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COMMISSION CLERK

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

DATE: March 18, 2004

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

FROM: Division of Economic Regulation (Harlow, Colson)
Office of the General Counsel (Vining)

RE: Docket No. 030959-EI – Petition by Tampa Electric Company for approval of extension of Pilot Green Energy Rate Rider and Program through December 2006.

AGENDA: 03/30/04 – Regular Agenda – Tariff Filing – Interested Persons May Participate

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\030959.RCM.DOC

Case Background

On April 17, 2000, the Commission issued Order No. PSC-00-0754-PAA-EG, in Docket No. 991791-EG, In Re: Approval of Demand-Side Management Plan of Tampa Electric Company, approving Tampa Electric Company's (TECO) demand-side management plan. The Commission's order included approval of TECO's Conservation Research and Development (R&D) Program, which provided for $750,000 of ratepayer funds over five years to finance TECO's conservation R&D efforts, including renewable energy related research.

On June 8, 2000, TECO filed a petition for a three-year pilot green pricing program. TECO's petition was in response to the stipulation between TECO and the Legal Environmental Assistance Foundation, Inc., as part of Docket No. 971007-EG, TECO's demand-side management goal-setting docket. On September 25, 2000, the Commission issued Order No. PSC-00-1741-TRF-EI, in Docket No. 00697-EI, In Re: Petition by Tampa Electric Company for Approval of a Pilot Green Energy Rate Rider and Program, approving TECO's pilot green pricing program through December 31, 2003. The program was offered to all customer classes. Customers taking service under the green energy rate rider paid $5 per month in addition to their applicable tariff rates for each 50 kWh block of green energy purchased. TECO provided renewable energy to participating customers from three company-owned sources: 1) an 18 kW photovoltaic array located at Tampa's Museum of Science and Industry; 2) a 30 kW micro-turbine fueled with land-fill gas; and, 3) co-firing biomass fuels in TECO's existing coal-fueled generators. The Commission also approved an allocation of $100,000 from TECO's Conservation R&D Program to partially fund the green pricing program. On June 4, 2001, the Commission issued Order No. PSC-01-1238-TRF-EI, in Docket No. 010423-EI, In Re: Petition by Tampa Electric Company for Approval of Modification to Pilot Green Energy Rate Rider and Program, which eliminated the purchase limit of five blocks of renewable energy per month per participating customer.

On October 1, 2003, TECO filed a petition requesting approval to extend the pilot green energy program through December 31, 2006. TECO also proposed increasing the energy block size to 100 kWh from the current 50 kWh, while holding the customer contribution constant at $5 per block per month. Further, TECO requested a $150,000 allocation from its Conservation R&D Program to partially fund the program over the proposed extension.

On January 5, 2004, the Commission issued Order No. PSC-04-0009-TRF-EI, In Re: Petition by Tampa Electric Company for Approval of Extension of Pilot Green Energy Rate Rider and Program through December 2006. The Commission conditionally approved TECO's petition for extension of the green energy pilot program until the program could be revisited after additional information submitted by TECO could be reviewed. The Commission required TECO to provide a business plan for the proposed program extension which shows the assumptions, budgets, marketing programs, and estimated penetration rates. TECO was also required to explain whether, after the three-year extension, the program would be self-sustaining. If the program is not expected to be self-sustaining, TECO was required to indicate what level of subsidy it anticipates would be necessary to continue the program beyond the three-year extension.

On January 30, 2004, TECO filed the required additional information regarding the extension of its pilot green energy program. This recommendation will: 1) provide further detail on the results of the first three years of the pilot program; 2) discuss the information filed by TECO on January 30, 2004; and, 3) address TECO's request for final approval of the program's extension through December 31, 2006.

The Commission has the authority to consider these matters pursuant to Sections 366.82(2), 366.05, 366.06, and 366.075, Florida Statutes.

Discussion of Issues

Issue 1: Should the Commission approve Tampa Electric Company's (TECO) petition for an extension of the Pilot Green Energy Rate Rider and Program through December 31, 2006?

Recommendation: Yes. TECO has shown that under reasonable assumptions, the program can be self-sustaining by the end of the proposed three-year extension. TECO's revised marketing and pricing approach should result in increased participation levels. The proposed extension should give TECO ample time to determine if the program can be self-sustaining. TECO's request for an allocation capped at $150,000 from its Conservation R&D Program should also be approved. TECO should recover annual expenses in excess of annual revenues through the ECCR clause, capped at $150,000 over the three-year period. TECO should be required to file semi-annual progress reports, which include the participation levels achieved, energy produced, and cost and revenue estimates.

Staff Analysis:

Program Results from 2001 through 2003: TECO did not achieve its projected participation levels in the pilot green energy program during its initial three-year period. TECO originally estimated that an average 2,182 blocks of renewable energy would be purchased by participants each month. Through December 2003, 231 customers were participating in the program, purchasing a total of 320 blocks of renewable energy per month, resulting in 458,100 kWh of renewable energy purchased over the initial three-year period. The total costs for the program were $193,920, with $95,131 recovered from participants, and the remaining $98,789 recovered from the general body of ratepayers through the ECCR clause.

TECO's incremental production expense per kWh was $1.14 for photovoltaic energy, $.095 for land-fill gas fueled energy, and $.009 for biomass fueled energy. Photovoltaic energy is by far the most expensive; however, TECO utilizes this energy first because, while the capital costs were high, the marginal costs of running the array are negligible. As program participation increased, TECO included lower cost energy from the recently installed land-fill gas fueled micro-turbine, and from the least-cost option, co-firing biomass in existing coal-fueled generators. Increased participation in the program resulted in a reduced incremental production expense per kWh. Therefore, the key to achieving a self-sustaining program is increasing participation in order to lower overall cost.

