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ORIGINAL

June 8, 2000

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RECORDS AND REPORTING

Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

000697-ET

Re: Petition by Tampa Electric Company for Approval of a Pilot Green Energy Rate Rider and Program

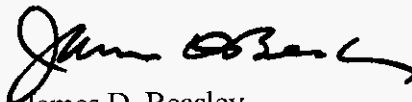
Dear Ms. Bayo:

Enclosed for filing in the above-styled matter are the original and fifteen (15) copies of Tampa Electric Company's Petition for Approval of a Pilot Green Energy Rate Rider and Program.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

JDB/pp
Enclosures

- APP _____
- CAE _____
- CMP _____
- COM _____
- CTR _____
- ECR _____
- LEG _____
- OPC _____
- PAI _____
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FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER-DATE

07034 JUN-88

FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ORIGINAL

In re: Petition by Tampa Electric)
for Approval of a Pilot Green)
Energy Rate Rider and Program.)
_____)

DOCKET NO.
FILED: June 8, 2000

**PETITION BY TAMPA ELECTRIC COMPANY FOR APPROVAL OF A PILOT
GREEN ENERGY RATE RIDER AND PROGRAM**

Tampa Electric Company ("Tampa Electric" or "the company") pursuant to Section 366.075, Florida Statutes and Rule 25-17.015 (4) and (5), Florida Administrative Code, petitions the Commission for approval of a three-year green energy pilot program and rate rider ("GE rate rider") and in support thereof states:

1. The name, address and telephone number of the petitioner are as follows:

Tampa Electric Company
Post Office Box 111
Tampa, FL 33601
(813) 228-4111
(813) 228-1770 (fax)

2. Tampa Electric requests that copies of all pleadings, orders, notices and other documents submitted in this proceeding be furnished to the following:

Angela Llewellyn
Administrator, Regulatory Coordination
Tampa Electric Company
Post Office Box 111
Tampa, FL 33601
(813) 228-1752
(813) 228-1770 (fax)

Lee L. Willis
James D. Beasley
Ausley & McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115
(850) 222-7952 (fax)

3. In this petition, Tampa Electric seeks approval of the GE rate rider and pilot program which will provide its residential, commercial and industrial customers an opportunity

DOCUMENT NUMBER-DATE

07034 JUN-88

FPSC-RECORDS/REPORTING

to purchase 50 kWh blocks of renewable, environmentally friendly (“green”) energy from a portfolio of green energy sources. The green energy generated from these resources will displace energy otherwise produced from non-renewable fossil fuels. The proposed tariff sheet is provided in standard and legislative formats as Exhibit “A” and Exhibit “B”, respectively.

4. Tampa Electric’s portfolio of green energy will initially include solar energy from company-owned photovoltaic (“PV”) generating facilities and green energy from biomass fuels utilized in existing steam generating facilities. PV technology, considered one of the most environmentally friendly energy generating technologies, uses solar cells to convert the radiant energy of sunlight into electric power with zero emissions. Biomass fuel is any renewable plant-derived material (e. g. tree trimmings and yard clippings, process waste material from agricultural crops such as sugar cane and rice, and energy crops grown specifically for the purpose) that can be used as a fuel to produce energy with less SO₂ and NO_x emissions than would otherwise be produced from non-renewable fossil fuels.

5. On a kWh basis, the costs of PV and biomass are at opposite ends of the scale. PV facilities are quite expensive and only generate energy during daylight hours. Therefore, PV energy is significantly more costly than many other electric generating technologies because of PV’s low energy output relative to its high capital costs. In contrast, energy produced from biomass fuel is relatively inexpensive because the fuel, which is readily available from local sources (particularly in Florida with its nearly year-round growing season), requires little or no incremental capital investment when utilized in existing steam generating facilities and the energy can be produced in larger quantities at any hour of the day. By supplementing the high-cost, limited quantity PV energy with lower-cost, higher volume biomass energy, a greater

quantity of renewable energy is produced and the average price of the green energy becomes more affordable for ratepayers.

