25 MW of firm capacity and energy sold by Manatee to FPL will not completely defer or avoid the need for additional capacity in order to meet the current reserve margin standard of 20%. However, it has been the Commission's policy to approve contracts, such as Manatee's, that promote the use of renewable resources as a primary fuel. Rule 25-17.001(5)(d), Florida Administrative Code, encourages electric utilities to:

Aggressively integrate nontraditional sources of power generation including co-generators with high thermal efficiency and small power producers using renewable fuels into the various utility service areas near utility load centers to the extent cost effective and reliable.

#### b. Cost-Effectiveness

FPL provided a simplified traditional analysis, which was modified on December 14, 2007, that compared the negotiated contract payments to the 2006 Standard Offer contract. The energy payments were estimated to be identical for the negotiated contract and the "avoided unit" and represent the bulk (88%) of the total payment stream. The energy payments are calculated as the lesser of system as-available energy or firm energy from the avoided unit in order to mimic economic dispatch of the renewable generator. Such a pricing methodology results in ratepayers being held harmless with regard to energy pricing.

The analysis provided by the utility compares the capacity payments with cost for similar capacity under the 2006 Standard Offer Contract, using a 2008 combustion turbine as the avoided unit. Under that analysis, the capacity payments result in an estimated \$64,540 in excess

<sup>&</sup>lt;sup>2</sup> See Section 366.82(2), Florida Statutes, and 18 CFR §292.301 - §292.304.

<sup>&</sup>lt;sup>3</sup> See, e.g., Order No. PSC-03-1329-PAA-EQ, issued November 21, 2003 in Docket No. 030866-EQ, <u>In re: Petition for Approval of standard offer contract based on 2007 combined cycle avoided unit and accompanying rate schedule COG-2</u>, and for waiver of Rule 25-17.0832(4)(E)5, F. A. c. by Progress Energy Florida, Inc., at 6.

¹ <u>Id.</u> at 7.

<sup>&</sup>lt;sup>5</sup> <u>Id.</u>

<sup>6</sup> Id.

of the standard offer contract payments for similar capacity. With total payments projected to amount to \$21,954,706, the excess is approximately 0.29% of the net present value over the life of the project.

The combustion turbine used as the avoided unit was projected to have a capacity factor of 10% in the first year of operation because the unit would only run during the times when demand was at a peak. In contrast, the Manatee unit is projected to run about 90% of the time. Thus, the contract between FPL and Manatee is a hybrid of sorts because the capacity payments to the renewable generator (based on a CT) do not match the performance requirements of the contract which mimic a baseload unit. Such performance requirements are uniquely suited to the Manatee project since the landfill gas will not be stored and is currently being flared to the atmosphere.

If the Manatee project does not meet the contractual performance requirements, then the capacity payments are reduced for that month. If the project does achieve the performance requirements, then the energy from the Manatee project will displace coal, oil, and natural gas baseload generation on FPL's system. Manatee projects that the generator will exceed a 90% capacity factor.

As part of the approval process, the Commission may consider the "characteristics of the capacity and energy to be delivered by the renewable generating facility under the contract" pursuant to Rule 25-17.240(2), F.A.C. FPL provided a traditional analysis comparing the net present value of the capacity payments with the calculated costs for similar capacity, based on the designated avoided unit. In its petition, FPL says that costs associated with the Manatee project are not expected to exceed full avoided costs. In response to staff's questions, FPL acknowledged that in the simplified analysis the capacity payments appear to exceed capacity costs associated with the designated avoided unit. FPL also explained that some expected savings are not taken into account in the simplified analysis. Since baseload plants have fixed costs that are typically 300-400% greater than a peaking unit, the small premium in fixed cost (0.29%) should be easily offset by the difference in performance requirements along with improved fuel diversity and security of FPL's generation mix. In essence, FPL's customers are getting a baseload capacity resource, which typically carries a high fixed cost, for a low fixed price. In contrast, the risk of fuel price volatility is borne by the owners of the Manatee project. When these factors are considered in total, the overall contract is expected to result in total payments that will be less than avoided cost.

## c. Security for Capacity Payments

Under the terms of this contract, the capacity payment depends upon the performance of the Manatee project for each individual month. There are no advance payments requiring security, since no payment is made by the utility until energy has been delivered by the seller. A period of 60 days following Commission approval of the contract is allowed for the seller to either make necessary arrangements or withdraw without penalty. After that 60-day period, the seller is obligated and will forfeit security up to \$30/kW for deficient performance. If the agreed capacity is not delivered by the date as required by the terms of the contract, the contract may be terminated by either party without future obligations, but the utility immediately receives 100% of the security deposit.

