REVISED



State of Florida

# Public Service Commission

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

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

**DATE:** September 1, 2010

**TO:** Office of Commission Clerk (Cole)

**FROM:** Division of Regulatory Analysis (Ellis, Brown, Clemence, Garl, Lewis)
Office of the General Counsel (Fleming, Sayler)

**RE:** Docket No. 100159-EG – Petition of approval of demand-side management plan of Tampa Electric Company.

**AGENDA:** 09/14/10 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Administrative

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\RAD\WP\100159.RCM.REVISED.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 cost-effectiveness information based on, at a minimum, three tests: (1) the Participants Test; (2) the

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 page 2 of the comments, SACE offers four recommendations for the Commission to consider.

SACE's first and second recommendations are that the utilities should develop their programs further with the exception of PEF whose entire Plan should be revised within a 90-day

[1] See Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, in Docket No. 080409-EG, In re: Commission 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, In re: Petition of approval 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, In re: Petition of approval of demand-side management plan of Tampa Electric Company. (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, In re: Petition of approval of demand-side management plan of Tampa Electric Company. (Walmart)

period. As discussed in Issue 1, the five IOUs have proposed plans that do not meet all of the annual goals established by the Commission in terms of kilowatt (kW) or kilowatt-hour (kWh) savings. Consistent with Florida Statutes, staff is recommending a 30-day period to correct the deficiencies.

The third recommendation made by SACE is that the Commission should initiate a proceeding to develop an incentive mechanism for utilities that exceed their goals as well as addressing lost revenues. During the DSM goals proceeding, the Commission addressed the issue of utility incentives. Page 24 of Order No. PSC-09-0855-FOF-EG states that:

> We believe establishing incentives during this proceeding would unnecessarily increase costs to ratepayers at a time when consumers are already facing financial challenges. Increasing rates in order to provide incentives to utilities is more appropriately addressed in a future proceeding after utilities have demonstrated and we have evaluated their performance.

SACE's final recommendation is that the Commission should "evaluate alternative means of providing energy efficiency opportunities to utility customers, such as third-party administered programs, if it determines that one or more utilities are not willing or able to offer a leading program." As discussed in Issue 1, the Commission has the authority to penalize a utility if it does not meet its approved goals. However, the Commission does not have the statutory authority to require a third-party administrator to offer a particular program.

On September 1, 2010, staff filed a revised recommendation for Issues 1 and 4 in this docket, which also resulted in numerous changes to Table and page numbers throughout the recommendation. The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.85 and 403.519, F.S.

## Discussion of Issues

**Issue 1**: Does TECO's proposed Demand-Side Management Plan (DSM) satisfy the Company's numeric conservation goals set by the Commission in Order No. PSC-09-0855-FOF-EG?

**Recommendation**: No. TECO's proposed DSM Plan fails to meet its annual residential goals in each category for two or more years, starting in 2013. Similarly, the Company's Plan does not meet all the annual commercial/industrial energy goals by as early as 2014. TECO's failure to meet its annual conservation goals may result in financial penalties or other appropriate action.

Consistent with Section 366.82(7), F.S., staff recommends that TECO file specific program modifications or additions that are needed in order for the 2010 DSM Plan to be in compliance with Order No. PSC-09-0855-FOF-EG within 30 days of the Commission's Order in this docket. The compliance filing should not include savings associated with TECO's solar pilot programs. (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 is responsible for meeting its required conservation goals, yet the projections provided by the Company shows that they plan to fail in a number of years.

Order No. PSC-09-0855-FOF-EG set annual, not aggregate or cumulative, goals for conservation in a total of six areas. As detailed below in Table 1, TECO's proposed DSM Plan fails to meet its annual residential goals in every category for two or more years, starting in 2013. Similarly, Table 2 shows that the Company's Plan does not meet all the annual commercial/industrial energy goals as early as 2014.