TECO's marketing efforts during the first three years of the program were focused on traditional utility approaches, including bill inserts, newspaper and television advertisements, messages on customers' bills, post cards, trade shows, door hangers, and billboards. TECO also used a targeted mailing for customers identified as environmentally conscious, placed information on its website, and provided renewable energy related presentations to civic organizations. TECO found that traditional marketing approaches are not sufficient to encourage the participation levels required to achieve a self-sustaining program. As a result, TECO plans to adopt a more targeted marketing approach if the proposed program extension is approved.

TECO's Proposed Program Extension: Pursuant to Commission Order No. PSC-04-0009-TRF-EI, the Commission required TECO to provide a business plan for the proposed program extension which shows the assumptions, budgets, marketing programs, and estimated penetration rates. TECO was also required to explain whether, after the three-year extension, the program would be self-sustaining. TECO's filing appears to meet the Commission's requirements. TECO provided a business plan for the proposed three-year extension, including: 1) the marketing plan; 2) participation and renewable energy consumption projections; and, 3) a financial schedule outlining the projected expenses, revenues and the ECCR contribution. TECO's business plan provides for a three-pronged approach to achieving a self-sustaining program, including a more targeted marketing approach, a changed pricing strategy, and increased use of low-cost biomass-fueled energy. TECO also provided a sensitivity analysis to its projections in response to a request by staff. TECO expects "to have a self-sustaining renewable energy program at the end of the current three-year pilot period (2004-2006)." TECO further stated that after 2006, "no further cost support or research and development funding through the ECCR clause is anticipated."

As discussed above, TECO's traditional marketing approach did not result in the expected participation levels during the initial three-year pilot program. In order to increase participation levels in the proposed program extension, TECO plans to hire a marketing consultant who is "well versed in consumer advocacy initiatives" to develop a more targeted marketing approach. The consultant will be paid a base fee of $16,000 with a potential performance fee of $24,000 for obtaining subscriptions for an average of 50 incremental blocks of renewable energy per month during 2004. If the consultant is unable to achieve the required level of participation, the performance fee will be reduced accordingly. TECO has already begun developing several new marketing strategies based on initial recommendations from the consultant.

TECO's proposed modification in the pricing structure of the program is also designed to increase participation. TECO plans to increase the monthly block size to 100 kWh from the current 50 kWh, while holding the price constant at $5 per block per month. This effectively reduces the incremental kWh charge for renewable energy from 10 cents to 5 cents per kWh. TECO expects this will increase participation levels of price sensitive customers, particularly, commercial customers.

TECO provided a three-year financial schedule for the proposed extension. If TECO's projected participation levels materialize, the program is expected to be self-sustaining in year 2007. TECO assumes that its marketing consultant will achieve 50 incremental blocks of renewable energy per month during 2004, and will receive both the $16,000 base fee and maximum performance fee of $24,000. During 2005 and 2006, TECO assumes the current average subscription rate of 10 incremental blocks of energy per month. TECO based its incremental renewable energy expenses on the actual expenses experienced from 2000 through 2003. Over the three-year extension, TECO expects program expenses of $236,729, with revenues of $164,100. TECO expects to recover the remaining costs through ECCR, with recovery capped at $150,000. TECO's cost estimates appear to be reasonable.

Staff requested a sensitivity analysis of the proposed program extension based on the current average subscription rate of 10 incremental blocks of energy per month, with just the base fee of $16,000 for the consultant included. Under this scenario, TECO estimates total costs of $199,563, with total revenues of $90,900 during 2004 through 2006. In year 2007, TECO's program is not self-sustaining, with costs in excess of revenues of $19,078.

Staff believes that TECO has shown that under reasonable assumptions, the program has the potential to be self-sustaining by the end of the proposed three-year extension. TECO's revised marketing and pricing approach should result in increased participation. Further, TECO's fee structure for its marketing consultant, which includes a financial incentive based on participation, should encourage participation while minimizing costs if the required participation level does not materialize. The proposed three-year extension should give TECO ample time to determine if the program can be self-sustaining. The program will also provide TECO with the opportunity to obtain operational expertise from further experiments with co-firing biomass in existing coal units and possibly gasifying biomass for use in natural-gas fired units. Therefore, staff recommends that TECO's proposed program extension should be given approval through December 31, 2006. TECO's request for an allocation capped at $150,000 from its Conservation R&D Program should also be approved. TECO should recover annual expenses in excess of annual revenues through the ECCR clause, capped at $150,000 over the three-year period.

Staff cautions, however, that it is evident from the sensitivity analysis that TECO's expectations that the program will be self-sustaining by 2007 are highly dependent on whether the estimated participation levels are achieved, particularly in the first year of the proposed extension. Staff therefore recommends that TECO be required to provide reports on the program's progress every six months. These reports should include the participation levels achieved, energy produced, and cost and revenue estimates. Staff will use these reports to monitor the program. If the necessary participation levels to achieve a self-sustaining program do not appear to be materializing, staff will bring this matter before the Commission.

Issue 2: Should this docket be closed?

Recommendation: Yes, if Issue 1 is approved, this tariff should become effective March 30, 2004. If a protest is filed within 21 days of the issuance of the order, this tariff should remain in effect with any increase held subject to refund pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order. (Vining)

Staff Analysis: If Issue 1 is approved, this tariff should become effective March 30, 2004. If a protest is filed within 21 days of the issuance of the order, this tariff should remain in effect with any increase held subject to refund pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order.