6. For the period of the pilot, Tampa Electric's green energy program will be comprised primarily of energy generated from an 18 kW PV array installed at the Museum of Science and Industry ("MOSI") in Tampa, Florida; from additional newly constructed PV facilities added as program participation warrants new construction; and from existing steam generating facilities capable of utilizing biomass fuel. Additional PV facilities added as part of this program will be installed at "high visibility" locations, similar to MOSI, in an effort to educate customers regarding the benefits and operations of PV facilities and to promote green energy alternatives. The PV facilities utilized by this program will support the stipulation entered into by Tampa Electric and the Legal Environmental Assistance Foundation, Inc. ("LEAF") as part of the Demand Side Management ("DSM") goals-setting docket (Docket No. 971007-EG).

7. Although PV and biomass are the two renewable resources currently proposed to generate energy for this rider, during the pilot period, Tampa Electric will continue to evaluate other renewable energy alternatives (e.g. micro-turbines fueled by landfill methane gas, hydrogen-powered fuel cells, etc.) for future inclusion in its green energy portfolio. The company will also evaluate supplementing its generated green energy with wholesale market purchases of green energy derived from renewable sources such as wind, heat from the earth's interior (geothermal), water (hydroelectric), and biomass (including designated energy crops). During the pilot period and beyond, Tampa Electric expects to shift the blend of resources more toward PV and other emerging alternatives as the costs of these alternatives decline relative to increased market acceptance.

8. Tampa Electric is requesting that the green energy pilot program be funded through two sources; customer participation and a research and development (“R&D”) allocation from the company’s approved Conservation R&D Program. Specific to program revenues from customer participation, customers taking service under this rider will pay on a monthly basis, in addition to their applicable tariff rates, a premium of \$5 for each 50 kWh block of green energy purchased. Funds generated from the blended energy mix above the incremental costs of the program will be reinvested in the deployment of additional PV systems and/or other green energy-compliant generating resources as participation increases. Projections indicate that a minimum of 32 kW of incremental PV capacity can be installed during the pilot period.

9. Tampa Electric’s request for an allocation from the approved Conservation R&D Program is \$100,000. This amount will be utilized during the three-year pilot for funding the overall administration of the program, billing set-up costs, monitoring and evaluating program progress, testing alternative marketing efforts, and investigating other incrementally new renewable resources. These expenditures will be recovered through the Energy Conservation Cost Recovery (“ECCR”) Clause and will be subject to normal Commission review for prudence.

10. Tampa Electric is requesting adjustments to the Fuel and Purchased Power Cost Recovery Clause (“Fuel Clause”) and the Environmental Cost Recovery Clause (“ECRC”) as a means of crediting the program for the incremental differences in cost and SO₂ emissions in between the green energy and energy otherwise generated or purchased from traditional resources. Specifically, through the Fuel Clause, the program would receive a credit for the differential costs (\$/MMBtu) between the biomass fuel cost and the coal displaced by the use of biomass and a credit equal to the avoided system average fuel and purchased power cost

(\$/MWH) for energy generated by the PV facilities. A credit equal to the market price for SO₂ allowances (\$/Ton) will be provided through the ECRC for the SO₂ emission reductions attributed to biomass fuel. During the pilot program period, the company will file annual updates integral to the projection and true-up filings that will detail customer participation levels, acceptance of the program by the public, financial results, emissions reductions, and other statistical and program specific analyses.

11. Cost support for the \$5 monthly charge, which is the incremental, additional cost of green energy above the standard tariff, is provided in Exhibit "C". A customer may purchase up to a maximum of five 50 kWh blocks of green energy aggregated from Tampa Electric's renewable portfolio. The limitation on the number of blocks per customer is requested to enable subscription by a larger number of customers desiring to purchase; however, the company may request that this limitation be revised in a future filing when access to additional resources and customer demand make it feasible to do.