## d. Performance Guarantees

Under the terms of this contract, the capacity payment depends upon the performance of the Manatee project for each individual month. The calculation of the payment for avoided capacity uses a set rate times the capacity produced. For the seller to receive full capacity payments, the Manatee project must have an availability of 90% for on-peak hours and 80% for all hours. No capacity payment is due if the Monthly On Peak Capacity Billing Factor is less than 90% or the Annual Capacity Billing Factor is less than 80%. In case the capacity factor drops below 70%, the contract may be terminated.

## Conclusion

The negotiated contract between FPL and Manatee will provide a viable source of renewable capacity and energy that provides fuel diversity and security to FPL's generation mix. Authorizing clause recovery for capacity and energy payments will put no additional risk on the utility or its ratepayers. For these reasons, staff recommends that FPL be authorized to include the capacity and energy payments made to Manatee with the regular filings for clause recovery.

<u>Issue 2</u>: Should the Commission approve FPL's request for recovery through the fuel clause for costs associated with payment for "Green Attributes" under terms of the negotiated contract?

Recommendation: No. It would not be appropriate for the general body of ratepayers to be obligated to pay the cost to purchase speculative "Green Attributes" that may be associated with the Manatee project. Such an obligation would require FPL's general body of ratepayers to pay in excess of avoided cost and therefore be contrary to Order No. PSC-02-1059-DS-EQ. Staff recommends that FPL be authorized to go forward with the contract and that the cost associated with purchase of "Green Attributes" should be booked below the line. The "Green Attributes" purchased should be the property of FPL, and any profit or loss resulting from the sale of such attributes should also be booked below the line. (Sickel, Graves)

<u>Staff Analysis</u>: The Contract provides that Manatee will sell and FPL would purchase "Green Attributes" associated with the renewable energy produced by the facility. In the provisions for the sale of "Green Attributes," the contract explains:

....FPL shall purchase and receive from the QS [qualifying seller]... any and all credits, benefits, emissions, reductions, offsets, and allowances, howsoever entitled, attributable to the generation of electricity from the Facility, and its displacement of conventional energy generation ("Green Attributes"). Notwithstanding the foregoing, such Green Attributes shall not include solely those attributes owned by Manatee County related to the landfill. FPL shall have the sole and exclusive right to purchase all electric energy, Committed Capacity and Green Attributes generated by the Facility.

# The Petition further alleges:

This supplemental energy-based payment recognizes the value of the renewable characteristic of energy from the facility. FPL's agreement to purchase the Green Attributes of Manatee's electrical production benefits FPL customers by encouraging development of a new renewable generation facility in Florida that will serve FPL's customers. Such Green Attributes may also benefit FPL's customers in the future, for example by being used to satisfy a future Florida or federal renewable portfolio standard.

Staff requested that FPL provide an explanation of the utility's plans for booking the payments to be made for the "Green Attributes" associated with electricity generated under this contract. FPL explained as follows:

Payments under the contract are for three products from the generator --capacity, energy and renewable attributes. FPL believes that capacity should be recovered through the capacity clause. Energy payments should be recovered through the fuel clause. Since renewable attributes are tied to energy production, FPL believes that the REC payments should also be recovered through the fuel clause. If the Commission establishes a RPS [renewable portfolio standard], then the RECs would be recovered in accord with procedures established at that time.

In review of the documents filed by FPL and Manatee, there is no clear definition of what will constitute, or be included in, the "Green Attributes" for which FPL has set a price of \$3.25/MWH. Specifically, a long list of possible "credits, benefits, . . . and allowances" is to be included. The explanation includes possible use for the "Green Attributes" at an uncertain time in the future, on the condition that certain environmental requirements might be developed under State or Federal regulation. The Company's explanation makes clear that "Green Attributes" are a product that is separate from capacity and energy, but it lacks a definition as to what would be included or excluded as a "Green Attribute." FPL estimates that payments for "Green Attributes" over the life of the contract will amount to \$888,502, net present value.

The requested fuel clause recovery of payments for the "Green Attributes" is directly contradictory to the underlying rationale for Order No. PSC-02-1059-DS-EQ.<sup>7</sup> In that Order, which addressed a request for Declaratory Statement, FPL asked the Commission:

to declare that its proposal to pay in excess of its avoided costs to a qualifying facility ("QF") for renewable energy for a Green Energy Program, in which FPL's customers voluntarily agree to higher rates covering the costs above FPL's avoided cost, does not violate PURPA, section 366.051, Florida Statutes, and state and federal regulations implementing PURPA.

