

State of Florida



Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

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

DATE: December 26, 2007

TO: Office of Commission Clerk (Cole)

FROM: Division of Economic Regulation (Sickel, Garl)
Office of the General Counsel (Klancke)

RE: Docket No. 070645-EQ – Joint petition to amend negotiated contract for firm capacity and energy from qualifying facility between Florida Power Corporation d/b/a Progress Energy Florida, Inc. and Innovative Energy Group of Florida

AGENDA: 01/08/2008 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\070645.RCM.DOC

Case Background

On October 10, 2007, Progress Energy Florida, Inc. (PEF) and Innovative Energy Group of Florida, LLC, (IEG-Florida) filed a joint petition requesting Commission approval of amendments to a previously approved negotiated contract for purchase of firm capacity and energy from a qualifying facility. IEG-Florida is an assignee of Florida Biomass Energy Group, LLC, a party to the contract that was approved by Commission Order No. PSC-06-0743-PAA-EQ, in Docket No. 060387-EQ, In re: Request for approval of a contract with a qualifying facility for purchase of firm capacity and energy between Florida Power Corporation d/b/a Progress Energy Florida, Inc. and Florida Biomass Energy Group, LLC.

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In Docket No. 060387-EQ, Florida Biomass Energy Group, LLC, (Florida Biomass) proposed to construct, own and operate an electric generating plant to be located on a farm that would produce a biomass fuel crop called "e-grass." The crop would be grown and harvested in a continuous cycle, for conversion into a liquid fuel to be used in a traditional combined cycle generator. Based on the exclusive use of a renewable fuel (after start-up) for electric generation, the facility had been certified by the Commission as a qualifying facility (QF).¹ The projected output of 116 MW was to be available for 25 years, beginning December 2009.

In this jointly filed petition, the parties seek approval for specific modifications to the previously approved contract to include a counterparty with associated contact information, revised dates pertinent to the supply of electric capacity and energy, and clarification of conditions regarding termination rights.

This recommendation addresses the requests made by the parties for modifications to the approved contract. The Commission has jurisdiction in this matter pursuant to section 366.051 and 366.081, Florida Statutes.

¹ See Order No. PSC-06-0596-PAA-EQ, issued July 7, 2006, in Docket No. 060367-EQ, In re: Petition for Certification as a qualifying facility pursuant to Rule 25-17.080, F. A. C. by Florida Biomass Energy Group, L.L.C.

Discussion of Issues

Issue 1: Should the Commission approve the amendments to the contract requested by Progress Energy Florida, Inc. (PEF) and Innovative Energy Group of Florida, LLC in their joint petition?

Recommendation: Yes. The net present value of projected savings to PEF's ratepayers is projected to be \$113 million. (Sickel, Garl)

Staff Analysis: The joint petition addressed in this docket provides for amendments to the previously approved contractual arrangements² for a proposed renewable generator. Complications relating to the location for growing the biomass crop have delayed the project, and the current petition includes a revised schedule for the biomass combined cycle generator to become operational. To date, no site for growing this crop has been finalized. The generator was originally planned to be in-service by December, 2009. The amended contract requires firm capacity no later than December 1, 2011. Also, the revised contract includes Innovative Energy Group, LLC, (IEG-Florida) as an assignee of Florida Biomass Energy Group, LLC, a party in the earlier contract. IEG-Florida has filed a petition requesting designation as a qualifying facility (QF), to be addressed in Docket No. 070723-EQ, In Re: Petition for certification as a qualifying facility pursuant to Rule 25-17.080, F. A. C., by Innovative Energy Group of Florida, LLC.

Within the contract filed in this docket, the Innovative Energy Group of Florida, LLC is called "Project LLC". By the proposed contract modifications, Project LLC must enter into the necessary project contracts by December 1, 2009. The contract period, for firm capacity and energy provided to PEF, remains 25 years and begins no later than December 1, 2011.

The proposed modifications are subject to Commission review for purposes of cost recovery as directed by Rule 25-17.0832(3), Florida Administrative Code. The utility's need for power, the cost effectiveness of the contract, the security provisions for capacity payments, and QF performance guarantees are to be considered. Staff's evaluation of each of these factors is provided in the following discussion.

Need for Power

The planned facility is expected to have a maximum nominal generating capacity of 145 MW. After serving internal loads, the QF will provide firm capacity between 116 MW and 134 MW. The expected annual energy amounts to 868,204 MWh. Expected on-peak energy is 397,927 MWh and expected off-peak energy is 470,277 MWh.

