State of Florida

Public Service Commission

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

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

DATE: January 12, 2006

TO: Director, Division of the Commission Clerk & Administrative Services (Bayó)

FROM: Division of Economic Regulation (Sickel)
Office of the General Counsel (Keating)

RE: Docket No. 050847-EQ – Request for approval of contract with a qualifying facility for purchase of firm capacity and energy by Progress Energy Florida.

AGENDA: 01/24/06 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Arriaga

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\050847.RCM.DOC

Case Background

On November 4, 2005, Progress Energy Florida (PEF) filed a petition requesting approval of a negotiated contract for purchase of firm capacity and energy from a qualifying facility, G2 Energy FL, LLC (G2). The contract is based on planned construction of one or more small power generators, which will together operate as a Qualifying Facility (QF) pursuant to regulations of the Federal Energy Regulatory Commission. The QF will use landfill gas as its primary fuel and have a maximum generating capability of approximately 14 megawatts, (MW).

This recommendation addresses the petition for approval of the contract. The Commission is vested with jurisdiction over this matter through Sections 366.04, 366.05, 366.051, 366.06, and 366.80 -- 366.82, Florida Statutes.

Discussion of Issues

Issue 1: Should the petition submitted by Progress Energy Florida (PEF) requesting approval of a contract with a qualifying facility, G2 Energy FL, LLC (G2), for purchase of firm capacity and energy to begin in 2008 be approved?

Recommendation: Yes. Taken as a whole, the contract negotiated between PEF and G2 integrates a renewable energy source into the region. The contract also provides savings estimated at $13,370,000 present value, compared to the cost of capacity and energy from the designated avoided unit. The petition and the contract comply with the provisions of Rule 25-17.0832, Florida Administrative Code. The approval should become effective on the date the Commission's order becomes final. (Sickel)

Staff Analysis: On October 19, 2005, PEF notified the Commission by letter that a negotiated contract had been executed between the utility and a qualifying facility, G2 Energy FL, LLC (G2), for purchase of 12.8 megawatts of firm energy and capacity. The contract includes a provision for generation up to 110% of this amount, or 14 MW. The capacity payments are based on an avoided unit comparable to Hines Unit 5, a nominal 528 MW combined cycle unit having an estimated in-service date of December 2009.

On October 25, 2005, in compliance with the requirements of Rule 25-17.0832(1)(b), Florida Administrative Code, PEF filed a copy of the G2 contract, along with a summary of the terms and conditions which are associated with the contract. On November 4, 2005, PEF filed a petition requesting approval of the contract for cost recovery purposes.

The contract results from joint efforts by PEF and G2 to utilize available landfill gas for electric generation. An initial installation of a 3.2 MW generator is planned for the Bee Ridge Landfill in Sarasota County. Similar installations up to an additional 11 MW, at sites acceptable to PEF, are included under the contract terms. G2 is negotiating with owner/operators at multiple landfill sites for rights to install the generators under the terms of the contract simultaneously with PEF seeking contract approval in this docket. The contract is limited to generators that are operational and meet commercial in-service requirements by a deadline set at January 1, 2008. G2 has the right to extend that deadline on a day-for-day basis if final Commission approval of the contract does not occur within 120 days of date PEF's petition was submitted, which would be March 3, 2006.

The contract necessarily provides flexibility as to the number and location of the generation sites, since the negotiations between G2 and individual landfill owner/operators are ongoing. Additional flexibility is provided to allow for the predictable decline in the quality or flow of landfill gas; that is, the committed capacity will be adjusted over the contract period if sufficient gas flow is not available to support full scale operations. As described in the filing, anticipated annual energy production may exceed 98,000 megawatt-hours (MWh) from the combined facilities beginning January 1, 2008, and continuing through December, 2022, subject to the limitations of fuel availability.

The committed capacity will be determined by demonstrating that the facilities have achieved commercial in-service status and will be based on actual performance of the generators operating under the terms of the contract. G2 has committed to start-up testing by October 31, 2007, and all testing must be complete by the deadline set at January 1, 2008. In contrast, the traditional purchase of capacity and energy from a qualifying facility is based on a known generating capacity, and the traditional payment for avoided capacity sets a monthly payment amount per kW. The terms of this contract include an innovative method for calculating payments for avoided capacity, based on the committed capacity which can be demonstrated.

In this contract, the capacity payment depends on the QF performance for each individual month. The calculation of the payment for avoided capacity uses a rate set in terms of the amount paid per MWh produced. PEF has derived the annual capacity payment rate, based on Hines Unit 5, to achieve a breakeven point with the traditional capacity payment at approximately 90% of committed capacity. If the capacity factor drops below 50%, there is no capacity payment. The payments for monthly performance between a 50% and 90% capacity factor are basically prorated. Above 90% capacity factor, capacity payments to G2 are increased.

The energy rate payable to G2 has been fixed at $37.75/MWh for the term of the contract. The current forecasted energy price for Hines Unit 5 is $56.70/MWh for year 2008, which equates to $7.76/mmBtu cost for natural gas. The cost for gas delivered to the existing Hines units in November, 2005, was reported to be $8.946/mmBtu. If today's price of gas were to continue into the future, the savings to PEF's ratepayers would be greater than the predicted savings. In staff's opinion, it appears that the contract energy rate will produce savings when compared to fossil energy.

The petition mentions expected annual energy of 98,112 MWh, with 44,968 MWh on-peak and 53,144 MWh off-peak. The petition includes a savings projection of $13,370,000 present worth based on that level of annual energy production. However, a lesser amount of energy would produce savings corresponding in scale. For each MWh of electric energy produced, the ratepayer will benefit from both lower cost electricity and the use of a renewable energy source.

This contract is in line with the provisions and intent of the Florida Energy Efficiency and Conservation Act and Rule 25-17.001(2), Florida Administrative Code, to conserve expensive energy resources. To whatever degree the endeavor is successful and generates electric energy, there will be conservation of the limited supply of expensive fossil fuel. Since there is no financial risk to the ratepayer if a portion of the current planned renewable generation cannot be implemented within the terms of this contract, there will not be a negative impact to PEF's ratepayers.

Issue 2: Should the firm capacity and energy payments made by PEF under the provisions of this contract be approved for recovery under the Commission's periodic review of purchased power costs?

Recommendation: Yes. (Sickel)

Staff Analysis: The provisions enumerated in the contract are acceptable as described in Issue 1 above. Therefore, in accordance with Rule 25-17.0832(8), the costs to PEF that result from payments made to G2 under the terms of this contract are appropriate for recovery through the Commission's ongoing proceedings to review purchased power costs.

Issue 3: Should this docket be closed?

Recommendation: If no person whose substantial interests are affected files a protest within 21 days of the issuance of the Commission's order approving the petition and contract, this docket should be closed upon the issuance of a consummating order. (Keating, Sickel)

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.