State of Florida



Hublic Serbice Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

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

DATE:	November 16, 2010	
TO:	Office of Commission C	lerk (Cole)
FROM:	Division of Regulatory A Office of the General Co	Analysis (Ellis, Brown, Clemence, Garl, Lewis)
RE:	Docket No. 100159-EG of Tampa Electric Comp	- Petition for approval of demand-side management plan any.
AGENDA:	11/30/10 – Regular Age Participate	nda – Proposed Agency Action – Interested Persons May
COMMISS	IONERS ASSIGNED:	All Commissioners
PREHEAR	ING OFFICER:	Administrative
CRITICAL	DATES:	None
SPECIAL I	NSTRUCTIONS:	None
FILE NAM	E AND LOCATION:	S:\PSC\RAD\WP\100159.RCM.11-30-10.DOC

Case Background

The Commission, as required by the Florida Energy Efficiency and Conservation Act (FEECA), Sections 366.80 through 366.85 and 403.519, Florida Statutes (F.S.), adopted annual goals for seasonal demand and annual energy consumption for the FEECA Utilities. These include Florida Power & Light Company (FPL), Progress Energy Florida, Inc. (PEF), Tampa Electric Company (TECO), Gulf Power Company (Gulf), Florida Public Utilities Company (FPUC), JEA, and Orlando Utilities Commission (OUC).

Pursuant to Rule 25-17.008, Florida Administrative Code (F.A.C.), in any conservation goal setting proceeding, the Commission requires each FEECA utility to submit costeffectiveness information based on, at a minimum, three tests: (1) the Participants Test; (2) the

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Rate Impact Measure (RIM) Test, and (3) the Total Resource Cost (TRC) Test. The Participants Test measures program cost-effectiveness to the participating customer. The RIM Test measures program cost-effectiveness to the utility's overall rate payers, taking into consideration the cost of incentives paid to participating customers and lost revenues due to reduced energy sales that may result in the need for a future rate case. The TRC Test measures total net savings on a utility system-wide basis. In past goal setting proceedings, the Commission established conservation goals based on measures that pass both the Participants Test and the RIM Test.

The 2008 Legislative Session resulted in several changes to the FEECA Statute, and the Commission's goal-setting proceeding was the first implementation of these modifications. By Order No. PSC-09-0855-FOF-EG,¹ the Commission established annual numeric goals for summer peak demand, winter peak demand, and annual energy conservation for the period 2010 through 2019, based upon an unconstrained Enhanced-Total Resource Test (E-TRC) for the investor-owned utilities (IOUs). The E-TRC Test differs from the conventional TRC Test by taking into consideration the estimated additional costs imposed by the potential regulation of greenhouse gas emissions. In addition, the numeric impact of certain measures with a payback period of two years or less were also included in the goals. Further, the IOUs subject to FEECA were authorized to spend up to 10 percent of their historic expenditures through the Energy Conservation Cost Recovery (ECCR) clause as an annual cap for pilot programs to promote solar water heating (Thermal) and solar photovoltaic (PV) installation.

On March 30, 2010, TECO filed a petition requesting approval of its Demand-Side Management (DSM) Plan pursuant to Rule 25-17.0021, Florida Administrative Code (F.A.C.). On May 7, 2010, the Florida Industrial Users Group (FIPUG) was granted leave to intervene by the Commission.² The Southern Alliance for Clean Energy (SACE) was granted leave to intervene on August 9, 2010.³ The Florida Solar Energy Industry Association (FlaSEIA) was granted leave to intervene on August 11, 2010.⁴ Wal-Mart Stores East, LP, and Sam's East, Inc. (Walmart) was granted leave to intervene on August 18, 2010.⁵

On July 14, 2010, the SACE filed comments on the FEECA Utilities' DSM Plans. These comments were amended on August 3, 2010, to include comments regarding FPUC. No other intervenors filed comments. On July 28, and August 12, 2010, PEF and Gulf, respectively, filed responses to SACE's comments.

On September 1, 2010, staff filed a recommendation, noting that the Company's original DSM Plan did not meet the annual goals set by the Commission in several years. Pursuant to Order No. PSC-10-0607-PAA-EG, the Commission denied TECO's original petition, and

¹ <u>See</u> Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, in Docket No. 080409-EG, <u>In re: Commission</u> review of numeric conservation goals (Tampa Electric Company).

² See Order No. PSC-10-0288-PCO-EG, issued May 7, 2010, in Docket No. 100159-EG, <u>In re: Petition of approval</u> of demand-side management plan of Tampa Electric Company. (FIPUG)

³ See Order No. PSC-10-0497-PCO-EG, issued August 9, 2010, in Docket No. 100159-EG, <u>In re: Petition of approval of demand-side management plan of Tampa Electric Company</u>. (SACE)

⁴ See Order No. PSC-10-0508-PCO-EG, issued August 11, 2010, in Docket No. 100159-EG, In re: Petition of approval of demand-side management plan of Tampa Electric Company. (FlaSEIA)

⁵ See Order No. PSC-10-0528-PCO-EG, issued August 18, 2010, in Docket No. 100159-EG, <u>In re: Petition of approval of demand-side management plan of Tampa Electric Company</u>. (Walmart)

required the Company to file a revised DSM Plan that meets the annual goals set forth by the Commission. On November 3, 2010, the Company filed its revised DSM Plan.

The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.85, F.S.

Discussion of Issues

<u>Issue 1</u>: Does TECO's revised Demand-Side Management Plan satisfy the Company's numeric conservation goals set by the Commission in Order No. PSC-09-0855-FOF-EG?

<u>Recommendation</u>: Yes. TECO's revised DSM Plan meets or exceeds the numeric conservation goals set by the Commission, is cost-effective, and the rate impact associated with the revised DSM Plan is relatively small compared to the increase in demand and energy savings projected.

The Commission should approve the programs contained in TECO's revised Demand-Side Management Plan to allow TECO to file for cost recovery. However, TECO must still demonstrate, during the Energy Conservation Cost Recovery (ECCR) clause proceeding, that expenditures in executing its DSM Plan are reasonable and prudent. TECO should be required to file program standards for administrative approval within 30 days of the Consummating Order in this docket. (Ellis)

Staff Analysis: By Order No. PSC-09-0855-FOF-EG, the Commission established annual goals for the FEECA Utilities for the period 2010 through 2019. TECO's approved goals are divided into residential and commercial/industrial goals, with each of these further subdivided into three categories: summer peak demand, winter peak demand, and annual energy. TECO's initial filing submitted March 3, 2010, was insufficient to meet several of the Commission's annual goals in multiple categories. TECO was directed by the Commission, in Order No. PSC-10-0607-PAA-EG, to file specific program modifications or additions needed in order for TECO's DSM Plan to be in compliance with the goal-setting order. The revised DSM Plan submitted by TECO on November 3, 2010, modified certain programs in order to fulfill these requirements, as discussed below.

