

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 31, 2008

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

**FROM:** Division of Economic Regulation (Graves, Breman)  
Office of the General Counsel (Fleming)

*REF DB*  
*ALT TJS*  
*KEP*

**RE:** Docket No. 070726-EQ – Petition for approval of second negotiated power purchase contract for purchase of firm capacity and energy with BG&E of Florida, LLC, by Progress Energy Florida, Inc.

**AGENDA:** 02/12/08 – 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\070726.RCM.DOC

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COMMISSION  
CLERK

### Case Background

On December 14, 2007, Progress Energy Florida (PEF) filed a Petition requesting approval of a second negotiated contract (the contract) for the purchase of firm capacity and energy between BG&E of Florida, LLC (BG&E) and PEF, dated December 12, 2007.

The contract is based on BG&E constructing and owning a biomass electric generating plant located in Florida, which will operate as a Qualifying Facility (QF) pursuant to the Federal Energy Regulatory Commission (FERC). BG&E will sell 75 megawatts (MW) of capacity and energy from the facility to PEF for a term from June 1, 2011, through May 31, 2031.

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This recommendation addresses PEF's petition for approval of the contract with BG&E. The Commission has jurisdiction over this matter pursuant to Sections 366.051 and 366.081, Florida Statutes.

### **Discussion of Issues**

**Issue 1:** Should the petition submitted by Progress Energy Florida (PEF) requesting approval of a negotiated contract (the contract) with a qualifying facility, BG&E of Florida, LLC (BG&E), be approved?

**Recommendation:** Yes. The rates, terms, and conditions of the contract can reasonably be expected to contribute toward the deferral or avoidance of additional capacity construction by PEF. Payments pursuant to the contract are estimated to result in a net present value savings of \$45 million based on current fuel forecasts. (Graves, Breman)

**Staff Analysis:** BG&E will sell firm capacity and energy from the biomass facility to PEF for a term from June 1, 2011, through May 31, 2031, with a committed capacity of 75 MW. The avoided unit for which the contract is indexed is a natural gas-fired combined cycle generating facility with a summer capacity of 537 MW and an in-service date of June 1, 2013. The characteristics of this contract, and the related facility, are similar to those of a contract between BG&E and PEF which was approved November 9, 2007, by the Commission.<sup>1</sup>

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: the need for power, the cost-effectiveness of the contract, security provisions for capacity payments, and qualifying facility (QF) performance guarantees. Each of these factors is evaluated below:

#### **A. Need for Power**

According to PEF's 2007 Ten Year Site Plan, PEF's 2011 summer reserve margin excluding BG&E's capacity is estimated to be 21%. However, according to staff calculations PEF's 2013 summer reserve margin, excluding 537 MW of capacity from the avoided unit, is estimated to be 18%. The addition of the BG&E facility would raise the reserve margin to 19%. Therefore the addition of 75 MW of firm capacity and energy sold by BG&E in 2011 to PEF pursuant to the contract will not completely defer or avoid the need for additional capacity in order to meet a 20% reserve margin. It has been the Commission's policy to approve cost effective contracts, such as BG&E's, that use renewable resources as the primary fuel. Rule 25-17.001(5) (d), Florida Administrative Code, encourages electric utilities to:

Aggressively integrate nontraditional sources of power generation including cogenerators 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.

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<sup>1</sup> Order No. PSC-07-0911-PPA-EQ, issued November 9, 2007, in Docket No. 070561-EQ, In re: Petition for approval of negotiated power purchase contract for purchase of firm capacity and energy with BG&E of Florida, LLC, by Progress Energy Florida.

## **B. Cost-Effectiveness**

Traditionally, payments to QFs have been divided into two parts, capacity and energy, and are based on the cost of capacity and energy from the designated avoided unit. The traditional payment for avoided capacity is a monthly payment amount in \$/kilowatt-month. The traditional payment for energy costs are based on the current forecasted energy price of the avoided unit in \$/megawatt hours (MWh), but are adjusted as actual fuel costs are known. The terms of the contract calculate payments for the avoided energy and capacity based on a committed capacity of 75 MW. In the contract, BG&E's energy payment has been fixed and combined with the capacity payment. The contract also includes a set percentage increase of the energy payment (confidential) over the proceeding year amount. This type of payment will encourage the development of a renewable generation resource and benefit BG&E because it provides a predictable revenue stream that removes the risk of fuel cost fluctuations. PEF will pay a set amount (confidential) for each MWh of net energy delivered to the delivery point. Since BG&E will receive a monthly payment based only on the MWh generated, the contract requires that the qualifying facility must generate in order for BG&E to be paid.

Both BG&E's committed capacity of 75 MW and PEF's avoided unit were modeled at an 89% capacity factor to compare the capacity and energy payments contained in the contract. Projected payments to BG&E when compared to the capacity and energy costs of the avoided unit are expected to result in an estimated net present value savings of more than \$45 million to PEF's ratepayers over the 20 year term of the contract. These estimated savings show the contract to be cost-effective.

## **C. Security for Capacity Payments**

Rule 25-17.0832(3)(c), Florida Administrative Code, requires the QF to post some form of security to repay the utility for dollars exceeding avoided cost in the event of QF default. Article 10 of the contract states that, after the signing date of the contract, either PEF or BG&E may terminate the contract on or before a preselected date (confidential). Once this date has expired, then BG&E shall establish, fund, and deliver to PEF performance security in the amount listed in the Agreement (confidential) and maintain this fund until the fifth anniversary of the commercial operation date. After the fifth anniversary of the commercial operation date, BG&E shall maintain this fund throughout the remainder of the contract in the amount equal to the amount listed in the Agreement (confidential). PEF has sole discretion to increase (up to 50 percent) or reduce BG&E's Performance Security amount in the event that a material adverse change occurs.

Staff believes the provisions contained in the contract are sufficient to protect PEF's ratepayers in the event that BG&E defaults on its obligations.

## **D. Performance Guarantees**

The expected annual energy from the facility is 584,703 MWh at an 89% capacity factor. The energy payment has been fixed and combined with the capacity payment. Under the performance provision of the contract (Article 8.1), the total payment rate will be reduced by 10% if the plant's twelve-month rolling capacity factor drops below 50%. This reduction in

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payment due to a capacity factor below 50% is not on a sliding scale. Unlike a traditional purchased power contract, which includes capacity payments, BG&E's payments are based only on the time that the plant is generating.

Staff believes the provisions contained in the contract are sufficient to protect PEF's ratepayers if BG&E fails to deliver firm capacity and energy as specified by the contract.

### **Conclusion**

The contract between PEF and BG&E provides PEF with a viable source of electric capacity and energy that meets all requirements and rules governing QFs and small power producers. The contract is shown to be cost-effective. If a portion of the planned renewable generation cannot be implemented under the terms of this contract, the security provisions effectively mitigate the risk to the ratepayer. For these reasons, staff recommends that the contract should be approved.

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**Issue 2:** 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. (Fleming)

**Staff Analysis:** 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.