# 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 29, 2009

TO:

Office of Commission Clerk (Cole)

FROM:

Office of Strategic Analysis and Governmental Affairs (Lewis, Ellis, Clemence)

Office of the General Counsel (Hartman)

RE:

Docket No. 080533-EQ - Petition for approval of negotiated power purchase

contract for purchase of firm capacity and energy with Horizon Energy Group,

LLC, by Progress Energy Florida, Inc.

**AGENDA:** February 10, 2009 – Regular Agenda – Proposed Agency Action – Interested

Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

PREHEARING OFFICER:

Edgar

**CRITICAL DATES:** 

None

**SPECIAL INSTRUCTIONS:** 

None

FILE NAME AND LOCATION:

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# Case Background

On August 11, 2008, Progress Energy Florida, Inc. (PEF) filed a Petition requesting approval of a negotiated contract for the purchase of firm capacity and energy between Horizon Energy Group, LLC (Horizon) and PEF, dated August 5, 2008.

The contract is based on Horizon constructing and owning a combined cycle generating facility fueled by gasified municipal solid waste located in Florida, which will operate as a Qualifying Facility (QF) pursuant to Rule 25-17.080, Florida Administrative Code (F.A.C.). Horizon will sell 30 to 60 megawatts (MW) of capacity and energy from the facility to PEF for a term from January 1, 2013, through December 31, 2037.

DOCUMENT NUMBER-DATE

00717 JAN298

FPSC-COMMISSION CLERK

This recommendation addresses PEF's petition for approval of the contract with Horizon. To preserve its ability to negotiate, PEF has requested confidentiality on some aspects of the contract, as noted in this recommendation. 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 petition submitted by Progress Energy Florida, Inc. (PEF), requesting approval of a negotiated contract with a qualifying facility, Horizon Energy Group, LLC (Horizon), be approved?

<u>Recommendation</u>: Yes. Payments for capacity and energy are expected to yield \$91.8 million in net present value savings to PEF's ratepayers over the 25 year term of the contract. The performance security required in the contract sufficiently protects ratepayers in the event of default. (Lewis, Ellis, Clemence)

<u>Staff Analysis</u>: Pursuant to the terms of the negotiated contract, Horizon will sell firm capacity and energy from its combined cycle generating facility to PEF for a term from January 1, 2013, through December 31, 2037. The facility will be fueled by gasified municipal solid waste. The committed capacity of the facility will range between 30 and 60 MW, with the exact capacity to be determined upon testing of the facility. For the comparative avoided unit, the contract uses a nominal 1,161 MW Combined Cycle gas-fired plant, Suwannee River No. 4 (the Suwannee Unit), with an estimated in-service date of June 2013, as reflected in PEF's 2008 Ten-Year Site Plan.<sup>1</sup>

The terms of the negotiated contract require that Horizon have knowledge of all laws and business practices that must be followed in performing its obligations under the agreement, and that they are in compliance with all laws, except to the extent that failure to comply therewith would not have a material adverse effect on Horizon or PEF. Horizon Energy Group, LLC filed an "Application by a Foreign Limited Liability Company for Authorization to Transact Business in Florida" with the Division of Corporations, Florida Department of State, on December 29, 2008.

As required by Rule 25-17.0832(3), F.A.C., in the review of a negotiated firm capacity contract, staff must consider the following: the need for power, the cost-effectiveness of the contract, security provisions for capacity payments, and performance guarantees. Each of these factors is evaluated below.

#### A. Need for Power

After serving internal loads, the Horizon facility will provide firm capacity of approximately 30 to 60 MW to PEF. The petition indicates that 60 MW is expected to be

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<sup>&</sup>lt;sup>1</sup> PEF's 2008 Standard Offer Contract, filed on April 1, 2008 in Docket No. 080187-EQ, designated the Suwannee Unit as the avoided unit, <u>In re: Petition for approval of amended standard offer contract and COG-2 rate schedule, by Progress Energy Florida</u>. On July 15, 2008, PEF filed a petition for rule waiver and approval of a revised standard offer contract in Docket No. 080501-EI, <u>In re: Petition for waiver of Rule 25-17.250(1) and (2)(a), F.A.C., which requires Progress Energy Florida to have a standard offer contract open until a request for proposal is issued for same avoided unit in standard offer contract, and for approval of standard offer contract. The Commission approved PEF's revised standard offer contract by Order No. PSC-08-0706-TRF-EI issued October 23, 2008. The energy and capacity payments in the Horizon contract are updated and in accord with PEF's revised standard offer contract.</u>

generated, with an annual energy production of 467,787 MWh. Horizon's generating facility is expected to be in-service by January 1, 2013; however, the location of the facility has not yet been determined. It should be noted that the addition of 60 MW of firm capacity and energy from Horizon to PEF will not completely defer or avoid the need for additional capacity in order to meet a 20 percent reserve margin. However, the Horizon facility will displace energy generated by fossil fuels, thus reducing the state's dependence on these resources and promoting fuel diversity.

