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COMMISSION CLERK

January 10, 2011

HAND DELIVERED

Ms. Ann Cole, Director Division of Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: Petition for Approval of Demand-side Management Plan of Tampa Electric Company; FPSC Docket No. 100159-EG

Dear Ms. Cole:

Enclosed for filing in the above docket are the original and five copies of Tampa Electric Company's answers to the Florida Public Service Commission Staff's Fourth Data Request, propounded and served by U. S. Mail on December 13, 2010.

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

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

COM	pp	
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APA		
ECR	Lawrence D. Harris	(w/enc.)
GCL 1	Vicki Gordon Kaufman	(w/enc.)
RADA	John W. McWhirter, Jr.	(w/enc.)
SSC	George Cavros	(w/enc.)
	Suzanne Brownless	(w/enc.)
	Rick D. Chamberlin	(w/enc.)
OPC		x
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TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 1 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 1. When in 2011 will TECO begin to offer the renewable energy pilot programs to customers?
- **A.** Tampa Electric plans to initiate its renewable energy pilot programs during second quarter of 2011.

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- 2. Please define the term "rebates of one per <u>premise</u>" as referenced in items #1 and #4 of the residential solar hot water program and item #7 of the residential and commercial solar PHOTOVOLTAIC program standards.
- **A.** "Premise" is the customer's permanent physical location.

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TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 3 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **3.** a. Please describe any physical access to systems or devices the company will need to gather data for the pilot programs.
 - b. Please explain how the company plans to obtain any physical access to the systems or devices, including access if ownership of the underlying property is changed.
- A. a. Tampa Electric does not anticipate the need for physical access to solar water heating ("SWH") systems. The company will have access to photovoltaic ("PV") arrays as a result of each customer signing an interconnection agreement with Tampa Electric.
 - b. See the company's response to subpart (a) above. Should ownership of the underlying property for the PV installation change, a new interconnection agreement will be required, thereby affording the company physical access.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 4 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 4. What obligations, if any, will be passed to subsequent owners of a system that has received rebates through the pilot programs? For example: renewable energy credits, access to the system, data from the system.
- A. Any renewable energy credits will be retained by the owner of the premise for systems that have received rebates through the pilot programs. As previously discussed, access and data collection for PV systems are addressed through the interconnection agreement process.

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TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 5 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 5. How will TECO measure and verify energy production and energy savings from devices funded through the pilot programs?
- A. Tampa Electric will utilize the extensive knowledge and data from the Florida Solar Energy Center ("FSEC") for SWH demand and energy savings. However, Tampa Electric will collect SWH system costs and the number of people living in a residence. This will provide the necessary data for cost-effectiveness analysis of SWH systems.

For PV systems, Tampa Electric will install monitoring equipment on a representative random sample of participants to determine demand and energy savings. Additionally, the company will collect system costs in order to perform the cost-effectiveness analysis.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 6 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

6. Please explain how and when TECO will measure and report cost effectiveness of the pilot programs to the Commission.

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A. Tampa Electric will determine and report the cost-effectiveness of the pilot programs at the end of the five-year period by utilizing the data collected throughout the pilot period.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 7 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 7. a. How does TECO plan to report administrative and marketing expenses for each pilot program to the Commission?
 - b. How does TECO plan to report administrative and marketing expenses for each pilot program against the annual incentive cap for each program?
 - c. How does TECO plan to report all other expenses associated with these pilot programs to the Commission?
- A. a. Tampa Electric plans to establish a separate account for each pilot program and report the respective program expenses by category in the company's annual ECCR filings.
 - b. It is not Tampa Electric's understanding that each pilot program has an annual incentive cap. The company interpreted the Commission order as an overall expenditure cap of \$1,531,018 per year for five years for all the pilot programs. The reporting of administrative and marketing expenses as well as rebate expenses will be managed as detailed in subpart (a) above.
 - c. See the company's responses to subparts (a) and (b) above.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 8 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 8. How will TECO manage requests for rebates if such requests exceed the funds allocated for each program?
- A. Tampa Electric will utilize a reservation process and maintain a list of "interested parties" and said parties will be notified if and when rebates become available during a given year. If the reservation process reopens during a given year, all interested parties will be notified and given equal opportunity to obtain a reservation.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 9 PAGE 1 OF SERVED: JANUARY 10, 2011

- **9.** a. If there are excess funds in a program, how will TECO manage such funds and report this to the Commission?
 - b. If there are excess funds in a program, how will TECO notify or inform its customers or contractors of any remaining fund balances?
- A. a. Tampa Electric will utilize a reservation and rebate disbursement process to manage available funding for each program. Should excess funds exist for any program, those funds will be reallocated to another program where demand is greater. Any excess of the overall renewable expenditure cap existing at the end of the year will be reported through the annual ECCR True-up filings. See item no. 7 of the Residential SWH Rebate Program Standards as an example of how the timing of the reservation process will be managed by the company.
 - b. If excess funds are available in any renewable program, individuals on the interested parties list will be notified via email and telephone. The notification will provide adequate time for a response.