12. A line item will be added to the bill of each customer taking service under the GE rate rider. The line item will indicate the number of 50 kWh green energy blocks purchased and the total green energy charge assessed (calculated by taking \$5 times the number of purchased 50 kWh blocks). As with all other charges on the otherwise applicable rate, additional Florida gross receipts tax and applicable franchise fees and/or taxes will apply.

13. The program will be optional and will be available to all Tampa Electric retail customers. The initial term of service for customers under the GE rate rider is 12 months. Customers may request termination of the service by providing a two-month prior notice, provided such notice is given after the tenth month of service. After completion of the initial 12-month term, service will be provided thereafter on a month-to-month basis. If the customer

terminates service and subsequently decides to re-subscribe, the customer may conditionally reestablish service based on a new 12-month initial term and adequate availability of unsubscribed green energy blocks.

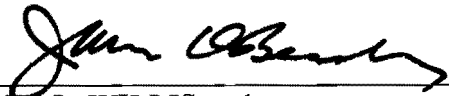
14. The company will develop and provide regular communications regarding green energy offerings to all customer segments. The company has established and will maintain an environmental web site and will provide communications via a variety of media such as bill inserts, Interactive Voice Response Unit, direct mail, printed advertisements, press releases, trade shows, internal publications, and direct customer contact. Informational brochures will be developed and circulated at MOSI, at trade shows, and through direct mailings. Customer participation will be recognized periodically. Market research compiled by the National Renewable Energy Laboratory (“NREL”), internal research, and other data sources will be utilized in the development of marketing materials. In addition, the company will be seeking opportunities to partner with the Florida Solar Energy Center (“FSEC”), NREL, local environmental groups, and local school districts to develop and deliver program specific information as well as secure program subscribers.

15. Tampa Electric will periodically assess the status of the program during the pilot period to determine if customer participation and/or continued availability of green energy supply warrant continuation. Should customer participation and cost recovery be satisfactorily achieved such that the program can be sustained on a stand-alone basis at the end of the pilot program period, Tampa Electric expects to file for approval of a permanent green energy offering.

16. Tampa Electric has received support for its green energy pilot program from FSEC whose letter of support is provided herein as Exhibit “D”.

WHEREFORE, Tampa Electric respectfully requests that the Commission grants approval of this pilot green energy rate rider and pilot program and requests that it be effective by August 1, 2000.

DATED this 8th day of June, 2000.



LEE L. WILLIS and
JAMES D. BEASLEY
Ausley & McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC
COMPANY

Tampa Electric Company
Exhibit A
Proposed Tariff Sheet - Standard Format

GREEN ENERGY RIDER - PILOT PROGRAM**(OPTIONAL)****SCHEDULE: GE****RATE CODE: 910**

AVAILABLE: To all customers served throughout the Company's service area. Pilot Program available until December 31, 2003.

APPLICABLE: Applicable, upon request, to all customers in conjunction with all standard rates. Customer billing will start on the next billing cycle following receipt of the service request.

CHARACTER OF SERVICE: Green Energy Rider customers will be served from the existing electrical system. Customers may purchase 50 kWh blocks of green energy produced at or purchased from photovoltaic facilities, facilities utilizing biomass fuel, and/or other clean, renewable energy sources. The green energy may not be specifically delivered to the customer, but will displace energy that would have otherwise been produced from traditional fossil fuels.

LIMITATION OF SERVICE: Multiple 50 kWh blocks up to a maximum of 5 blocks per customer per month. Customers requesting service under the rider will be accepted on a first-come first-served basis subject to availability of green energy. If additional green energy is not available, customers requesting service under the optional rider may request to be put on a waiting list until additional green energy can be secured to serve their request.

MONTHLY RATE: \$5.00 per 50 kWh premium in addition to charges applied under otherwise applicable rate schedules.

TERM OF SERVICE: Service under the GE rider shall be for a term of one (1) year and may be terminated by the customer with two (2) months notice. Such two months notice to terminate can be given at any time following the tenth month of service. After completion of the initial 12-month term, service will be provided thereafter on a month-to-month basis. Changes in the number of blocks purchased will not initiate a new term of service nor be counted as a termination of service.

