

State of Florida



# Public Service Commission

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

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COMMISSION  
CLERK

**DATE:** October 11, 2007

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

**FROM:** Division of Economic Regulation (Colson, Matlock, Garl)  
Office of the General Counsel (Fleming) *RC sum* *Y* *B* *RET* *10/11/07*

**RE:** Docket No. 070561-EQ – 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.

**AGENDA:** 10/23/07 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Skop

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\070561.RCM.DOC

### Case Background

On August 10, 2007, Progress Energy Florida (PEF) filed a Petition requesting approval of a negotiated contract for the purchase of firm capacity and energy between BG&E of Florida, LLC (BG&E) and PEF, dated July 25, 2007 (the contract). The contract is based on BG&E constructing and owning a biomass power production generating facility located in Florida, which will operate as a Qualifying Facility (QF) pursuant to the Federal Energy Regulatory Commission (FERC). The facility will have a maximum generating capability of approximately 75 megawatts (MW), using a gasified biomass product as its primary fuel. BG&E will sell capacity and energy from the facility to PEF for a term from January 1, 2011 through December 31, 2030, with a committed capacity of 75 MW. PEF has requested confidential classification

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for certain information contained in the contract and for portions of its response to staff's data request dated September 13, 2007.

The Commission has jurisdiction over this matter pursuant to section Sections 366.04, 366.05, 366.051, 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, 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 produce an estimated net present value savings of \$41 million over a 20-year term based on current fuel forecasts. (Colson)

**Staff Analysis:** Section 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 QF performance guarantees. Each of these factors is evaluated below:

**a. Need for Power**

BG&E will sell firm capacity and energy from the biomass facility to PEF for a term from January 1, 2011, through December 31, 2030, with a committed capacity of 75 MW. At a capacity factor of 89%, the expected annual energy from the facility is estimated to be 584,730 MWh. According to PEF's Ten Year Site Plan, PEF's 2011 summer reserve margin excluding BG&E's capacity is estimated to be 21%. PEF's 2011 summer reserve margin including BG&E capacity is estimated to be 22%. This increase in PEF's reserve margin after the addition of BG&E's generation is temporary. In 2013, PEF's summer reserve margin including BG&E's generation is estimated to be 19%. PEF's next planned generating unit, a 537 MW Combined Cycle plant, would increase the 2013 summer reserve margin to 24%. Therefore, there is a need for additional generation on PEF's system in the 2013 time frame.

The addition of 75 MW of firm capacity and energy sold by BG&E in 2011 to PEF pursuant to the negotiated contract will not completely defer or avoid the construction of a new generating facility by PEF. However, it has been the Commission's policy to approve facilities, such as BG&E's, that use 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 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.

**b. Cost-Effectiveness**

Over the 20-year term (2011-2030) of the negotiated contract, the expected annual energy generated by the facility is 584,730 MWh. 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. PEF's avoided unit is a 537 MW natural gas-fired combined cycle plant with an in-service date of June 1, 2013. The traditional payment for avoided capacity is a monthly payment amount in \$/kW month. The traditional payment for energy costs are based on the current forecasted energy price of the avoided unit in \$/MWh, but are adjusted as actual fuel costs are known. The terms of this contract include an innovative method for calculating payments for the avoided energy and capacity, based on committed capacity.

In this contract, BG&E's energy payment has been fixed and combined with the capacity payment. PEF will pay a set amount (Confidential) for each MWh of net energy delivered to the delivery point. The contract also includes a set percentage increase of the energy payment (Confidential) over the proceeding year amount. This innovative method of calculating payments to QFs is being proposed to encourage renewable resources. This type of payment will benefit BG&E because it provides a predictable revenue stream that removes the risk of fuel cost fluctuations from the renewable generator.

Since BG&E will receive a monthly payment based only on the MWh generated, this contract requires that the qualifying facility must generate in order for BG&E to be paid. These payments to BG&E when compared to the capacity and energy from the avoided unit are expected to result in net present value savings of \$41 million to PEF's ratepayers over the 20 year term of the contract. Both BG&E's committed capacity of 75 MW and PEF's avoided unit were modeled at an 89% capacity factor to calculate the capacity and energy payments contained in the negotiated contract and the \$41 million in forecasted savings.

**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. PEF's negotiated contract with BG&E contains provisions that protect PEF's ratepayers in the event that BG&E defaults on its obligations. 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 pre-selected 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 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 Change occurs.

**d. Performance Guarantees**

PEF's negotiated contract with BG&E contains provisions to protect PEF's ratepayers if BG&E fails to deliver firm capacity and energy as specified by the contract. 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 payment due to a capacity factor below 50% is not on a sliding scale. Unlike a traditional purchased power contract which includes capacity payments, in this contract, BG&E's payments are based only on the time that the plant is generating.

**Conclusion**

The negotiated 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. There will be no financial risk to ratepayers if a portion of the planned renewable generation cannot be implemented under the terms of this contract. For these reasons, staff recommends that the negotiated 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.