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TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 10 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 10. a. Does TECO intend to recognize Rule 25-6.065, F.A.C., for solar installations made pursuant to the renewable energy systems initiative?
 - b. If not, please explain.
 - c. If so, should the Rule be referenced in the program standards?
- A. a. Yes, Tampa Electric intends to recognize Rule 25-6.065, F.A.C., for solar installations made pursuant to the renewable energy systems initiative.
 - b. Not applicable.
 - c. As referenced in item no. 12 of the PV Rebate Program Standards, Tampa Electric has addressed the interconnection rule by requiring applicants to meet all applicable interconnection requirements as set forth in Tampa Electric's Standard Interconnection Agreement for Renewable Generator Systems.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 11 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

School Photovoltaic Program

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- **11.** Will TECO participate as a partner in the Sun Smart Schools program, administered by the Florida Solar Energy Center?
- **A.** Yes, Tampa Electric plans to be a partner in the Sun Smart Schools program administered by FSEC.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 12 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **12.** How does TECO plan to select schools for the School Photovoltaic program?
- A. Tampa Electric will rely upon FSEC to select qualifying emergency shelter schools. FSEC has initiated a selection process with an emphasis on attaining a minimum of one emergency shelter school in each Florida County. If less than five emergency shelter schools are available in Tampa Electric's service area, the company will coordinate with FSEC to select other non-shelter schools in its service area necessary to achieve a total of five schools over the five-year period of the program.

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TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 13 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **13.** Will TECO coordinate its school selection with the Sun Smart Schools program?
- **A**. See the company's response to Staff's Fourth Data Request No. 12.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 14 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **14.** Why isn't battery back-up required or standard for all school Photovoltaic installations made by TECO through this program?
- A. Tampa Electric believes battery back-up is only necessary for schools identified as State of Florida emergency shelters. The lack of battery back-up for photovoltaic installations on non-emergency shelter schools will not detract from the renewable energy emphasis and school curricula associated with this pilot program and would likely provide additional funds for other pilot programs of the company's renewable initiative.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 15 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **15.** a. With reference to item #4 in the School Photovoltaic Program, what criteria will be used to determine ownership of the installed School Photovoltaic System?
 - b. If TECO owns the School Photovoltaic System and receives any rebates or tax credits, how does TECO plan to report the receipt of such rebates or tax credits to the Commission?
- A. a. In order to maintain flexibility within school boards across Tampa Electric's service area, the company will defer to the school board's preference regarding ownership.
 - b. If Tampa Electric owns the school PV system, the company plans to report any rebates or tax credits as an offset to program expenses in ECCR true-up filings. Any rebate or tax credit will be used to increase funding of the renewable initiative.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 16 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **16.** Please explain TECO's warranty and maintenance of the School Photovoltaic System for the first 5 years:
 - a. If TECO owns the system.
 - b. If the school owns the system.
- **A.** a. Regardless of ownership of the PV system, FSEC is securing a fiveyear warranty and maintenance agreement with the vendor.
 - b. See the company's response to subpart (a) above.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 17 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

17. Please describe TECO's anticipated standard bid process for installation of the School Photovoltaic System.

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A. Tampa Electric's partnership with FSEC will allow the company to utilize FSEC's bid process for School PV Programs.

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- **18.** Will TECO initiate a Standard Interconnection Agreement with the school? If not, please provide the Commission a contract or interconnection agreement for this program.
- A. Yes.

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TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 19 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

Residential Solar Water Heater Program

- **19.** Please explain, in detail, TECO's reservation process for this program.
- A. Tampa Electric's reservation process for the Residential SWH Program will utilize a web-based process, which will be managed on a first come, first served basis. Specifically, customers will access a reservation form on the company's web site. The web site will allow customer reservations until the maximum number has been reached. When the maximum number of reservations has been reached, the system will automatically begin collecting a list of "interested parties" with their contact information.

Once a customer has obtained a reservation, Tampa Electric will contact the customer to schedule a free home energy audit. The audit will verify the availability of qualifying roof space. After this verification, the customer will have 90 days to install the SWH system and submit the required documentation to Tampa Electric.