Based on TECO's current estimates and projections, the Company's revised DSM Plan will meet or exceed the Commission-approved annual demand and energy goals for the residential sector and the commercial/industrial sector. The revised DSM Plan, filed November 3, 2010, represents an increase of approximately 18.7 megawatt (MW) summer peak demand, 19.5 MW winter peak demand, and 41 gigawatt-hour (GWh) annual energy, over the original DSM plan filed on March 30, 2010. The projected demand and energy savings stated in the revised DSM Plan, along with the goals approved by the Commission in Order No. PSC-09-0855-FOF-EG, are summarized in Tables 1 and 2 below.

	Summer (MW)		Winter	(MW)	Annual Energy (GWh)	
Year	Commission Approved Goal	TECO Revised Projected Savings	Commission Approved Goal	TECO Revised Projected Savings	Commission Approved Goal	TECO Revised Projected Savings
2010 ⁶	4.6	7.0	6.4	9.2	9.8	14.9
2011	6.6	8.8	8.5	[].]	14.0	19.9
2012	8.4	10.0	10.2	12.3	17.7	23.1
2013	9.9	11.5	11.5	13.8	20.6	20.6
2014	10.8	12.7	12.2	15.1	22.6	22.6
2015	10.9	13.3	11.6	16.0	23.0	23.0
2016	9.8	12.7	10.1	15.4	21.3	21.5
2017	9.0	11.7	8.8	14.1	19.4	20.2
2018	8.3	11.4	8.0	13.6	18.3	19.8
2019	7.8	11.0	7.4	12.9	17.3	19.2
Total	86.1	110.1	94.7	133.5	184.0	204.8

Table 1 - Comparison of Residential Goals to Revised DSM Plan

Table 2 - Comparison of Commercial/Industrial Goals to Revised DSM Plan

	Summer (MW)		Winter	(MW)	Annual Energy (GWh)	
Year	Commission Approved Goal	TECO Revised Projected Savings	Commission Approved Goal	TECO Revised Projected Savings	Commission Approved Goal	TECO Revised Projected Savings
2010 ⁶	2.5	3.7	0.9	2.1	6.5	12.2
2011	3.6	4.9	1.1	2.5	10.6	17.3
2012	4.3	5.7	1.4	3.0	15.4	18.4
2013	5.1	6.0	1.3	3.2	16.2	19.2
2014	5.4	6.8	1.5	3.7	19.5	20.4
2015	6.0	7.1	1.7	4.0	20.9	21.6
2016	6.2	7.4	1.6	4.1	21.6	22.7
2017	6.3	8.2	1.6	4.6	21.8	22.9
2018	6.4	7.6	1.7	4.2	22.1	22.1
2019	6.3	7.0	1.7	3.7	21.7	21.7
Total	52.1	64.4	14.5	35.1	176.3	198.5

Staff is aware that the values presented in this docket are projections based upon participation rates which may or may not occur. Depending on the actual results realized, failure to meet its goals in any year may result in financial penalties or other appropriate action by the Commission at the time of the violation.

⁶ The values listed for 2010 are based upon the Company's filings. As the revised DSM Plan is not scheduled to be implemented during 2010, these values do not reflect actual savings for the period.

Description of the Revised DSM Plan

TECO's original DSM Plan consists of 37 programs. A complete list of the programs can be found in Attachment A. Of the 37 programs, only the Renewable Energy System Initiative, a pilot program which features a combination of rebates and free installations of solar technologies, has already been approved by the Commission pursuant to Order No. PSC-10-0607-PAA-EG.

As part of the Company's revised DSM Plan, no new programs were added, and eight of the proposed programs were modified to increase participation levels, listed in Table 3. For the Neighborhood Weatherization & Agency Outreach Program and the Energy Education Outreach Program, the Company anticipates an increased rate and magnitude of promotional events. The remaining programs feature increased advertising and customer awareness efforts to encourage participation. No changes were made to energy savings per participant, or any other aspect of the DSM Plan.

	Residential Programs		Commercial/Industrial Programs
1.	Residential Electronically Commutated Motor	1.	Commercial Energy Efficient Motors
2.	Residential HVAC Re-commissioning	2.	Commercial Lighting
3.	Neighborhood Weatherization & Agency Outreach	3.	Commercial HVAC Re-commissioning
4.	Energy Education Outreach		
5.	Residential Energy Planner		

Table 3 - List of Modified Programs in TECO's revised DSM Plan

The extra participation rates associated with these programs now provide sufficient demand and energy savings to allow the Company's plan to meet or exceed the annual goals set forth by the Commission in Order No. PSC-09-0855-FOF-EG. Staff would note that these values represent projections only, and that actual participation may vary from the Company's estimates. As a result, TECO should continuously monitor its DSM Programs. In the event that actual participation is insufficient, it is the Company's responsibility to take appropriate action to meet its conservation goals.

Program Cost-Effectiveness

In reviewing TECO's DSM Plan, staff analyzed the assumptions made for a variety of aspects of the programs, including but not limited to: rebate and incentive levels, participation rates, avoided costs, and program savings. Overall, staff believes the assumptions utilized in TECO's revised DSM Plan are reasonable.

For rebates and incentives, a majority of the programs were limited to a cap of 50 percent of the customer's cost or less. While incentives do not impact the E-TRC Test, they can have an impact on customer's rates, as discussed below. It should be noted that several programs provide free equipment to customers, instead of rebates or incentives. These programs include audits and

several target low income customers. The equipment consists of items such as compact fluorescent light (CFL) bulbs, water heater blankets, and other simple devices.

Participation rates were compared to existing programs where applicable. Most participation levels are approximately equal to those experienced within the last two- to five-year period. For new programs, TECO assumes a low value in the initial year, with participation ramping up throughout the ten-year period. Staff would note however that as these are voluntary programs, TECO is responsible for continual monitoring of actual participation rates. Should participation fall below expected values, TECO is responsible for taking appropriate action to meet its conservation goals.

Seasonal peak demand and annual energy savings from the proposed programs in TECO's DSM Plan were compared to existing programs where applicable. Program energy savings vary from previous programs, partially due to increased efficiency standards and building codes, but also due to modifications and new additions to the program's component measures.

