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: July 1, 2009

TO: Office of Commission Clerk (Cole)

FROM: Office of Strategic Analysis and Governmental Affairs (Matthews, Ellis)
Office of the General Counsel (Brown)

RE: Docket No. 090146-EQ – Petition by Tampa Electric Company for approval of extension of small power production agreement with City of Tampa.

AGENDA: 07/14/09 – 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: S:\PSC\SGA\WP\090146.RCM.DOC

Case Background

On March 23, 2009, Tampa Electric Company (TECO) filed a Petition requesting approval of an extension of its small power production agreement (Extension) with the City of Tampa (City). The Extension is based upon previous contractual agreements with the City (the First Agreement), last amended and approved by the Commission in Order No. 21862-A, issued September 8, 1989, in Docket No. 890736-EQ, In re: Petition of Tampa Electric Company for approval of amendment to small power agreement with City of Tampa. TECO currently purchases 15.5 megawatts (MW) of capacity and associated energy under the First Agreement. The contract is based on the City's McKay Bay Refuse to Energy Facility (Facility), located in Hillsborough County, Florida.

After an extended outage resulting in an uprate for the Facility, the City signed a second contract with TECO (the 2006 Agreement) for an additional 3.5 MW of capacity, which was approved by the Commission in Order No. PSC-06-0943-PAA-EQ, issued November 13, 2006, in Docket No. 060573-EQ, In re: Petition of Tampa Electric Company for approval of 2006 small power production agreement with City of Tampa. Combined, the First Agreement and the 2006 Agreement represent 19.0 MW of firm capacity and associated energy, with a common expiration date of July 31, 2011.

The Extension filed on March 23, 2009, seeks to amend the First Agreement by increasing the committed capacity to include that capacity currently purchased under the 2006 Agreement, extend the term of the contract by an additional 13 years, and make other modifications discussed below.

The Commission has jurisdiction over this matter pursuant to Sections 366.051 and 366.81, F.S.

Discussion of Issues

Issue 1: Should the Commission approve, for purposes of cost recovery, the proposed extension of a small power production agreement between Tampa Electric Company (TECO) and the City of Tampa?

Recommendation: Yes. Payments for capacity and energy are expected to result in a net present value savings to ratepayers of between $8.6 million and $15.6 million as compared to TECO's Standard Offer Contract using a 2012 combustion turbine as the avoided unit. (Matthews, Ellis)

Staff Analysis: TECO has purchased 15.5 MW of capacity and energy generated by the Facility under previous agreements since 1983, and an additional 3.5 MW since 2006. The Facility is fueled by municipal solid waste, using a steam turbine to generate electricity. Municipal solid waste is defined as a renewable resource, specifically biomass, in Section 366.91(2)(a), F.S., and in Rule 25-17.210, Florida Administrative Code (F.A.C.). The Commission has a long history of supporting the purchase of electric energy generated from renewable sources, such as municipal solid waste, by electric utilities.

Pursuant to Rule 25-17.0832(3), F.A.C., in reviewing a negotiated firm capacity contract, the Commission considers the following: the need for power, the cost-effectiveness of the contract, security provisions for capacity payments, and performance guarantees. Each of these considerations are evaluated below.

Need for Power

TECO currently purchases a total of 19 MW of capacity under the First Agreement and the 2006 Agreement, which both expire on July 31, 2011. This 19 MW of capacity is included in TECO's Ten Year Site Plan. Without the Extension, and taking into account planned reductions in firm capacity imports from other sources, TECO's reserve margin will drop below its 20 percent planning threshold to 19.3 percent in 2012. Approval of the Extension would increase TECO's reserve margin to 19.7 percent in 2012.

While the Extension does not completely defer or avoid the need to construct additional generating units or purchase generating capacity, it does reduce the total amount required. In addition, the energy and capacity provided by the Facility will continue to displace energy generated by fossil fuels, thus reducing the state's dependence on these resources and promoting fuel diversity.

Cost-Effectiveness

Under the terms of the Extension, the City will receive fixed capacity payments that will be paid only if the Facility achieves a twelve-month rolling average capacity factor of not less than 70 percent. The actual capacity factor is expected to be higher based on the historical performance of the Facility. Over its last seven years of operation, the Facility has in fact achieved an average capacity factor of 95 percent. The energy payments are calculated using the actual capacity factor along with the lesser of an hour-by-hour comparison of the fuel component of TECO's system avoided energy costs and Big Bend Unit 4, a coal fired unit owned and operated by TECO.

Because coal units generally represent baseload generation and have an energy cost that is typically lower than other fossil-fueled generation, the cost to be used as a basis for calculating energy payments is expected to primarily be that of Big Bend 4. If the average capacity factor of the Facility falls below 70 percent, no capacity payment is due to the City and only the energy payment will be made.

The petition filed by TECO on March 23, 2009, states that the Extension provides a savings to ratepayers of $2.2 million over the term of the contract. However, after additional information was obtained staff determined that this projected savings was based on an analysis using a high capacity factor of 95 percent and was calculated in comparison to the system as-available energy cost. This comparison is not appropriate because the Extension represents a contract for firm energy whereas the analysis provided by TECO contained only an as-available energy cost. In fact, when the minimum capacity factor of 70 percent is used in the original analysis, the comparison to the as-available energy cost shows a net cost to ratepayers of $8.8 million.

On April 1, 2009, TECO filed a petition for approval of a Standard Offer based on a 2012 combustion turbine as the avoided unit. Staff performed a more suitable comparison between the Extension and the Standard Offer contract. This analysis shows that when using a capacity factor of 70 percent, the Extension affords a net savings to ratepayers of $8.6 million over the contract term. When using a 95 percent capacity factor, the savings increases to $15.6 million.

Security for Capacity Payments

The Extension modifies the First Agreement by including a clause that allows either the City or TECO to discontinue the contract on any of three dates, without penalty. These dates are August 1, 2014, August 1, 2017, and August 1, 2020. Based on the net present value of the contract on these dates compared to that of the Standard Offer, there does not appear to be any adverse consequences to the ratepayers if the contract is in fact canceled.

Performance Guarantees

The Extension makes no amendment to the non-performance provisions in the First Agreement. Staff believes these provisions to be sufficient protection for ratepayers in the instance of non-performance by the Facility.

Conclusion

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 continued use of the capacity and energy associated with the Facility represents an encouragement of renewable fuels in Florida. The Extension provides TECO's customers with 19.0 MW of capacity and energy that is potentially below the as-available energy cost, and that is generated using a renewable fuel source. Overall, the Extension reperesents a good value for TECO's ratepayers, and should be approved.

Issue 2: 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 issuance of a consummating order. (Brown)

Staff Analysis: 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 issuance of a consummating order.