In the event customers with reservations do not qualify, decide not to move forward with the installation, or do not provide proof of installation within the required time period, the reservation process will be evaluated and reopened quarterly. All "interested parties" that provided contact information will then be notified and afforded the opportunity to secure a reservation. The reservations will again be first come, first served for the remaining funds.

In the event that a customer does not have access to the internet, the customer will have the option to call Tampa Electric's designated solar incentive line and a representative will provide assistance for completing the reservation form and providing a hard copy confirmation to the customer.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 20 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **20.** Why will TECO require a direct load control or tamper proof timer for each system?
- A. Tampa Electric's requirement of direct load control or a tamper proof timer for each installed system is to ensure back-up heating, usually electric resistance, is not engaged during a winter system peak.

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- **21.** With reference to item #13 of this program's standards, please explain TECO's requirement of Solar Water Heating Certification by the Florida Solar Energy Center, and how such construction will be processed.
- A. Tampa Electric's requirement for SWH certification by FSEC is to ensure system integrity and performance through FSEC's testing protocol. The company will compare the SWH certification provided on the application against the list of certified systems maintained by FSEC.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 22 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 22. In addition to FSEC certification, why is TECO requiring a copy of the solar water heating invoice; a purchase agreement; and an inspection report for completed work before issuing a rebate?
- A. Requiring copies of the solar water heating invoice or the purchase agreement, along with the inspection report is Tampa Electric's method of verifying the system has been installed. Field verifications by Tampa Electric will be performed on a random sample of the installed systems.

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- **23.** In the event that a customer or contractor exceeds the 90 day rebate application period, will the customer or contractor have any opportunity to receive the rebate? Please fully explain.
- A. In the event that a customer exceeds the 90-day application period, the circumstances will be evaluated on a case by case basis and the company will determine if the circumstances deem an extension or grace period. If it is determined that an extension will not be granted and the customer plans to install a SWH system eventually, the customer will need to reapply for another reservation.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 24 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- 24. Is an energy audit necessary for new construction? If yes, what will constitute such an audit?
- A. A comprehensive energy audit is not necessary for new construction; however, proper orientation and shading must be validated by Tampa Electric through this process.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 25 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **25.** Why will TECO verify all solar water heating installations in addition to receiving an inspection report before issuing a rebate?
- A. Tampa Electric's verification process will encompass field verifications on a minimum of 10 percent of the installations and office verification on the balance through a review of the submitted documentation. The random field verification will confirm continued contractor adherence to program standards. The inspection report only confirms adherence to building code standards.

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- **26.** How will any unused Solar Water Heating Program funds be transferred to other pilot programs, and how will TECO report this information to the Commission?
- Please see the company's response to Staff's Fourth Data Request No. 9 (a).

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Residential and Commercial Photovoltaic Rebate Program

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- **27.** With reference to item #4 of this program, please explain TECO's energy audit process for new construction.
- **A.** Please see the company's response to Staff's Fourth Data Request No. 24.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 28 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **28.** a. Please explain the process by which a customer will provide a digital photo of the Photovoltaic system and disconnect switch.
 - b. Will TECO assist the customer with this requirement, and if so, how?
 - c. Will TECO require some identification information in the photo?
 - d. What is the digital medium needed for the file (e.g. jpeg, etc.)?
- A. a. At the time of submission of the interconnection application and agreement, a digital photo of the PV system and disconnect switch is required.
 - b. Yes, if a customer is unable to provide a digital photo, Tampa Electric will provide assistance by making a field visit to verify.
 - c. No; however, identification will be verified during the field inspection, which will occur on all PV installations.
 - d. Tampa Electric will accept all digital mediums supplied by customers; there is no limitation on file type.

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Low Income Solar Water Heating Program

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- **29.** Please identify the criteria TECO will use to approve non-profit builders/agencies.
- A. Tampa Electric will utilize the low-income non-profit builders/agencies designation by federal, state, and local guidelines to approve non-profit builders/agencies.

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- **30.** Please provide a list of non-profit building contractors as described in item #1 of this program's standards.
- **A.** Presently, Tampa Electric has identified Habitat for Humanity and Florida Home Partnership as not-for-profit homebuilders in its service area.

TAMPA ELECTRIC COMPANY DOCKET NO. 100159-EG STAFF'S FOURTH DATA REQUEST REQUEST NO. 31 PAGE 1 OF 1 SERVED: JANUARY 10, 2011

- **31.** What will be the capacity standard/size used for Solar Water Heating systems in this program?
- A. The system design will be for a family of four.

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- **32.** Please explain the requirement to install a direct load control or tamper proof timer on these systems, as detailed in this program's standard #7.
- A. Please see the company's response to Staff's Fourth Data Request No. 20.