All proposed programs pass both the E-TRC and Participants tests, with the exception of the paid audit program. However, not many customers select this option and the amount TECO can charge for the audit is governed by Rule 25-17.003(4)(b), F.A.C. The cost-effectiveness test results are included in Table 4 on the next page. The eight programs modified in the revised DSM Plan feature increased spending on advertising and related expenses to improve their participation rates. Staff will monitor all expenditures related to TECO's revised DSM Plan as part of the Energy Conservation Cost Recovery Clause (ECCR) proceeding each year, and at that time the Commission would have the opportunity to determine the prudence of all DSM related expenditures.

TECO used a natural gas-fired Combustion Turbine with an in-service date of 2012 as its avoided unit in calculating the economic benefit of its demand-side management programs. In addition to the savings associated with avoided or deferred generation or transmission assets, TECO included the potential cost of greenhouse gas emissions in its cost of energy, which it calculated as \$38/ton starting in 2014, and escalating in the future. As a result, the resulting cost-effectiveness tests are referred to as the E-TRC and E-RIM tests.

TECO's avoided unit is consistent with the Company's Ten-Year Site Plan in terms of cost and performance characteristics. It is also reasonable when compared to other companies' reported costs for similar units. Costs associated with potential greenhouse gas emissions were identical to the values used in the goal-setting docket. Transmission and distribution line loss percentages are also similar to values provided by several utilities.

ogram	Name	E-TRC	E-RIM	Participan
1	Kesidential Low Income Port	5 20	1.1.1	
1.	Reighborhood weatherization & Agency Outreach	5.50	1.11	
Ζ.	Residential Portfolio	0.83	0.90	
1.	Walk-Through Audit	2.08	0.66	
2.	Customer Assisted Audit	4.04	0.77	-
3.	Computer-Assisted Audit	1.25	0.53	-
4.	Phone Assisted Audit	6.79	0.85	
5.	Heating & Cooling	2.03	1.01	2.06
6.	Electronically Commutated Motors	1.72	0.99	1.77
7.	HVAC Re-commissioning	2.18	1.05	2.16
8.	Duct Repair	2.20	1.06	2.40
9.	Building Envelope	1.29	1.02	1.27
10.	New Construction	1.81	1.08	1.71
11.	Energy Planner	2.50	1.10	-
	Commercial/Industrial Portf	olio		
1.	Free Audit	1.90	0.75	-
2.	Paid Audit	0.62	0.40	12
3.	Duct Repair	8.39	1.28	6.82
4.	Building Envelope	2.20	0.97	2.28
5.	Energy Efficient Motors	2.41	1.02	2.60
6.	Cooling	3.28	1.02	3.25
7.	Chiller	6.91	1.12	6.16
8.	Lighting	5.06	0.99	5.14
9.	Lighting Occupancy Sensors	1.18	0.83	1.43
10.	Water Heating	2.17	1.01	2.40
11.	Conservation Value	3.90	1.24	3.25
12.	Commercial Load Management	17.52	3.27	-
13.	Demand Response	2.44	1.30	-
14.	Standby Generator	9.24	2.64	4.11
15.	HVAC Re-commissioning	4.54	0.99	4.70
16.	Electronically Commutated Motors	7.91	1.24	6.58
17.	Cool Roof	1.89	0.96	1.98
18.	Energy Recovery Ventilation	1.00	0.89	1.12
19.	Refrigeration (Anti-Condensate)	2.33	1.01	2.33
20.	Industrial Load Management	46.62	1.20	-
21.	Cogeneration	-	-	
22.	Research and Development	-	-	

Table 4 - Cost Effectiveness Test Results by Program⁷

⁷ Programs are determined to be cost-effective if the result of the test is a ratio greater than 1.00.

Rate Impact

The costs to implement a DSM program consist of administrative, equipment, and incentive payments to the participants, which are recovered by the Company through its ECCR clause. This clause represents a monthly bill impact to customers as part of the non-fuel cost of energy on their bill. As discussed above, if a program passes the E-TRC Test it is cost-effective from a system basis. However, utility incentive payments, not included in the E-TRC Test, are recovered through the utility's ECCR factor and have an immediate impact on customer rates.

Much like investments in generation, transmission, and distribution; investments in energy efficiency have an immediate rate impact but produce savings over time. Overall, the ECCR impact of TECO's revised DSM Plan is low relative to the customer's total bill. Table 5 below, shows the bill impact of the ECCR factor remaining relatively small over the ten year period. The estimated monthly bill impact is \$0.84 by 2014, when the Commission is due to revisit the conservation goals as required by Section 366.82(6), F.S.

Year	ECCR Component	Estimated Residential Bill	Percent of Bill
2010 ⁹	\$3.05	\$137.22	2.22%
2011	\$3.53	\$137.70	2.56%
2012	\$3.61	\$137.78	2.62%
2013	\$3.79	\$137.96	2.75%
2014	\$3.89	\$138.06	2.82%
2015	\$3.88	\$138.05	2.81%
2016	\$3.83	\$138.00	2.78%
2017	\$3.75	\$137.92	2.72%
2018	\$3.70	\$137.87	2.68%
2019	\$3.65	\$137.82	2.65%

Table 5 - Estimated Rate Impact⁸

While not immediately applied to customer's bills, energy saving DSM programs can also have an impact on a utility's base rates. When revenues go down because fewer kWh were consumed, the utility may have to make up the difference by requesting an increase in rates in order to maintain its authorized Return on Equity (ROE). Other factors interact with a company's earnings, and may either delay or accelerate a base rate proceeding.

⁸ Based on TECO's revised DSM Plan, submitted on November 3, 2010. Estimated Residential Bill for the period 2011 through 2019 assumes all bill components remain static, excluding the Energy Conservation Cost Recovery clause.

⁹ Based on 1,200 kWh monthly usage, determined from residential tariff rates effective as of November 1, 2010.

TECO's DSM Plan includes a variety of programs that would allow participation by a wide spectrum of customer groups, including low-income, residential, and commercial customers. By participating in a DSM program, customers should be able to reduce or eliminate the potential rate impact of TECO's DSM Plan. However, because the Commission-approved goals were based on the E-TRC Test, which does not consider costs associated with utility incentives, those who do not or cannot participate in an incentive program will not see their monthly utility bill go down unless they directly decrease their consumption of electricity. If that is not possible, non-participants could actually see an increase in the monthly utility bill.