**Table 1 – Comparison of Residential Goals to DSM Plan**

| | Summer (MW) | | Winter (MW) | | Annual (GWh) | |
|---|---|---|---|---|---|---|
| Year | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings |
| 2010 | 4.6 | 7.0 | 6.4 | 9.2 | 9.8 | 14.9 |
| 2011 | 6.6 | 8.8 | 8.5 | 11.1 | 14.0 | 19.9 |
| 2012 | 8.4 | **9.8** | 10.2 | 12.1 | 17.7 | 22.6 |
| 2013 | **9.9** | **9.3** | **11.5** | **11.2** | **20.6** | **16.8** |
| 2014 | **10.8** | **9.7** | **12.2** | **11.6** | **22.6** | **17.5** |
| 2015 | **10.9** | **9.8** | 11.6 | 11.8 | **23.0** | **17.3** |
| 2016 | 9.8 | 10.2 | 10.1 | 12.2 | **21.3** | **18.1** |
| 2017 | 9.0 | 10.6 | 8.8 | 12.5 | **19.4** | **18.8** |
| 2018 | 8.3 | 11.0 | 8.0 | 12.9 | 18.3 | 19.5 |
| 2019 | 7.8 | 11.3 | 7.4 | 13.1 | 17.3 | 19.9 |
| Total | 86.1 | 97.5 | 94.7 | 117.7 | 184.0 | 185.3 |

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

| | Summer (MW) | | Winter (MW) | | Annual (GWh) | |
|---|---|---|---|---|---|---|
| Year | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings |
| 2010 | 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 | 5.9 | 1.3 | 3.1 | 16.2 | 19.1 |
| 2014 | 5.4 | 6.5 | 1.5 | 3.5 | **19.5** | **19.1** |
| 2015 | 6.0 | 6.4 | 1.7 | 3.5 | **20.9** | **18.8** |
| 2016 | 6.2 | 6.7 | 1.6 | 3.5 | **21.6** | **19.4** |
| 2017 | 6.3 | 7.0 | 1.6 | 3.9 | **21.8** | **18.8** |
| 2018 | **6.4** | **6.1** | 1.7 | 3.4 | **22.1** | **17.3** |
| 2019 | **6.3** | **5.4** | 1.7 | 2.9 | **21.7** | **16.6** |
| Total | 52.1 | 58.3 | 14.5 | 31.4 | 176.3 | 177.0 |

## Solar Pilot Programs

As part of its filing, TECO included savings from its solar pilot program to meet its summer and winter peak demand and energy goals. In its analysis below, staff did not include these savings for several reasons. First, the methodology used to establish the goals did not include estimates of the potential savings of the solar pilot program. The solar pilot programs were developed separately in the goal setting process in order to address changes to section 366.82(2), F.S., which now requires the Commission to also establish goals to encourage

development of demand-side renewable energy resources. Rather than set demand and energy goals for demand-side renewables, the Commission established a funding cap for utility sponsored pilot programs for solar thermal and photovoltaic technologies, as discussed in Issue 3. Also, consistent with past practice, pilot programs are designed to gather performance and cost data on new or emerging technology that is typically not currently cost-effective. Historically the Commission has not counted the demand and energy contribution of such measures toward goals compliance.

As shown by Tables 3 and 4 below, removing the savings associated with the solar pilot programs would slightly reduce TECO's overall estimated savings.

**Table 3 – Comparison of Residential Goals to DSM Plan (excluding Solar Pilot Program)**

| | Summer (MW) | | Winter (MW) | | Annual (GWh) | |
|---|---|---|---|---|---|---|
| Year | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings |
| 2010 | 4.6 | 6.8 | 6.4 | 9.1 | 9.8 | 14.0 |
| 2011 | 6.6 | 8.6 | 8.5 | 11.0 | 14.0 | 19.0 |
| 2012 | 8.4 | 9.6 | 10.2 | 12.0 | 17.7 | 21.7 |
| 2013 | **9.9** | **9.1** | **11.5** | **11.1** | **20.6** | **15.9** |
| 2014 | **10.8** | **9.5** | **12.2** | **11.5** | **22.6** | **16.6** |
| 2015 | **10.9** | **9.8** | 11.6 | 11.8 | **23.0** | **17.3** |
| 2016 | 9.8 | 10.2 | 10.1 | 12.2 | **21.3** | **18.1** |
| 2017 | 9.0 | 10.6 | 8.8 | 12.5 | **19.4** | **18.8** |
| 2018 | 8.3 | 11.0 | 8.0 | 12.9 | 18.3 | 19.5 |
| 2019 | 7.8 | 11.3 | 7.4 | 13.1 | 17.3 | 19.9 |
| Total | **86.1** | **96.4** | **94.7** | **117.2** | **184.0** | **180.8** |