The Commission granted the Company's request for a declaratory statement with the following explanation:

It seems clear to us that the prohibition under PURPA and the rules implementing PURPA against exceeding the avoided costs applies to circumstances where the rate paid to QFs in excess of avoided cost is imposed upon the utility and its ratepayers. FPL's plan as stated in its petition is voluntary and is not, therefore, inconsistent with PURPA, or FERC's regulations, section 366.051, Florida Statutes, or our rules implementing PURPA. Accordingly, we grant FPL's petition and declare that its proposal to pay in excess of its avoided costs to a QF for renewable energy for a Green Energy Program in which FPL's customers voluntarily agree to higher rates covering the costs above FPL's avoided cost does not violate PURPA and its implementing rules, or section 366.051, and its implementing rules. [Emphasis in original.]

In the view of staff, the rationale underlying the Commission's decision granting this requested declaratory statement is that a regulated utility may, for a purchase from a renewable facility, incur cost in excess of avoided cost on the condition that the additional cost is recovered from a pool of customers who voluntarily agree to pay for such costs. The additional cost, beyond avoided cost, may not be imposed upon the general body of ratepayers. It would be a

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<sup>&</sup>lt;sup>7</sup> See Order No. PSC-02-1059-DS-EQ, issued August 2, 2002, in Docket No. 020397-EQ, <u>In re: Petition for declaratory statement by Florida Power & Light Company that FPL may pay a Qualified Facility (QF) for purchase of renewable energy an amount representing FPL's full avoided cost plus a premium borne by customers voluntarily participating in FPL's Green Energy Project.</u>

violation of PURPA and state and federal regulations if such additional costs were to be imposed without a voluntary agreement by each ratepayer involved.

That Declaratory Statement further states:

The question of whether circumstances might exist where a request for costs in excess of avoided cost to be borne by the general body of ratepayers would be justified, or the question of the amount FPL or its green electricity customers may pay, is not presented by FPL's petition and is not addressed in this declaratory statement.

The Commission's policy, clearly evident in the Declaratory Statement, is to encourage small power production while providing assurance that a utility is not required to purchase electricity from a renewable generator when the utility can otherwise produce or purchase power at a lower cost. The Declaratory Statement goes on to recognize that FPL's proposal to pay in excess of avoided cost for a renewable energy program does not violate State or Federal requirements because the impacted customers will voluntarily agree to participate in this program.

Since there is no clear definition for the Green Attributes that FPL has agreed to purchase, staff cannot provide a comparison between the price of \$3.25/MWH included in the contract and other products purchased by regulated utilities. FPL has referred to the voluntary market as a basis for the pricing. While staff applauds the efforts made by FPL to reach an agreement for this purchase of renewable energy, we cannot recommend approval for the proposed recovery within the fuel clause of the cost to purchase the "Green Attributes."

#### Conclusion

Payment for renewable energy credits are speculative at this time and there is no regulatory requirement for their purchase. There are many varied scenarios which could possibly develop within the provisions of the FPL agreement for the purchase of "Green Attributes" from the Manatee project. It would not be appropriate for the general body of ratepayers to be obligated to pay the cost to purchase speculative "Green Attributes" that may be associated with the Manatee project.

However, the contract represents an extended effort on the part of both FPL and Manatee to reach a practical agreement for the renewable generation represented by the Manatee project. In the view of staff, FPL has an opportunity to purchase and own the Green Attributes provided with the Manatee renewable generation by booking the purchase below the line. Whether or not a requirement for purchase of carbon-based or other environmental credits would develop for Florida regulated utilities in the future, FPL appears to estimate that the contract will have positive financial outcome. By authorizing FPL to go forward with this contract and book the purchase of Green Attributes below the line, the Commission allows the utility to directly benefit from participating in the voluntary market utilizing utility-based expertise.

Therefore, staff recommends that FPL be authorized to go forward with the contract and the cost associated with purchase of "Green Attributes" as a non-regulated operation, booked below the line. The "Green Attributes" purchased should be the property of FPL, and any profit or loss resulting from the sale of such attributes should also be booked below the line.

**Issue 3:** Should this docket be closed?

**Recommendation:** Yes, this docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action. (Hartman)

<u>Staff Analysis</u>: If no timely protest to the proposed agency action is filed within 21 days, this docket should be closed upon the issuance of the Consummating Order.