In its revised petition submitted on November 3, 2010, the Company requests that the Commission revisit the use of cumulative goals as a measure of compliance. Staff believes that the Commission's goal-setting order clearly sets annual goals for each of the FEECA Utilities in six categories. The Commission is required by Section 366.82(10), F.S., to annually report to the Legislature and the Governor, by March 1, each utility's progress towards meeting the goals established by the Commission. Staff completes this function through the FEECA Report.

Staff will continue to monitor and report the actual amount of DSM savings each year, on an annual and cumulative basis, as part of the FEECA Report. In the event that a FEECA utility fails to achieve its DSM goals in one or more category, the utility can submit justification for its failure to meet the annual or cumulative goals. Staff will bring this to the attention of the Commission as part of the annual FEECA Report and the Commission will then consider what actions are appropriate.

Program Standards

Most programs have an administrative component that describes the eligibility requirements, billing practices, etc. Historically, this information is provided to staff for administrative approval after a program has been approved by the Commission. Therefore, staff recommends that TECO file its program standards for all its programs within 30 days of the Consummating Order in this docket. If final incentive levels are changed in the program standards, these will be brought back to the Commission for approval.

Conclusion

The revised DSM Plan submitted by TECO on November 3, 2010, shows estimated conservation achievements for both peak demand and energy reduction which exceed those approved by the Commission in Order No. PSC-09-0855-FOF-EG. TECO has developed residential and commercial/industrial portfolios that are cost-effective. The rate impact associated with the revised DSM Plan is relatively small compared to the increase in demand and energy savings projected.

The Commission should approve the programs contained in TECO's revised DSM Plan to allow TECO to file for cost recovery. However, TECO must still demonstrate, during the ECCR clause proceeding, that expenditures in executing its DSM Plan were reasonable and prudent. TECO should be required to file program standards for administrative approval within 30 days of the Consummating Order in this docket.

Issue 2: Should this docket be closed?

Recommendation: Yes. If no person whose substantial interests are affected by the proposed agency action issue files a protest within 21 days of the issuance of the Order, a Consummating Order will be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the Order, the programs should not be implemented until after the resolution of the protest. However, the docket should remain open for staff's verification that the program standards have been filed by the Utility and approved by staff. When the PAA issues are final and the program standards have been approved, this docket may be closed administratively. (Fleming)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action issue files a protest within 21 days of the issuance of the Order, a Consummating Order will be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the Order, the programs should not be implemented until after the resolution of the protest. However, the docket should remain open for staff's verification that the program standards have been filed by the Utility and approved by staff. When the PAA issues are final and the program standards have been approved, this docket may be closed administratively.

Description of TECO's DSM Portfolio

RESIDENTIAL PROGRAMS:

Residential Walk-Through Audit (Free)

A conservation program adopted by Florida under Section 366.82(5), F.S., and Rule 25-17.003, F.A.C. This program is offered to all residential customers and is designed to save demand and energy by increasing customer awareness of energy use in personal residences. Savings are dependent on the customer implementing energy saving recommendations. Recommendations are the same as the Computer-Assisted Audit but are standardized and include an estimated range of savings.

The audit is conducted by a trained analyst who notes only those recommendations which apply to the residence. In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output. Audits are kept on file with the company for three years. There is no charge to the customer for the Walk-Through Audit.

On-Line Residential Energy Audit

A conservation program designed to save demand and energy by increasing customer awareness of energy use in personal residences. Savings are dependent on the customer implementing energy saving recommendations. Recommendations are the same as the Computer-Assisted Audit but are standardized and include an estimated range of savings.

To access the audit, customers will go to Tampa Electric's internet site, under online audits, and automatically link to the audit. Customers will answer questions about their home and energy usage. Personalized audit results are then immediately displayed to customers for review and implementation. The audit recommendations are based on the customers' answers to the questions and their actual energy consumption. There is no charge to customers.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.

Residential Computer-Assisted Energy Audit

A conservation program originally developed in response to the Energy Policy Act (1978) and adopted by Florida under Section 366.82 (5), F.S., and Rule 25-17.003, F.A.C. The program is designed to save demand and energy and is offered to all residential customers. Savings are achieved by increasing customer awareness of the energy use in personal residences. Savings are dependent on customers implementing energy saving recommendations. The audit is performed by a trained analyst who collects specific data about the structure of the home and the customer's lifestyle. The following information is then provided on the applicable energy saving measures:

• Estimated cost for contractor installation

- Estimated cost for do-it-yourself installation
- Payback period for customer investment
- Estimated first year energy savings

Analysts note only those recommendations which apply to the individual residence. Audit findings are kept on file with the utility for three years. The audit charge to the customer is \$15.00.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.

Residential Phone Assisted Audit

A conservation program designed to save demand and energy by increasing customer awareness of energy use in personal residences. This program is intended to provide an additional option to customers who may not be available for a walk-through audit, however, they would benefit from speaking directly with a Tampa Electric representative.

To access this service, customers will speak directly with a Tampa Electric representative who will have the customers answer questions about their home and energy usage. The representative will input the information provided into the on-line audit form at Tampa Electric's internet site and personalized audit results are then immediately available for review with customers. Results can then be sent to the customer via e-mail or regular mail. The audit recommendations are based on the customer's answers to the questions and their actual energy consumption. There is no charge to customers.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.

Residential Heating and Cooling

A conservation program that offers a rebate to encourage the installation of high efficiency heating and cooling systems in existing residential dwellings. The program is aimed at reducing the growth of weather sensitive peak demand and energy through two types of equipment replacement. Type One equipment replacement is defined as a heat pump replacing resistance heat and Type Two equipment replacement is defined as a heat pump replacing a heat pump. Both types of equipment replacement have a threshold for qualification of 15.0 SEER. Tampa Electric's rebate is paid to the contractor performing the installation.

There are two incentive levels for this program, based upon equipment install type. Type One rebate is \$400/customer. Type Two rebate is \$275/customer.

Residential Electronically Commutated Motor (ECM) Program

A conservation incentive program designed to reduce demand and energy by decreasing the load on residential air conditioning and heating ("HVAC") equipment. The program is designed to help residential customers improve the overall efficiency of their existing HVAC equipment by replacing the existing motor in the air-handler with an Electronically Commutated Motor (ECM). This will in turn help participating customers reduce demand and energy usage.

> The Residential ECM Program Rebate is set at \$135/customer.

Residential HVAC Re-commissioning

A conservation incentive program designed to help residential customers ensure HVAC equipment is operating at optimal efficiency through maintenance and equipment tune-up. This will in turn help participating customers reduce demand and energy usage and help to promote good long-term maintenance habits.