Although the projected 116 MW of renewable energy has been the subject of contract negotiations since early 2006, the development had not reached sufficient certainty to be included as a firm resource in the 2007 Ten Year Site Plan filed by PEF. The amended schedule requires firm capacity no later than December 1, 2011. Further, the specific contracts providing

² See Order No. PSC-06-0743-PAA-EQ, issued September 1, 2006, in Docket No. 060387-EQ, In re: Petition for approval of a contract with a qualifying facility for purchase of firm capacity and energy between Florida Power Corporation d/b/a Progress Energy Florida, Inc and Florida Biomass Energy Group, L.L.C.

necessities such as engineering, financing, transmission and insurance must be in place by December 1, 2009, or the project is dissolved.

At present, PEF's next avoided unit is a 618 MW combined cycle unit slated for commercial in-service mid-year 2013. The availability of 116 MW of firm capacity would be expected to displace a portion of the need for the larger unit. The effect of this contract should be reflected in PEF's 2008 Ten Year Site Plan. Also, the contribution of available energy from the renewable source contributes to fuel diversity as well as reliability for the utility.

Cost-effectiveness

The projected capacity and energy payments that will be made under the contract have been compared to a nominal 618 MW combined cycle gas-fired plant having an estimated in-service date of June, 2013. The comparison is modeled at a committed capacity of 116.6 megawatts and a capacity factor of 85%. Based on current fuel forecasts, the projected payments for capacity and energy pursuant to the contract will have a net present value of \$113 million less than the cost for similar capacity and energy that would be provided by the avoided unit. The actual savings could vary considerably, depending on the actual fuel costs over the period. In addition, available energy may be sold by PEF if marginal cost makes such a sale profitable.

There has been no change in the agreed arrangements relating to the capacity payments. Full capacity payments are contingent upon the biomass generator maintaining a specified confidential 12-month rolling average capacity factor. Below a specified minimum capacity factor, also confidential, there is no capacity payment, and energy will be purchased at "as available" rates. The confidential arrangements appear reasonable.

As in the original agreement, the proposed modifications do not subject PEF and its body of ratepayers to the high costs and risks associated with the research and development aspects of this project. Payments by PEF to Project LLC are entirely contingent upon the unit's demonstrated capacity and energy production. The anticipated generation from a renewable energy source will provide the benefits of fuel diversity and price stability. Once a successful installation comes on line, the possible replication of the project offers an opportunity to multiply any initial benefit.

In addition to savings for the capacity and energy provided by the Project LLC biomass generator, the contract establishes first right of refusal for PEF to purchase renewable energy credits (RECs) that will be associated with the electric energy produced from the biomass facility. These provisions have not been modified, and Staff continues to believe that there is a benefit to PEF in the provisions agreed upon and included in the contract. Any purchase of RECs would be subject to Commission review for prudent and cost effective management. Any revenue to PEF from REC sales will be credited to the utility's ratepayers through PEF's fuel recovery clause, and could increase the cost effectiveness of the contract.

Security for Capacity Payments

The contract between PEF and Project LLC does not contain any early capacity payments, so no form of security is required. PEF's capacity and energy payments to Project LLC, both on an annual and a cumulative basis, are expected to be less than avoided cost. Consistent with agreements for purchase power contracts from non-renewable resources, this contract includes completion and performance security deposits which may be provided by letter of credit or cash deposit. The amount is confidential.

Performance Guarantee

The proposed modifications to the previously approved contract reflect some of the difficulties that are typically encountered as innovative designs are developed. Until the entire operation is proven reliable, there is no guarantee of success. As was the case in the earlier contract, the agreement between PEF and the renewable energy developer protects PEF and the utility's ratepayers if the renewable project does not work as well as anticipated. Performance provisions require that the 12-month rolling average of the monthly capacity factor will be above a specified minimum threshold in order for Project LLC to receive full capacity payment. Further, if production drops below a specified minimum threshold, no capacity payment is due and payments to the QF would take the form of payments for "as available energy." The committed capacity basis for the capacity factor will be determined by the actual performance of the unit.

As in the previous contract, the proposed modified contract between PEF and Project LLC is an opportunity to encourage a renewable energy resource. In the event that the project is not successful within the limits of this modified contract, there will be no out-of-pocket expense for PEF or its ratepayers. The contract meets all requirements and rules governing QFs, and it represents an opportunity to improve the status quo. The Florida Energy Efficiency and Conservation Act (FEECA), Section 366.81, Florida Statutes, states that the use of renewable energy sources will be encouraged along with conservation of expensive resources, particularly petroleum fuels. Rule 25-17.001, Florida Administrative Code, encourages the use of renewable energy sources as a high priority. The modified contract and the associated proposed installation continue to meet the goals of FEECA and Rule 25-17.001, Florida Administrative Code. For these reasons, staff recommends that the modifications to the contract be approved.

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Issue 2: Should this docket be closed?

Recommendation: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order. (Klancke)

Staff Analysis: At the conclusion of the protest period, if no protest is filed this docket should be closed upon the issuance of a consummating order.