**Table 4 – Comparison of Commercial/Industrial Goals to DSM Plan (excluding Solar Pilot Program)**

| | Summer (MW) | | Winter (MW) | | Annual (GWh) | |
|---|---|---|---|---|---|---|
| Year | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings | Commission Approved Goal | TECO Projected Savings |
| 2010 | 2.5 | 3.6 | 0.9 | 2.1 | 6.5 | 11.8 |
| 2011 | 3.6 | 4.8 | 1.1 | 2.5 | 10.6 | 16.9 |
| 2012 | 4.3 | 5.6 | 1.4 | 3.0 | 15.4 | 18.0 |
| 2013 | 5.1 | 5.8 | 1.3 | 3.1 | 16.2 | 18.7 |
| 2014 | 5.4 | 6.4 | 1.5 | 3.5 | **19.5** | **18.7** |
| 2015 | 6.0 | 6.4 | 1.7 | 3.5 | **20.9** | **18.8** |
| 2016 | 6.2 | 6.7 | 1.6 | 3.5 | **21.6** | **19.4** |
| 2017 | 6.3 | 7.0 | 1.6 | 3.9 | **21.8** | **18.8** |
| 2018 | **6.4** | **6.1** | 1.7 | 3.4 | **22.1** | **17.3** |
| 2019 | **6.3** | **5.4** | 1.7 | 2.9 | **21.7** | **16.6** |
| Total | **52.1** | **57.7** | **14.5** | **31.4** | **176.3** | **175.2** |

Staff is aware that the values presented in this docket are projections based upon participation rates which may or may not occur. Based on these projections, however, it would appear that TECO does not plan to meet each of the Commission's annual goals. TECO did not request a waiver or modification of its approved goals. 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. Pursuant to Section 366.82(7), F.S., the Commission could deny TECO's DSM Plan and require TECO to submit a modified plan within 30 days. However, such action would delay the implementation of cost-effective DSM programs for many months. Therefore, as discussed in Issue 2, staff is recommending that the programs contained in TECO's 2010 DSM Plan be approved at this time and that TECO be required to file specific program modifications or additions that are needed in order for the 2010 DSM Plan to be in compliance with Order No. PSC-09-0855-FOF-EG within 30 days of the Commission's Order in this docket.

## Conclusion

TECO's proposed DSM Plan does not satisfy the Company's annual numeric goals set by the Commission. The Commission did not establish aggregate or cumulative goals and the Company's DSM Plan should reflect this. It would appear that TECO will not meet the Commission's annual goals which may result in financial penalties or other appropriate action by the Commission. Therefore, consistent with Section 366.82(7), F.S., staff recommends that TECO file specific program modifications or additions that are needed in order for the 2010 DSM Plan to be in compliance with Order No. PSC-09-0855-FOF-EG within 30 days of the Commission's Order in this docket. The compliance filing should not include savings associated with TECO's solar pilot programs.

**Issue 2**: Are the programs contained in TECO's proposed 2010 Demand-Side Management Plan cost-effective as this criterion is used in Commission Order No. PSC-09-0855-FOF-EG?

**Recommendation**: Yes. All programs in TECO's proposed 2010 DSM Plan pass the E-TRC and Participants Tests. Audits, Pilot Programs, and Research & Development programs are not included in this evaluation because they are not required to pass cost-effectiveness testing. TECO should be required to file program standards within 30 days of the Commission's Order in this docket.

The Commission should approve cost-effective programs to allow TECO to file for cost recovery. However, TECO must still demonstrate, during the Energy Conservation Cost Recovery clause proceeding, that expenditures in executing its DSM Plan were reasonable and prudent. In addition, the Commission will evaluate the Company's compliance filing and make a final determination at that time regarding the cost-effectiveness of any modified or new programs. (Ellis)

**Staff Analysis**: TECO's DSM Plan includes a variety of programs, some of which are retained from previous plans without modification, others incorporated with changes to incentive levels or other design aspects, as well as new programs. In total, TECO's Plan consists of 36 programs, which are broken down in Table 5 below. A complete list of the programs, including related information, can be found in Attachment A.