> The Residential HVAC Re-commissioning rebate is set at \$75/customer

Residential Duct Repair

A conservation incentive program designed to reduce demand and energy by decreasing the load on residential air conditioning and heating ("HVAC") equipment. This program eliminates or reduces areas of HVAC air distribution losses by sealing and repairing the air distribution system ("ADS"). The ADS is defined as the air handler, air ducts, return plenums, supply plenums and any connecting structure.

Customers call Tampa Electric to request appointments for duct repair and a HVAC contractor appointed by Tampa Electric will seal and repair all accessible components of the ADS in the residence. Tampa Electric's incentive is included in the payment to the participating contractor performing ADS repairs.

> The Residential Duct Repair rebate is set at \$183/customer.

Residential Building Envelope

The Residential Building Envelope Program is designed to encourage customers to make costeffective improvements to existing residences in the areas of ceiling insulation, wall insulation, and window improvements. The goal is to offer customer incentives for making these improvements while helping them reduce energy consumption and reducing Tampa Electric's peak demand. The following measures are a part of this program.

Ceiling Insulation

This measure is designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Qualifying residential structures are eligible for an incentive which is in the form of a certificate. Customers use the certificate as partial payment for the ceiling insulation installed.

Ceiling Insulation Rebate is \$516/customer.

Wall Insulation

This measure is designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Qualifying residential structures are eligible for an incentive to insulate exterior walls adjacent to the living area.

▶ Wall Insulation Rebate is \$516/customer.

Window Replacement

This measure is designed to encourage qualifying customers replacing windows in their home to do so with high-performance windows. This program is intended to reduce the solar heat gain into a home which, in turn, reduces HVAC load and improves comfort.

▶ Window Replacement Rebate is \$824/customer.

Window Film

This measure is designed to encourage qualifying customers to apply film on windows with eastern and western exposures. This is intended to reduce the solar heat gain into a home which, in turn, reduces HVAC load and improves comfort.

Window Film Rebate is \$100/customer.

New Construction (Residential)

The company's New Construction Program known as Energy Plus Homes is a residential new construction conservation program designed to reduce the growth of peak demand and energy in the residential new construction market through the installation of high efficiency equipment and building envelope options. The program utilizes incentives to encourage the construction of new homes to be above the minimum energy efficiency levels required in the State of Florida Energy Efficiency Code for New Construction. This will be achieved through the actions listed below.

- 1. The certification of new home construction that meets or exceeds the standards used in the Environmental Protection Agency's Energy Star Program.
- 2. Promoting the construction and purchase of energy efficient housing by educating builders (for profit and not-for-profit), trade groups, architects, realtors, lenders and home buyers in a manner designed to transform the residential new construction market by influencing decisions toward energy efficiency in building techniques and practices.
- 3. Placing an emphasis on securing participation by affordable housing builders and buyers through educational efforts, coordinated through affordable housing financiers and affordable housing builders.
- 4. Encouraging the use of environmentally friendly building techniques.
 - There are multiple incentives within the New Construction Program, including for Duct Systems, Attic Insulation, HVAC, Windows, and HERs Certification. These range from \$100 to \$400/customer.

Neighborhood Weatherization and Agency Outreach

The Neighborhood Weatherization and Agency Outreach Program is designed to assist lowincome families in reducing their energy usage. The goal of the program is to establish a package of conservation measures at no cost for the customer. In addition to providing and/or installing the necessary materials for the various conservation measures, a key component will be educating families on energy conservation techniques to promote behavioral changes to help customers control their energy usage.

Customer eligibility is by utilization of census data to identify eligible customer geographic regions or referral through local community assistance agencies which serve low-income households.

Neighborhood Weatherization

Census data will be utilized to identify qualified geographic regions of low-income customers. Through direct customer contact, distributed literature, and communication through key community contacts, local residents will have the opportunity enroll for participation in the program at no cost.

Tampa Electric will deliver the following applicable measures.

- **Duct Sealing:** For qualified dwellings with a ducted central HVAC system, this will provide sealing of the duct system to include all joints, seams, and penetrations.
- Ceiling Insulation: For qualified dwellings where the existing ceiling insulation is below R-19, this will provide for an R-13 to be installed. Any home where roof pitch limits accessibility, a lower R-value may be installed.
- **Compact Fluorescent Bulbs:** This provides the resident with eight compact fluorescent lamps to replace incandescent bulbs with the similar lumens output.
- Water Heater Wrap: This will furnish and install a water heater wrap for an electric water heater manufactured prior to 1996.
- Water Heater Temperature Check and Adjustment: This provides a temperature check of the water heater and informs the customer of the possibility for turn-down adjustment.
- Low Flow Faucet Aerator: This allows for the installation of a maximum of three aerators per household.
- Low Flow Showerhead: This allows for the installation of a maximum of two low flow showerheads per household.
- Wall Plate Thermometer: This will provide for the installation of one wall plate thermometer per home where there is only wall/window units in use.
- **Refrigerator Coil Cleaning and Brush:** This will provide for the cleaning of the refrigerator coil. The brush will be provided to the customer for future cleaning.
- HVAC Weather Stripping Kit: This will provide for the installation of a weather stripping kit for window/wall a/c units. The customer will receive or have installed up to two kits.

- **Change Filter Reminder:** This provides each homeowner with a filter whistle to help remind them to clean or change filter monthly.
- Weatherization Measures: This portion of the program will provide weather stripping, caulk, and foam sealant which will be used to reduce or stop air infiltration around doors, windows, attic entries, and where pipes enter the home. Reducing air infiltration is vital to saving energy and improving comfort.

Agency Outreach

This portion of the program will allow for delivery of energy efficiency kits that will help educate agency clients on practices that help to reduce energy consumption. The suggested practices will mirror the recommendations provided to customers who participate in a free energy audit.

As a means to encourage adoption of the recommendations, agency clients who are seeking energy-related assistance will be provided with:

- Four compact fluorescent lamps to replace incandescent lamps with similar lumens outputs
- Three low-flow faucet aerators
- Air filter whistle to help remind them to clean or change filter monthly
- A hot water temperature card to check for necessary temperature adjustment of the water heater
- No-cost energy efficiency recommendations that can be immediately adopted in their home

Energy Education Outreach

The Energy Education Outreach Program is comprised of two distinct initiatives: 1) public education, and 2) energy awareness. The program is designed to establish opportunities for engaging groups of customers and students, in energy-efficiency related discussions in an organized setting. Tampa Electric recognizes the importance of educating students and motivating customers through participation in its energy audits, and this program will provide the opportunity to accomplish both initiatives for large groups in one setting.