Staff questioned PEF as to why it chose to negotiate a contract with Horizon outside the request for proposal process (RFP) described in Rule 25-22.082, F.A.C. PEF indicated that it began negotiations with Horizon in August 2007. PEF did not issue a RFP for its next planned generating unit, Suwannee River 4, until June 12, 2008. Rule 25-17.240, F.A.C., encourages investor-owned utilities and renewable generating facilities to negotiate contracts for the purchase of firm capacity and energy to avoid or defer construction of planned utility generating units. It appears reasonable for PEF to have continued negotiations with Horizon rather than requiring Horizon to respond to the RFP.

#### **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 in \$/kilowatt-month. The traditional payment for energy costs is based on the current forecasted energy price of the avoided unit in \$/megawatt hours (MWh), but is adjusted as actual fuel costs are known. The terms of the contract calculate payments for the avoided energy and capacity based on a projected committed capacity of 60 MW. In the contract, Horizon's energy payment has been fixed and combined with the capacity payment; therefore the contract payment rate includes both capacity and energy payments. This type of payment will encourage the development of a renewable generation resource and benefit Horizon because it provides a predictable revenue stream that removes the risk of fuel cost fluctuations. However, if fuel costs decline in the future, PEF remains obligated to pay the contracted amount and may seek to recover the costs from ratepayers through the fuel costs recovery clause, subject to Commission review.

PEF will pay a set amount (confidential) for each MWh of net energy delivered to the delivery point. Since Horizon will receive a monthly payment based only on the MWh generated, the contract requires that the qualifying facility must generate in order for Horizon to be paid.

Both Horizon's projected committed capacity of 60 MW and PEF's avoided unit were modeled at an 89 percent capacity factor to compare the capacity and energy payments contained in the contract. Projected payments to Horizon 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 \$91 million to PEF's ratepayers over the twenty-five year term of the contract. Savings are projected to be \$1.9 million in the first year of the contract and increase to \$91.8 million by the twenty-fifth year of the contract. The 25 year average fuel forecast is \$12.23/MMBTU for this scenario. These estimated savings show the contract to be cost-effective.

As a result of recent energy price volatility, sensitivity analyses of the contract were requested to judge the adequacy of its fixed price. PEF provided staff with its 2008 Ten Year Site Plan fuel forecasts, including a base, low, and high forecast for the 2013 through 2037 period. These forecasts show net present value savings of \$25 million for the low case and \$184 million for the high case. While these fuel forecasts were timely when the contract was signed, they had since become outdated. Therefore, staff requested the most recent fuel price forecast, which showed a net present value savings of \$152 million. The 25 year average fuel forecast is \$14.85/MMBTU in this scenario. PEF estimates that the 25 year average fuel forecast would have to drop to \$6.40/MMBTU to make the Horizon contract a break-even deal. Staff believes that these analyses show that the contract, while a form of hedging, appears reasonable given current fuel forecasts provided by PEF, with a high likelihood of benefits accruing to PEF's ratepayers.

# C. Security for Capacity Payments

Rule 25-17.0832(3)(c), F.A.C., requires the QF to post some form of security to repay the utility for dollars exceeding avoided cost in the event of QF default. The contract requires Horizon to maintain performance security in a set amount (confidential) based upon the committed capacity and Horizon's credit rating. In the event of default, PEF would be eligible to collect this amount in full.

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

#### D. Performance Guarantees

The expected annual energy from the facility is 467,787 MWh at an 89 percent capacity factor. The energy payment has been fixed and combined with the capacity payment. Under the performance provision of the contract, the total payment rate will be reduced by 10 percent if the facility's twelve-month rolling capacity factor drops below a set amount (confidential). Unlike a traditional purchased power contract, which includes capacity payments, Horizon's payments are based only on the time that the plant is generating. If Horizon fails to maintain a capacity factor of a set amount (confidential) for twelve consecutive months, it will be considered an event of default and PEF will receive the full performance security discussed above.

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

# Conclusion

It has been the Commission's policy to approve cost-effective contracts, such as Horizon's, that use renewable resources as the primary fuel. Rule 25-17.001(5) (d), F.A.C., 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.

Staff believes the characteristics of the capacity and energy associated with this contract are sufficiently desirable to encourage the use of renewable fuels in Florida.

The contract between PEF and Horizon 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 be approved.

**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. (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 issuance of the Consummating Order.