ISSUED BY: J. B. Ramil, President**DATE EFFECTIVE:**

Tampa Electric Company
Exhibit B
Proposed Tariff Sheet - Legislative Format

GREEN ENERGY RIDER - PILOT PROGRAM

(OPTIONAL)

SCHEDULE: GE

RATE CODE: 910

AVAILABLE: To all customers served throughout the Company's service area. Pilot Program available until December 31, 2003.

APPLICABLE: Applicable, upon request, to all customers in conjunction with all standard rates. Customer billing will start on the next billing cycle following receipt of the service request.

CHARACTER OF SERVICE: Green Energy Rider customers will be served from the existing electrical system. Customers may purchase 50 kWh blocks of green energy produced at or purchased from photovoltaic facilities, facilities utilizing biomass fuel, and/or other clean, renewable energy sources. The green energy may not be specifically delivered to the customer, but will displace energy that would have otherwise been produced from traditional fossil fuels.

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ISSUED BY: J. B. Ramil, President

DATE EFFECTIVE:

Tampa Electric Company
Exhibit C
Cost Support for Green Energy Pilot Program

Cost Support for Tampa Electric Company's Green Energy Pilot Program

Annual Revenue Requirements (1)	Year 1			Year 2			Year 3			Three-Year Average		
	\$	¢/kWh	% of Total	\$	¢/kWh	% of Total	\$	¢/kWh	% of Total	\$	¢/kWh	% of Total
Photovoltaic Systems												
O&M	1,200	0.1	0.7%	2,400	0.2	1.3%	3,600	0.2	1.9%	2,400	0.18	1.4%
Credit for Displaced Fossil Fueled Energy (2)	(406)	(0.0)	-0.2%	(833)	(0.1)	-0.5%	(1,258)	(0.1)	-0.7%	(832)	(0.06)	-0.5%
<u>Cost of Capital</u>	<u>28,307</u>	<u>3.0</u>	<u>17.4%</u>	<u>70,241</u>	<u>5.2</u>	<u>38.1%</u>	<u>109,155</u>	<u>6.7</u>	<u>58.9%</u>	<u>69,234</u>	<u>5.29</u>	<u>39.0%</u>
Sub-Total Photovoltaic Systems	29,101	3.1	17.9%	71,809	5.4	39.0%	111,497	6.8	60.2%	70,802	5.41	39.9%
Biomass												
O&M and Fuel Handling Expense	10,660	1.1	6.5%	15,237	1.1	8.3%	18,891	1.2	10.2%	14,930	1.14	8.4%
Cost of Capital	1,361	0.1	0.8%	1,283	0.1	0.7%	1,180	0.1	0.6%	1,275	0.10	0.7%
Credit for Avoided SO2 Allowances (3)	(694)	(0.1)	-0.4%	(1,032)	(0.1)	-0.6%	(1,321)	(0.1)	-0.7%	(1,016)	(0.08)	-0.6%
<u>Credit from Fuel Recovery Clause (4)</u>	<u>(5,840)</u>	<u>(0.6)</u>	<u>-3.6%</u>	<u>(8,607)</u>	<u>(0.6)</u>	<u>-4.7%</u>	<u>(11,102)</u>	<u>(0.7)</u>	<u>-6.0%</u>	<u>(8,516)</u>	<u>(0.65)</u>	<u>-4.8%</u>
Sub-Total Biomass	5,486	0.6	3.4%	6,882	0.5	3.7%	7,648	0.5	4.1%	6,672	0.51	3.8%
Green Energy Program												
Administrative (5) (6)	25,100	2.6	15.4%	25,630	1.9	13.9%	26,170	1.6	14.1%	25,633	1.96	14.4%
Billing Set-up (6)	23,100	2.4	14.2%	0	0.0	0.0%	0	0.0	0.0%	7,700	0.59	4.3%
<u>Marketing and Sales</u>	<u>80,000</u>	<u>8.4</u>	<u>49.1%</u>	<u>80,000</u>	<u>6.0</u>	<u>43.4%</u>	<u>40,000</u>	<u>2.4</u>	<u>21.6%</u>	<u>66,667</u>	<u>5.09</u>	<u>37.6%</u>
Sub-Total Program	128,200	13.5	78.8%	105,630	7.9	57.3%	66,170	4.0	35.7%	100,000	7.64	56.3%
Total Revenue Requirements	162,787	17.2	100%	184,320	13.8	100%	185,315	11.3	100%	177,474	13.55	100%