In order to create an awareness of this offering, the company will establish participation avenues through its Speakers' Bureau and Community Relations teams.

By working with local civic groups, churches, government sponsored public forums, homeowners associations, trade shows, rental property management groups, etc., Tampa Electric will establish informative presentations that help educate customers on no-cost practices they can implement to reduce their energy consumption, low-cost improvements to increase the efficiency of their homes, and incentives available for making larger, long-term investments. This type of forum will allow for dialogue with customers in such a setting that many customers will simultaneously benefit from the discussion.

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Additionally, this program will focus on opportunities to promote energy efficiency education through local school systems. Students will be educated on ways to become active participants in saving energy at home and at school through the use of theater, educational modules, videos, or other learning tools that support Sunshine State Standards and are approved by school authorities.

Participants will be provided with energy saving devices and supporting information appropriate for the audience. Items available for distribution will include:

- Compact Fluorescent Lamps
- Low-Flow Faucet Aerators
- Filter Whistles
- Hot Water Temperature Check Cards
- Energy Savings Tips and Recommendations

Energy Planner - Residential Price Responsive Load Management

The company's program relies on a multi-tiered rate structure combined with price signals conveyed to participating customers during the day. This price information is designed to encourage customers to make behavioral or equipment usage changes to their energy consumption thereby achieving the desired high cost period load reduction to assist in meeting system peak.

Price information from the utility is used by the customer to program a "smart" thermostat into preset actions based on the level of pricing. Equipment may be turned on, turned off or changed to a different temperature setting automatically by the smart thermostat or manually by the customer through the smart thermostat in response to either the multi-tiered rates or critical price signals.

Tampa Electric will install a communication device along with a "smart" thermostat at the participant's home that will be able to control the operation of selected appliances such as space heating, air conditioning, water heating and pool pumps. Customers will be able to program the operation of this equipment and alter their energy consumption based the price tiers occurring at specific times of the day.

> The Energy Planner program incentive is approximately \$103/customer annually.

COMMERCIAL/INDUSTRIAL PROGRAMS:

Commercial/Industrial Audit (Free)

A conservation program designed to reduce demand and energy consumption by increasing customer awareness of the energy use in their facilities. The savings are dependent upon the customer's implementation of audit recommendations. Recommendations are based upon the replacement of less efficient equipment and systems or modifications to operations to enhance the customer's overall efficiency. Recommendations are primarily standardized and encourage the customer to implement measures that, if cost-effective, move the customer beyond the efficiency level typically installed in the marketplace.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with 8 fluorescent lamps to replace incandescent bulbs with similar lumens output.

Comprehensive Commercial/Industrial Audit (Paid)

A conservation program designed to reduce demand and energy by increasing customer awareness of energy used in their facilities. The paid audit may involve monitoring specific equipment within a customer's facility to determine its electric usage with respect to the time of operation. Based on the results, Tampa Electric will recommend changes to save energy on equipment and/or operations. Savings are dependent upon the customer implementing recommendations.

In an effort to encourage customer participation in conservation programs, Tampa Electric will provide participants with 8 fluorescent lamps to replace incandescent bulbs with similar lumens output.

Commercial Duct Repair Program

A conservation incentive program designed to reduce demand and energy by decreasing the load on commercial air conditioning and heating ("HVAC") equipment. This program eliminates or reduces areas of HVAC air distribution losses by sealing and repairing the air distribution system ("ADS"). The ADS is defined as the air handler, air ducts, return plenums, supply plenums and any connecting structure.

Customers call Tampa Electric to request appointments for duct repair and a HVAC contractor appointed by Tampa Electric will seal and repair all accessible components of the ADS in the facility. Tampa Electric's incentive is included in the payment to the participating contractor performing ADS repairs.

> The Commercial Duct Repair rebate is \$300/customer.

Commercial Building Envelope

This is a conservation program designed to reduce demand and energy by decreasing the load on commercial air conditioning and heating ("HVAC") equipment. Through incentives, the

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program will encourage commercial/industrial customers to invest in energy efficiency building envelope improvements. The improvements include solar window film, ceiling insulation, and wall insulation.

The Commercial Building Envelope Program will be promoted during commercial/industrial energy audits in an effort to inform and educate the customer. Certificates for participation will be issued through energy audits or by direct evaluation of existing building envelope conditions.

Solar Window Film

A conservation measure designed to encourage commercial/industrial customers to apply solar film on windows facing east and west. This measure is intended to reduce the solar heat gain into a facility which, in turn, reduces HVAC load and improves comfort.

> The Solar Window Film rebate is \$1.25/square foot, or approximately \$1,655/customer.

Ceiling & Roof Insulation

A conservation measure designed to encourage commercial/industrial customers to install insulation in ceilings above conditioned spaces in their facility. This measure is intended to reduce heat transfer through ceilings which, in turn, reduces HVAC load and improves comfort.

The Ceiling & Roof Insulation rebate is \$0.25/square foot and \$0.15/square foot, respectively. This results in a rebate of approximately \$389 and \$228/customer.

Wall Insulation

A conservation measure designed to encourage commercial/industrial customers to install insulation in walls of conditioned spaces in their facilities. This measure is intended to reduce heat transfer through ceilings which, in turn, reduces HVAC load and improves comfort.

> The Wall Insulation rebate is \$0.40/square foot, or approximately \$403/customer.

Commercial Energy Efficient Motors

A conservation program designed to encourage commercial/industrial customers to install premium-efficiency motors in new or existing facilities through incentives. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient equipment with high efficiency equipment that exceeds minimum product manufacturing standards.

> The Energy Efficient Motors rebate is \$6/horsepower, or approximately \$90/customer.

Commercial Cooling Program

This is a conservation measure that uses incentives for the installation of high efficiency cooling systems in commercial buildings. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient cooling equipment with high efficiency equipment that exceeds minimum product manufacturing standards. This program includes both direct expansion ("DX") and package terminal air conditioners ("PTAC").

There are two incentive levels for this program, based upon equipment type. DX Cooling receives \$50/ton, and PTAC Cooling receives \$38/ton.

Commercial Chiller Program

This is a commercial conservation program that uses incentives for the installation of high efficiency electric water-cooled chillers and electric air-cooled chillers in commercial buildings. The program is aimed at reducing the growth of peak demand and energy by encouraging customers to replace worn out, inefficient cooling equipment with high efficiency equipment that exceeds minimum product manufacturing standards.

> The Commercial Chiller Rebate is \$175/kw, or approximately \$7,490/customer.