**Table 5 - Summary of TECO's Proposed DSM Programs**

| Program Type | Residential | Comm./Ind. | Other* | Total |
|---|---|---|---|---|
| Existing | 5 | 7 | 0 | 12 |
| Modified | 6 | 11 | 0 | 17 |
| New | 2 | 4 | 1 | 7 |
| Total | 13 | 22 | 1 | 36 |
| *This includes programs classified as both residential and commercial/industrial. | | | | |

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. Staff issued multiple data requests, and used previously submitted data from the utility's DSM programs, the goal-setting docket, and the Company's Ten-Year Site Plan to examine each category. Overall, staff believes the assumptions in TECO's DSM Plan are reasonable for use in evaluating TECO's DSM Plan.

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 a role in customer's rates, as discussed in Issue 4. It should be noted that several programs which did not feature rebates or incentives did provide free equipment to customers. These programs

include audits and several targeting low income customers, and the equipment consisted of items such as compact fluorescent light (CFL) bulbs, water heater blankets, and other simple devices.

Participation rates were compared to existing programs when 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 when 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. For example, TECO's residential walk-through audit historically used a value of 137 kWh for energy savings. TECO's DSM Plan lists energy savings as increasing to 544 KWh for the period 2010 to 2012, and then returning to the historic 137 kWh from 2013 through 2019. The increase in this program's energy savings corresponds to the inclusion of data from ITRON, a consulting firm that participated in the goal-setting procedure, regarding CFL bulbs until efficiency standards come into effect.

Typically savings from energy audits are not included in either the company's annual goals or as part of the savings attributed to the DSM Plan. However, TECO has historically included audits and their associated savings in its conservation goals, including in the 2009 goal-setting proceeding. It is therefore proper to include savings from audits in TECO's DSM Plan. The Commission's rules do require that program savings be measurable, monitorable, and verifiable. TECO currently proposes to measure savings from audits to include two items, as mentioned above; CFL bulbs and behavioral modifications combined with low-cost measures. While ITRON data was used for the CFL bulbs, the savings from the remaining features of the audit are gathered by comparing the billing histories of customers who participated in an energy audit, but did not elect to participate in any other DSM program, and customers who have not had an energy audit conducted. Staff finds this reasonable but will continue to monitor the effectiveness of this measuring methodology.

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 company's 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.

**Cost-Effectiveness Results**

By definition, a program passes a cost-effectiveness test if the benefits-to-cost ratio is 1.00 or greater. All proposed programs pass both the E-TRC and Participants tests with ratios greater than 1.00, 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. Many of the proposed programs pass or are within a reasonable range of passing the E-RIM Test, several do not by a significant margin. Cost-effectiveness test results for TECO's programs are shown in the chart on the following page:

**Table 6 - Cost Effectiveness Test Results by Program**

| Program Name | E-TRC | E-RIM | Participant |
|---|---|---|---|
| Residential Low Income Portfolio | | | |
| 1. Neighborhood Weatherization & Agency Outreach | 5.30 | 1.11 | - |
| 2. Education Outreach | 6.83 | **0.90** | - |
| Residential Portfolio | | | |
| 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 Portfolio | | | |
| 1. Free Audit | 1.90 | **0.75** | - |
| 2. Paid Audit | **0.62** | **0.40** | - |
| 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 | - | - | - |

Several types of programs are not evaluated for cost-effectiveness. These include audits, which are mandated by the Commission to be available for ratepayers, and pilot programs, which are designed to gather additional information on conservation measures or methods. A notable pilot program incorporated in TECO's DSM Plan is the Renewable Energy Systems Initiative,

which is necessary to fulfill Commission Order No. PSC-09-0855-FOF-EG, and discussed further in Issue 3.

TECO has developed residential and commercial/industrial portfolios that are cost-effective. The Company's DSM Plan also includes a wide variety of programs as well as programs that encourage the development of solar water heating and solar PV technologies. Staff believes the Commission should approve the DSM programs in TECO's current Plan to permit filing for cost recovery. However, TECO must still demonstrate that expenditures for its DSM Plan were reasonable and prudent. In addition, the Commission will evaluate the Company's compliance filing and make a final determination at that time regarding the cost-effectiveness of any modified or new programs.

**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, including any modified or new programs as a result of the vote in Issue 1, within 30 days of the Commission's Order in this docket. If final incentive levels are estimated in the program standards, these will be brought back to the Commission for approval.

## Conclusion

All programs in TECO's proposed 2010 DSM Plan pass the E-TRC and Participants tests. Audits, Pilot Programs, and Research & Development programs are not included in this evaluation because they are not required to pass cost-effectiveness testing. TECO should be required to file program standards within 30 days of the Commission's Order in this docket.

