

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of demand-side
management plan of Tampa Electric Company.

DOCKET NO. 100159-EG
ORDER NO. PSC-10-0607-PAA-EG
ISSUED: October 4, 2010

The following Commissioners participated in the disposition of this matter:

NANCY ARGENZIANO, Chairman
LISA POLAK EDGAR
NATHAN A. SKOP
ART GRAHAM
RONALD A. BRISÉ

NOTICE OF PROPOSED AGENCY ACTION ORDER
DENYING DEMAND-SIDE MANAGEMENT PLAN AND
APPROVING SOLAR PILOT PROGRAMS

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code (F.A.C.).

BACKGROUND

As required by the Florida Energy Efficiency and Conservation Act (FEECA), Sections 366.80 through 366.85 and 403.519, Florida Statutes (F.S.), we adopted annual goals for seasonal peak 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, F.A.C., in any conservation goal setting proceeding, we require 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, we established conservation goals based on measures that pass both the Participants Test and the RIM Test.

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

The 2008 Legislative Session resulted in several changes to the FEECA Statute, and our goal-setting proceeding was the first implementation of these modifications. By Order No. PSC-09-0855-FOF-EG,¹ we 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, F.A.C. On May 7, 2010, the Florida Industrial Users Group (FIPUG) was granted leave to intervene.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.

We have jurisdiction over this matter pursuant to Sections 366.80 through 366.85 and 403.519, F.S.

DEMAND-SIDE MANAGEMENT PLAN

By Order No. PSC-09-0855-FOF-EG, we 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 show that they plan to fail in a number of years.

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)

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

Year	Summer (MW)		Winter (MW)		Annual (GWh)	
	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

Year	Summer (MW)		Winter (MW)		Annual (GWh)	
	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

TECO's proposed DSM Plan does not satisfy the Company's annual numeric goals set by this Commission. It appears that TECO will not meet its annual goals which may result in

financial penalties or other appropriate action by this Commission. Therefore, consistent with Section 366.82(7), F.S., we find that TECO shall 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 this Order. In Order No. PSC-09-0855-FOF-EG we directed the utilities to file pilot programs focusing on encouraging solar water heating and solar PV technologies. As part of its DSM filing, TECO included savings from its solar pilot program to meet its summer and winter peak demand and energy goals. Because the solar pilot programs were mandated by this Commission, the compliance filing shall also include savings associated with TECO's solar pilot programs.

As previously stated, since TECO's proposed DSM Plan does not satisfy the Company's numeric conservation goals set forth in Order No. PSC-09-0855-FOF-EG, TECO shall file a modified DSM Plan. We are not approving any additional DSM programs at this time. We will evaluate and make a final determination regarding the cost-effectiveness of any new or modified programs when we review TECO's modified DSM Plan.

SOLAR PILOT PROGRAMS

Section 366.82(2), F.S. requires us to establish goals for demand-side renewable energy systems. In order to meet the intent of the Legislature, we directed the utilities to file pilot programs focusing on encouraging solar water heating and solar PV technologies in Order No. PSC-09-0855-FOF-EG. This Order also directed the IOUs to file the solar pilot programs subject to an expenditure cap of 10 percent of the average annual recovery through the ECCR clause in the previous five years. The 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 3 – 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 shall 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, our 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 3. Our staff also looked at the allocation of funds between solar PV and solar water heating programs. As shown in Table 4, approximately 86.7 percent of the funding goes towards solar PV technology, and 13.3 percent towards solar thermal installations.

Comparison With Other Utilities

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 4 below. However, all IOUs generally tend to allocate a greater percentage of funding to PV applications.

Table 4 - Percentage of Funds Allocated by Technology Type⁶

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.					

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 5 below, illustrates these differences, which overall favor private installations.

Table 5 - 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. Because of the variations between the utilities, we direct our staff to conduct a workshop to address how the distribution of funds should be allocated.

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 Order No. PSC-09-0855-FOF-EG. Accordingly, we find that the solar pilot programs included in TECO's proposed DSM Plan are hereby approved. However, the allocation of funds to: (1) solar thermal versus solar PV, (2) private customers versus public institutions, and (3) low-income residential varies widely among the investor-owned utilities. Therefore, we direct our staff to conduct a workshop to address how the distribution of funds should be allocated.

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.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Tampa Electric Company's Proposed Demand-Side Management Plan does not satisfy the numeric conservation goals set forth in Order No. PSC-09-0855-FOF-EG. It is further

ORDERED that Tampa Electric Company shall 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 this Order. It is further

ORDERED that Tampa Electric Company's solar pilot programs contained in its Proposed Demand-Side Management Plan are hereby approved as set forth herein. It is further

ORDERED that all attachments contained herein are incorporated by reference. It is further


ORDERED that the solar pilot programs shall be effective on the date of the Consummating Order. It is further

ORDERED that if a protest is filed, the solar pilot programs shall not be implemented until after the resolution of the protest. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

ORDERED that in the event this Order becomes final, this docket shall remain open in order for Tampa Electric Company to refile its Demand-Side Management Plan within 30 days from the date of this Order.

By ORDER of the Florida Public Service Commission this 4th day of October, 2010.



ANN COLE
Commission Clerk

(S E A L)

KEF

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on October 25, 2010.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

Description of TECO's DSM Portfolio

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.