Commercial Lighting Program

This program is design to encourage commercial/industrial customers to invest in more efficient lighting systems. This program includes standards for lighting retrofit projects in conditioned spaces, non-conditioned spaces, and exit signs.

Conditioned Space Commercial Lighting

This is a conservation measure for existing commercial/industrial facilities to encourage investment in more efficient fluorescent lighting technology within conditioned space. Specifically, this program is designed to: 1) affect a significant number of eligible customers, 2) recognize the most probable lighting investment opportunities, and 3) contribute toward weather-sensitive peak demand reduction.

> The Conditioned Lighting rebate is \$0.175/watt, or approximately \$3,300/customer.

Non-Conditioned Space Commercial Lighting

This is a conservation measure for existing commercial/industrial facilities to encourage investment in more efficient lighting technology within non-conditioned space. Specifically, this program is designed to: 1) affect a significant number of eligible customers; 2) recognize the most probable lighting investment opportunities; and 3) contribute toward weather-sensitive peak demand reduction.

The Non-Conditioned Lighting rebate is \$0.175/watt, or approximately \$5,453/customer.

Exit Signs

This is a conservation measure for existing commercial/industrial facilities to encourage investment in more efficient LED exit signs. Specifically, this program is designed to: 1) affect

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a significant number of eligible customers, 2) recognize the most probable lighting investment opportunities, and 3) contribute toward weather-sensitive peak demand reduction.

The Exit Sign rebate is \$25/unit, or approximately \$125/customer.

Commercial Lighting Occupancy Sensor Program

This program is aimed at reducing the growth of peak demand and energy consumption for commercial/industrial customers by increasing the use of occupancy sensors to efficiently control lighting systems. Tampa Electric will provide incentives to customers who install qualifying controls for lighting systems.

> The Occupancy Sensor rebate is \$25/unit, or approximately \$2,184/customer.

Commercial Water Heating Program

This is a conservation program designed to encourage commercial/industrial customers to install high efficiency water heating systems thereby reducing future growth of demand and energy consumption. Two technologies covered under this program are heat recovery units and heat pump water heaters.

> The Water Heating rebate is \$0.0116/BTU, or approximately \$700/customer.

Conservation Value Program

This is an incentive program available for all commercial/industrial customers designed to recognize and encourage investments in demand shifting or demand reduction measures. Measures funded in this program will not be covered under other Tampa Electric commercial/industrial conservation programs. Candidates are identified through the energy audit, or their engineering consultants can submit proposals for funding which offer energy reduction during weather sensitive peak periods.

> The Conservation Value rebate is \$275/kW, or approximately \$6,636/customer.

Commercial Load Management

Tampa Electric's Commercial Load Management Program is intended to help alter the company's system load curve by reducing summer and winter demand peaks.

Large loads such as walk-in freezers are interrupted for up to three hours by radio controlled switches similar to those used in the residential load management. Commercial air conditioning equipment is cycled during summer control periods. Monthly incentive credits are paid to customers participating in this program.

The Load Management Program features two types of rebates, based upon the type of interruption. The Cycling rebate is \$416/customer, while the Extended rebate is \$3,776/customer annually.

Commercial Demand Response

Tampa Electric's Commercial Demand Response is a conservation and load management program intended to help alter the company's system load curve by reducing summer and winter demand peaks. The company will contract for a turn-key program that will induce commercial/industrial customers to reduce their demand for electricity in response to market signals. Reductions will be achieved through a mix of emergency backup generation, energy management systems, raising cooling set-points and turning off or dimming lights, signage, etc.

Tampa Electric will contract with a demand response vendor for an additional minimum of five MW of load reduction. Vendor will market program to potential customers and secure participants. In addition, vendor will audit the customer's facility to identify equipment to be utilized in demand reduction, install automated controls and provide participant with load tracking software for the customer's use. Vendor will pay customers on a dollar per kW -month basis.

> The Demand Response rebate is approximately \$24,000/customer annually.

Commercial Standby Generator

This program is designed to utilize the emergency generation capacity of commercial/industrial facilities in order to reduce weather sensitive peak demand. Tampa Electric provides the participating customers a thirty minute notice that their generation will be required. This allows customers time to start generators and arrange for orderly transfer of load. Tampa Electric meters and issues monthly credits for that portion of the generator's output that could serve normal building load after the notification time. Normal building load is defined as load (type, amount, and time duration) that would have been served by Tampa Electric if the emergency generator did not operate. Under no circumstances will the generator deliver power to Tampa Electric's grid.

The Standby Generator rebate is \$4/kW, or approximately \$21,816/customer.

Commercial HVAC Re-commissioning

A conservation program designed to help commercial/industrial customers ensure HVAC equipment is operating at optimal efficiency by incenting maintenance and tune-up of equipment. This will in turn help commercial/industrial customers reduce demand and energy usage.

> The HVAC Re-commissioning rebate is \$25/ton, or approximately \$188/customer.

Electronically Commutated Motors (ECM) Program

A conservation incentive program designed to encourage commercial/industrial customers to install electronically commutative motors in existing air conditioning and refrigeration equipment. The program is aimed at reducing the growth of peak demand and energy by

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encouraging customers to replace worn out, inefficient equipment with high efficiency equipment that exceeds minimum product manufacturing standards.

The ECM program offers different rebates based upon the type of equipment. The HVAC Motors rebate is \$180/horsepower, while the Refrigeration motors rebate is \$125/ (1/15) horsepower.

Cool Roof

A conservation incentive program designed to encourage commercial/industrial customers to install a cool roof system above conditioned spaces. This measure is intended to reduce heat transfer through reflectance which, in turn, reduces HVAC load and improves comfort.

> The Cool Roof rebate is \$0.60/square foot, or approximately \$6,000/customer.

Energy Recovery Ventilation (ERV)

A conservation incentive program designed to help commercial/industrial customers reduce humidity and HVAC loads in buildings. This measure is intended to reduce demand and energy while improving comfort of commercial buildings.

> The Energy Recovery Ventilation rebate varies, as described in TECO's petition.

Refrigeration Program (Anti-condensate Controls)

A conservation incentive program designed to reduce the current and future growth of peak demand and energy consumption for commercial customers by increasing the use of efficient refrigeration controls. Tampa Electric will provide an incentive to customers who install qualifying anti-condensate controls that reduce electric demand and energy in refrigeration equipment.

> The Refrigeration rebate is \$0.65/linear foot, or approximately \$1,519/customer.