The Commission should approve cost-effective programs to allow TECO to file for cost recovery. However, TECO must still demonstrate, during the cost recovery proceeding, that expenditures in executing its DSM Plan were reasonable and prudent. In addition, the Commission will evaluate the Company's compliance filing and make a final determination at that time regarding the cost-effectiveness of any modified or new programs.

**Issue 3**: Does TECO's proposed DSM Plan include pilot programs that encourage the development of solar water heating and solar PV technologies consistent with Commission Order No. PSC-09-0855-FOF-EG?

**Recommendation**: Yes. The cost of the proposed pilot program is within the annual expenditure cap of $1,531,018 that was specified by Commission Order No. PSC-09-0855-FOF-EG. However, the allocation of funds to: (1) solar thermal vs. solar PV, (2) private customers vs. public institutions, and (3) low-income residential varies widely among the investor-owned utilities. If the Commission desires to have more uniformity among the IOUs' programs, then the Commission should initiate public workshops to explore that issue further. (Ellis)

**Staff Analysis**: Commission Order No. PSC-09-0855-FOF-EG directed the IOUs to file pilot programs focused on encouraging solar water heating and solar PV technologies subject to an expenditure cap of 10 percent of the average annual recovery through the ECCR clause in the previous five years. The Commission-approved annual expense cap for TECO is $1,531,018. As shown below, the projected annual expenditures for TECO's pilot programs do not exceed the approved annual expense cap.

**Table 7 – Solar Pilot Program Costs**

| Program Name | First Full Year Expenditures ($) | First Full Year Percentage of Annual Expenditure Cap (%) |
|---|---|---|
| Residential & Commercial PV | $1,056,402 | 69% |
| Residential SWH | $143,412 | 9% |
| School PV | $153,102 | 10% |
| Low Income SWH | $25,000 | 2% |
| Administrative & Education | $153,102 | 10% |
| Total | $1,531,018 | 100% |

As a pilot program, the utility should collect information relating to customer acceptance rates, energy production, and other data to refine potential future program offerings for solar renewable technologies. TECO's demand-side renewable energy portfolio, the pilot program Renewable Energy System Initiative, is comprised of the following measures:

**Residential & Commercial Photovoltaics** – This measure would allow residential and commercial customers a fixed $2/watt rebate for solar photovoltaic systems, for up to 5 kW ($10,000 rebate) for residential installations, and 10 kW ($20,000 incentive) for commercial rooftops. TECO estimates that this program would have approximately 60 residential and 20 commercial participants annually.

**Residential Solar Water Heaters** – This measure encourages residential customers to install solar thermal water heating systems, and offers a $1000 rebate per system. TECO estimates that this program would have approximately 150 participants annually.

**School Photovoltaics** – As part of its educational activities, TECO would provide one school each year with a 10 kW PV array, at no cost to the school. The installations would focus on schools which are also designated emergency shelters, and include educational materials. TECO intends to own and maintain the five systems for an initial five-year period, and then donate the PV arrays to the schools.

**Low Income Solar Water Heaters** – In partnership with local non-profit building organizations, TECO would annually provide five low-income housing units with a solar thermal water heater, at no cost to the owner. Over the life of the program, this will provide a total of 25 free solar thermal water heating systems.

**Allocation of Funds**

Because the costs of these pilot programs are shared by all customers, staff looked at whether or not the programs offered opportunities for participation by all customer classes. TECO offers programs for residential, low-income, commercial, and public facilities. The first year allocation of funds to each of the programs is listed above in Table 7. Staff also looked at the allocation of funds between solar PV and solar water heating programs. As shown in Table 8, approximately 86.7 percent of the funding goes towards solar PV technology, and 13.3 percent towards solar thermal installations.

**Comparison With Other Utilities**

Commission Order No. PSC-09-0855-FOF-EG provided no guidance on how the annual expense cap was to be allocated. While each utility has complied with Order No PSC-09-0855-FOF-EG, the renewable pilot programs of each of the IOUs varies in the weight it provides to the two major types of solar renewable resources, photovoltaics (PV) and thermal water heating (Thermal), as outlined in the Table 8 below. However, all IOUs generally tend to allocate a greater percentage of funding to PV applications.