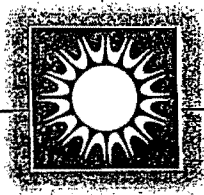
Annual Green Energy Produced (kWh)	Year 1	Year 2	Year 3	Three-Year Average
Photovoltaic Systems (7)	18,748	39,192	59,636	39,192
Biomass	929,432	1,301,205	1,580,034	1,270,224
Total Annual Energy Produced	948,180	1,340,397	1,639,670	1,309,416

Annual Revenues	Year 1	Year 2	Year 3	Three-Year Average
Green Energy Block Size (kWh)	50	50	50	50
Green Energy Blocks Purchased (# per month)	1,580	2,234	2,733	2,182
Green Energy Monthly Charge per Block (\$)	5.00	5.00	5.00	5.00
Effective Rate (¢/kWh)	10	10	10	10
Green Program Revenues (\$)	94,818	134,040	163,967	130,942
<u>Conservation R&D Program (ECCR)</u>	<u>48,200</u>	<u>25,630</u>	<u>26,170</u>	<u>33,333</u>
Total Annual Revenues (\$)	143,018	159,669	190,137	164,275

Notes:

- (1) Annual refers to each 12 consecutive month period beginning in the month of program implementation.
- (2) Credit based on system average fuel and purchased power expense (\$/MWh).
- (3) Credit based on market price for SO2 allowance (\$/ton).
- (4) Calculated by subtracting the biomass cost (\$/MMBtu) from displaced coal cost for Gannon Unit No. 3 (\$/MMBtu).
- (5) Administration functions include monitoring and evaluating program progress, market research, and investigating other incrementally new renewable resources.
- (6) Recovered via Conservation R&D program (ECCR).
- (7) Annual PV energy based on a total PV capacity of 18 kW, 34 kW, and 50 kW for Years 1, 2, and 3, respectively.

Tampa Electric Company
Exhibit D
Letter from Florida Solar Energy Center



FLORIDA SOLAR ENERGY CENTER

May 31, 2000

Matt Powers
Program Coordinator
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601-0111

Dear Mr. Powers,

Thank you for providing the Florida Solar Energy Center (FSEC) with the opportunity to review your proposed green energy program. In this age of fuel price uncertainties, global climate change and utility restructuring, it only makes sense for Florida's electric utilities to pursue clean alternative energy resources. FSEC feels that this program is a step in the right direction, and strongly encourages Tampa Electric Company to take a leadership role in improving Florida's prospects for a sustainable energy future.

This blended biomass/photovoltaic energy product seems to offer the opportunity to provide a cleaner energy selection to TEC's customers, although FSEC strongly encourages TEC to make every effort to increase its new renewable energy generating capacity beyond this blended product. Based on your calculated SOx and NOx avoided emissions, the product does significantly reduce the production of two major EPA Criteria Pollutants. Given that the biomass fuel will come from a pure source of woody waste products, the product may hold great promise as an initial green energy fuel.

It is our hope the TEC will use the funds derived from this program to expand its use of photovoltaics and other cleaner renewable energy options. Although photovoltaic energy is currently much more expensive than conventional fuels, increased utility investment in PV as a distributed generation technology holds great promise for near term price reductions. PV also offers the advantage of zero CO₂, NO_x and SO_x emissions—something that is much needed, given Florida's current fuel mix.

Please let us know if we can be of assistance to you in your efforts to implement this program. We will monitor its progress with great interest.

Sincere Regards,

Jennifer Skislak Szaro
Energy Analyst
Florida Solar Energy Center