Cogeneration

Tampa Electric's Cogeneration program is administered by a professional team experienced in working with cogenerators. The group manages functions related to coordination with Qualifying Facilities ("QFs") including negotiations, agreements and informational requests; functions related to governmental, regulatory and legislative bodies; research, development, data acquisition and analysis; economic evaluations of existing and proposed QFs as well as the preparation of Tampa Electric's Annual Twenty-Year Cogeneration Forecast.

The Cogeneration team leads Tampa Electric's involvement with prospective cogeneration projects that may be developed within the company's retail service area. This involvement includes developing and providing interconnection cost estimates, determining appropriate relaying schemes, establishing operation and maintenance procedures and negotiating purchase power and transmission service agreement when appropriate.

Program Activities

A detailed description of the activities conducted under the Cogeneration program is listed below.

- Plan, develop and assist in administering and implementing corporate and FPSC policies and regulations in areas related to cogeneration activities.
- Provide consultation, data and other specific information on a daily basis to cogeneration customers, consultants, industry executives, FPSC and other governmental agencies, developers, other utilities and various media publications regarding cogeneration policies, FPSC rules, avoided cost rates and other related criteria.
- Prepare testimony and represent Tampa Electric at hearings, rulemaking and workshop sessions, and specific tariff activities before the FPSC and other governmental agencies.
- Conduct research and development, data acquisition and economic analyses that provide reliable criteria upon which to evaluate the feasibility of cogeneration and small power production facilities.
- Prepare and issue monthly correspondence to cogeneration customers which includes a payment statement, hour-by-hour energy payment rates for preliminary and final energy payments, identification of hourly differences between preliminary and final energy payments and early capacity payment accrual accounts.
- Obtain appropriate initial and subsequent renewal Certificates of Insurance for each cogeneration customer interconnected with Tampa Electric and for each cogeneration customer under contract with the company, sufficient to cover the customer's liability with the company.
- Prepare monthly and quarterly reports of cogeneration activities, avoided costs, etc., for submittal to the FPSC.
- Review monthly O&M bills for a customer's substation and transmission interconnections with the company.
- Determine if each customer's monthly contract standby demand level remains appropriate, and when ratcheted, the new level does not exceed the customer's generator capacity.
- Direct communications and develop the negotiations and final contractual language for interconnection, operating and transmission service agreements with cogeneration and small power production facilities.
- Assist the company's engineering and maintenance personnel with cogeneration maintenance procedures and cost estimates.
- Coordinate all cogeneration-related activities with other company departments.
- Develop the company's forecast of annual sales to cogeneration customers.
- Serve as a resource for budgeting non-fuel revenues from cogeneration customers for transmission service transactions, O&M on interconnected facilities and standby service from the company.

• Prepare and distribute the company's Twenty-Year Cogeneration Forecast.

Industrial Load Management (GSLM 2&3)

This is a load management program for large industrial customers with interruptible loads of 500 kW or greater. The program was approved by the FPSC in Docket No. 990037-EI, Order No. PSC-99-1778-FOF-EI, issued September 10, 1999. Assessments for customer participation are conducted every six months.

> The monthly credit for this program is determined annually in the ECCR Clause.

Conservation Research and Development (R&D)

This program is in response to Rule 25-17.001 (5) (f), F.A.C., that requires aggressive R&D projects be "... an ongoing part of the practice of every well managed utility's programs." It is also in support of FPSC Order No. 22176 dated November 14, 1989, requiring utilities to "... pursue research, development, and demonstration projects designed to promote energy efficiency and conservation." R&D activity will be conducted on proposed measures to determine the impact to the company and its ratepayers and may occur at customer premises, Tampa Electric facilities or at independent test sites. Tampa Electric will report program progress through the annual ECCR True-Up filing.

RENEWABLE PROGRAMS:

Renewable Energy Systems Initiative

This initiative is a five-year renewable energy pilot program that uses rebates and incentives to encourage the following: 1) the installation of solar photovoltaic ("PV") and solar water heating ("SWH") technologies on existing and new residential and commercial premises; 2) the installation of PV on emergency shelter schools coupled with an educational component for teachers and students; and 3) the installation of SWH on low income housing done in partnership with local non-profit building organizations.

The program will have annual funding capped at \$1.53 million. The projected annual allocation of the funding will be 69 percent for PV installations on residential and commercial premises, 10 percent for school PV, 11 percent for SWH installations, and 10 percent for overall program administration. With an annual funding cap in place, the company will use a reservation process to manage fund allocations. This will allow for any unused funds in a specific area to be reallocated to other components of the overall program so as to maximize the installation of various renewable technologies.

Residential and Commercial PV

This component of the program will provide incentives for the installation of PV on residential and commercial premises. The allocation of funds for this endeavor will be split at 60 percent for residential and 40 percent for commercial. Participants must agree to have the system interconnected to the grid with an interconnection agreement in place once installation has occurred.

Residential & Commercial PV Systems are fixed at \$2/Watt incentive, with a maximum incentive of \$20,000

Residential SWH

This component of the program will provide incentives for the installation of SWH on residential premises. The projected allocation of funds for this endeavor will be split at a minimum of 80 percent for existing residential premises and a maximum of 20 percent for new residential premises.

Residential Solar Water Heaters receive a rebate of \$1,000 per unit.

School PV

This component of the program will provide capital funding for the installation of PV on emergency shelter schools and will be coupled with an educational component for teachers and students to evaluate and understand the performance and benefits of PV. Tampa Electric will explore partnership opportunities through the Florida Solar Energy Center's E-Shelter program to enhance the effectiveness and deployment of resources. The company anticipates installing one 10 kW system per year and maintaining each system for a five-year period. These five systems will allow for at least one emergency shelter school in each county of the company's service area to have PV as a backup source of power during emergencies. The equipment cost of each system will be capitalized for five years with the amortization costs collected through the company's ECCR Clause. Subsequent to full depreciation, the system will be donated to the respective school for the majority balance of its life.

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Low Income SWH

This component of the program will provide for the installation of SWH systems on low income housing done in partnership with local non-profit building organizations. Based on historical building activity from these organizations, the company anticipates five installations per year for the five-year period.

Renewable Energy Program

This program provides customers with the option to purchase 200 kWh blocks of renewable energy for five dollars per block to assist in the delivery of renewable energy to the company's grid system. This specific effort provides funding for renewable energy procurement, program administration, evaluation and market research.

Renewable energy participants will be served from the existing electrical system. Renewable energy may not be delivered to the customer, but will displace energy that would have otherwise been produced from traditional fossil fuels. Tampa Electric will report program progress through the annual ECCR True-up and Projection Filings.