**Table 8 - Percentage of Funds Allocated by Technology Type[6]**

| Company | FPL | PEF | TECO | GULF | FPUC |
|---|---|---|---|---|---|
| PV | 41.0% | 67.3% | 86.7% | 63.9% | Not Available |
| Thermal | 37.6% | 20.9% | 13.3% | 19.4% | |
| The percentages above do not sum to 100% as administrative, education, and R&D costs are excluded. | | | | | |

[6] Refer to Docket No. 100154-EG – In re: Petition of approval of demand-side management plan of Gulf Power Company. Docket No. 100155-EG – In re: Petition of approval of demand-side management plan of Florida Power & Light Company. Docket No. 100158-EG – In re: Petition of approval of demand-side management plan of Florida Public Utilities Company. Docket No. 100159-EG – In re: Petition of approval of demand-side management plan of Tampa Electric Company. Docket No. 100160-EG – In re: Petition of approval of demand-side management plan of Progress Energy Florida, Inc.

The distribution of funds between solar installations intended for public facilities, specifically schools, and privately owned facilities, including residential housing and commercial properties, is another area of variation among the utilities. Table 9 below, illustrates these differences, which overall favor private installations.

**Table 9 - Percentage of Funds Allocated by Ownership Type**

| Company | FPL | PEF | TECO | GULF | FPUC |
|---|---|---|---|---|---|
| Public | 7.2% | 31.7% | 10.4% | 15.5% | Not Available |
| Private | 68.9% | 56.5% | 89.6% | 67.8% | |
| The percentages above do not sum to 100% due to administrative and education costs being excluded. | | | | | |

The variations between utilities represent different service territories and program designs. If the Commission desires increased uniformity in the values of the pilot programs between utilities, it could initiate a workshop or other proceeding to determine the appropriate split between these technological and customer categories.

## Conclusion

TECO's proposed DSM Plan includes a pilot program to encourage the development of solar water heating and solar PV technologies. The cost of the proposed pilot programs is within the annual expenditure cap specified by Commission Order No. PSC-09-0855-FOF-EG. Staff recommends that the pilot program included in TECO's proposed DSM Plan be approved and incorporated into the compliance filing. However, the allocation of funds to: (1) solar thermal vs. solar PV, (2) private customers vs. public institutions, and (3) low-income residential varies widely among the investor-owned utilities. If the Commission desires to have more uniformity among the IOUs' programs, then the Commission should initiate public workshops to explore that issue further.

**Issue 4**: Do any of the programs in TECO's proposed DSM Plan have an undue impact on the costs passed on to customers?

**Recommendation**: No. The proposed program costs are not undue because the increase in program costs correlates with the increase in goals. The Commission should evaluate the Company's compliance filing and make a final determination in the ECCR clause proceedings regarding the appropriateness of incentive levels. (Ellis)

**Staff Analysis**: TECO's energy goals for the 2010 through 2019 period are more than a 200 percent increase over the previous ten-year period, as illustrated in Table 10 below. This increase also results in higher expenditures required for conservation programs, as more participants and new programs add costs. There are two basic components to a rate impact: the ECCR clause and base rates. TECO estimates the cost to deploy the proposed DSM Plan to be $550 million (nominal) over the ten-year period 2010-2019. As shown in Table 11 below, for a residential customer, the impact to the ECCR clause is projected to increase from the current level of $3.08/month to a peak level of $3.67/month in 2014. In comparing Tables 10 and 11, the percentage increase in rates is significantly lower than the percentage increase in energy goals. However, as noted in Issue 1, the TECO's DSM Plan does not comply with the Commission's annual goals, and these projections may not represent the final rate impact to customers.

**Table 10 – Conservation Goals Comparison**

| 2005-2014 Goals | | | 2010-2019 Goals | | | % Change | | |
|---|---|---|---|---|---|---|---|---|
| Summer (MW) | Winter (MW) | Energy (GWH) | Summer (MW) | Winter (MW) | Energy (GWH) | Summer (MW) | Winter (MW) | Energy (GWH) |
| 66.3 | 66.5 | 110.0 | 138.2 | 109.2 | 360.3 | 108.4% | 64.2% | **227.5%** |

**Table 11 – Estimated Rate Impact**

| Year | | ECCR Revenue Requirement | Rate Impact ($/Mo.) | % Increase |
|---|---|---|---|---|
| Current | | $43,816,518 | $3.05 | - |
| Projected | 2010 | $47,606,668 | $3.38 | 10.9% |
| | 2014 | $55,588,022 | $3.67 | **20.4%** |
| | 2019 | $59,965,446 | $3.65 | 19.8% |
| Current Rates refer to those established in Docket 090002 | | | | |
| Rate impact assumes a residential customer with 1,200 kWh/Mo. usage | | | | |

**ECCR Clause**

The costs to implement a DSM program consist of administrative, equipment, and incentive payments to the participants, which is 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 in Issue 2, if a program passes the E-TRC Test it is cost-effective from a system basis. However, utility incentive payments are not included in the E-TRC Test but are recovered through the utility's ECCR factor and have an immediate impact on customer rates.

In the event the Commission desires to reduce the short-term rate impact of TECO's DSM Plan, Table 12 below contains a listing of each program's relative contribution to TECO's ECCR factor as well as the estimated long-term net savings. All DSM programs have an initial rate impact; but the relationship between goal contribution, short-term rate impact, and long-term net benefits must be considered before any program is removed from a utility's DSM Plan. As discussed in Issue 2, all programs have a positive net benefit under the E-TRC Test, yet some have a negative net benefit under the E-RIM Test. Such programs indicate that non-participating customers would bear a disproportionate share of the program cost. Programs that have a positive net benefit under both the E-TRC and E-RIM Test may have substantial initial rate impact, but also substantial long-term savings. Staff would note that if a program is removed to reduce short-term the rate impact, the Company's goals should be modified accordingly which could also impact long-term net benefits.

In terms of an individual program basis, several stand out as major contributors. It should be noted that while the largest program, Industrial Load Management does not show any savings, it represents a continuing program with no new participation during the ten-year period. The ECCR contribution is due to its payment of incentives to existing program participants, set at a RIM value of 1.2, and represents a large amount of the interruptible load available to TECO.

**Table 12 - Program Contributions**

| Program Name | Type | % Total Goal | | | Net Benefits | | ECCR |
|---|---|---|---|---|---|---|---|
| | | Sum | Win | Ann | E-TRC | E-RIM | |
| | | (%) | (%) | (%) | ($000) | ($000) | (%) |
| Industrial Load Management | C/I | 0.00% | 0.00% | 0.00% | $11,212 | $1,909 | 35.41% |
| Prime Time (Closed Program) | RES | 0.00% | 0.00% | 0.00% | $0 | $0 | 10.40% |
| Walk-Through Audit | RES | 2.71% | 4.65% | 7.17% | $3,299 | **($3,247)** | 8.09% |
| Duct Repair | RES | 11.42% | 18.06% | 7.37% | $6,472 | $682 | 7.41% |
| Demand Response | C/I | 3.86% | 4.88% | 0.11% | $1,899 | $739 | 6.62% |
| Energy Planner | RES | 20.98% | 41.16% | 4.62% | $8,427 | $1,242 | 6.24% |
| Building Envelope | RES | 8.09% | 7.44% | 4.98% | $1,541 | $155 | 3.99% |
| Standby Generator | C/I | 8.73% | 10.07% | 0.33% | $1,372 | $956 | 3.57% |
| Heating & Cooling | RES | 7.61% | 13.91% | 7.63% | $4,995 | $105 | 2.50% |
| Free Audit | C/I | 0.84% | 0.85% | 1.70% | $582 | **($409)** | 1.84% |
| HVAC Re-commissioning | RES | 8.23% | 8.46% | 6.96% | $793 | $64 | 1.69% |
| Customer Assisted Audit | RES | 0.43% | 0.81% | 1.31% | $924 | **($361)** | 1.65% |
| Renewable Energy Systems Initiative | ALL | 0.00% | 0.00% | 0.00% | **($7,433)** | **($1,620)** | 1.39% |
| Common Expenses (Administrative) | ALL | 0.00% | 0.00% | 0.00% | $0 | $0 | 1.16% |
| Neighborhood Weatherization & Agency Outreach | RES | 5.39% | 6.93% | 4.32% | $1,395 | $175 | 1.00% |
| Education Outreach | RES | 1.03% | 1.95% | 2.50% | $958 | **($124)** | 0.84% |
| Duct Repair | C/I | 1.77% | 0.53% | 14.75% | $9,287 | $2,304 | 0.80% |
| Lighting | C/I | 9.80% | 6.99% | 16.57% | $4,064 | **($54)** | 0.79% |
| Cool Roof | C/I | 1.21% | 0.00% | 2.50% | $898 | **($88)** | 0.72% |
| Electronically Commutated Motors | RES | 1.81% | 2.13% | 1.74% | $244 | **($6)** | 0.72% |
| New Construction | RES | 2.01% | 1.87% | 1.56% | $510 | $86 | 0.60% |
| Cooling | C/I | 2.76% | 0.00% | 2.08% | $1,218 | $39 | 0.37% |
| Research and Development | C/I | 0.00% | 0.00% | 0.00% | $0 | $0 | 0.36% |
| Chiller | C/I | 3.86% | 3.62% | 2.82% | $2,629 | $341 | 0.26% |
| Cogeneration | C/I | 0.00% | 0.00% | 0.00% | $0 | $0 | 0.24% |
| HVAC Re-commissioning | C/I | 4.59% | 0.00% | 2.15% | $697 | **($10)** | 0.23% |
| Lighting Occupancy Sensors | C/I | 0.30% | 0.22% | 0.58% | $56 | **($72)** | 0.21% |
| Building Envelope | C/I | 0.63% | 0.03% | 0.36% | $36 | **($2)** | 0.21% |
| Conservation Value | C/I | 0.91% | 0.63% | 1.67% | $620 | $160 | 0.21% |
| Energy Recovery Ventilation | C/I | 0.46% | 0.20% | 0.28% | $0 | **($15)** | 0.18% |
| Electronically Commutated Motors | C/I | 0.75% | 0.00% | 2.55% | $711 | $159 | 0.16% |
| Commercial Load Management | C/I | 1.14% | 0.59% | 0.00% | $34 | $25 | 0.10% |
| Energy Efficient Motors | C/I | 0.14% | 0.17% | 0.13% | $16 | $1 | 0.02% |
| Refigeration (Anti-Condensate) | C/I | 0.02% | 0.01% | 0.07% | $8 | $0 | 0.01% |
| Phone Assisted Audit | RES | 0.01% | 0.16% | 0.02% | $10 | **($2)** | 0.01% |
| Water Heating | C/I | 0.01% | 0.00% | 0.03% | $6 | $0 | 0.00% |
| Paid Audit | C/I | 0.00% | 0.00% | 0.00% | **($1)** | **($1)** | 0.00% |
| Computer-Assisted Audit | RES | 0.00% | 0.00% | 0.00% | $0 | **($1)** | 0.00% |
| Renewable Energy Program | ALL | 0.00% | 0.00% | 0.00% | $0 | $0 | 0.00% |
| **Sum of All Programs** | | | | | | | **100%** |

As discussed in Issue 1, staff recommends that TECO file specific program modifications or additions that are needed in order for the 2010 DSM Plan to be in compliance with Order No. PSC-09-0855-FOF-EG within 30 days of the Commission's Order in this docket. The Commission will have an opportunity to review these updated values upon receipt of the filing, and can make a determination on whether the programs have an undue rate impact at that time.

**Base Rates**

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). Based on TECO's current projections the Company's energy savings will not have a basis point impact of more than 81 points by 2019. Other factors interact with a company's earnings, and may either delay or accelerate a base rate proceeding.

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.

**Conclusion**

The impact of the proposed programs on costs passed on to customers is not undue because the increase in program costs correlates with the increase in goals. The Commission should evaluate the Company's compliance filing and make a final determination in the ECCR clause proceedings regarding the appropriateness of incentive levels.

**Issue 5**: Should this docket be closed?

**Recommendation**: No. This docket should remain open in order for TECO to refile its demand-side management plan within 30 days from the date of this Order. In addition, 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. (Fleming, Sayler)

**Staff Analysis**: This docket should remain open in order for TECO to refile its demand-side management plan within 30 days from the date of this Order. In addition, 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.

# Description of TECO's DSM Portfolio

## RESIDENTIAL PROGRAMS:

### Residential Walk-Through Audit (Free)

A conservation program adopted by Florida under Section 366.82 (5) Florida Statutes 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) Florida Statutes 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 cost-effective 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 low-income 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.

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 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 $7490/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 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 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 $10,000 for Residential Systems and $20,000 for Commercial Systems.

**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.

**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.