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July 7, 2014

VIA: ELECTRONIC DELIVERY

Ms. Diana Csank
Associate Attorney
Sierra Club
50 F St. NW, 8th Floor
Washington, DC 20001

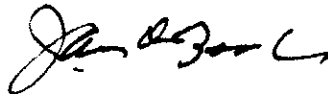
Re: Commission review of numeric conservation goals
(Tampa Electric Company); FPSC Docket No. 130201-EI

Dear Ms. Csank:

Attached is the five page late filed deposition exhibit you requested from Tampa Electric witness Howard T. Bryant at his May 1, 2014 deposition in the above proceeding (described at deposition pages 140-142).

Best regards.

Sincerely,



James D. Beasley

JDB/pp
Attachment

cc: All parties of record (w/attachment)

Bryant, Howard T.

From: Koch, Tom <Tom.Koch@fpl.com>
Sent: Thursday, May 29, 2014 11:39 AM
To: Bryant, Howard T.
Subject: FW: Technical Potential Study (TPS) Update - SACE Measures - Data Requirements
Attachments: SACE - Suggested TPS Update Measures (Information & Data Table).xlsx

From: Koch, Tom
Sent: Friday, July 05, 2013 11:04 AM
To: George Cavros (george@cavros-law.com)
Cc: Bill Eberle (bill.eberle@duke-energy.com); Duff, Tim; htbryant@tecoenergy.com; Lee (Helena) T Guthrie (helena.guthrie@duke-energy.com); Richardson, Tim O.; Steven R. Griffin; Todd, Jennifer L.; Tom Ballinger; Mark Futrell; Cano, Jessica; Hoffman, Kenneth
Subject: Technical Potential Study (TPS) Update - SACE Measures - Data Requirements

Dear Mr. Cavros,

On behalf of the utilities, please find attached a workbook with two worksheets. These should assist SACE in efficiently providing the required data to the utilities for its suggested measures for the TPS update.

- **1st Worksheet – SACE’s measure list appended to the June 26th letter to Commission Staff**
 - The utilities have identified which measures SACE needs to provide the required data for from this list (note, the utilities had already identified many of these and are already gathering the needed data)
 - Baselines – provided for any measures where applicable
 - Note that some of the measures require further clarification in addition to the required data
- **2nd Worksheet – Template for providing the required data**
 - Some sample hypothetical data has been included to help illustrate how to complete the template
 - For measures where a baseline is applicable – first provide the data for that baseline, then provide the **incremental change** from that baseline for any associated measures
 - For measures where a baseline is not applicable – just provide the incremental impact for that individual measure
 - **Participant Incremental Impact:**
 - Participant Cost – incremental cost to the participant
 - Measure Life – in years
 - Annual kWh Savings
 - kW Savings – incremental kW for a single device installation
 - **Utility System Impact:**
 - Annual kWh Savings – same as above for the participant (formula – no need to input)
 - Summer Peak kW Savings – participant kW savings above adjusted for the likelihood the technology is operating at the time of the utility system peak (impact of diversity, etc.)
 - Winter Peak kW Savings – same as Summer Peak kW Savings above, except during the utility’s winter peak
 - **Data Source**
 - **Calculation Methodology**
 - **Comments – as needed**

Please use this template to provide SACE’s data to the utilities.

Sincerely,

Tom Koch
Florida Power & Light Company

SACE Suggested Measures for TPS Update

SACE Suggested Measure	Measure Status	Baseline (if Applicable) & Comments
Residential		
Interior and external halogen	SACE to provide data	43W Compliance Incandescent
De-humidifier	SACE to provide data	14 SEER. Florida-specific climate zone data required.
Geothermal heat pump EER 14.1, 16, 18, 30	SACE to provide data	14 SEER. Florida-specific climate zone data required.
Heat pump SEER 19	SACE to provide data	14 SEER. Florida-specific climate zone data required.
Locate ducts in insulated space	SACE to provide data	14 SEER. Florida-specific climate zone data required.
New construction Insulation (foundation, wall sheathing, wall cavity)	SACE to provide data	14 SEER. Florida-specific climate zone data required.
Storm and thermal doors	SACE to provide data	14 SEER. Florida-specific climate zone data required.
Refrigerator, freezer, dishwasher high efficiency versions beyond energy star	SACE to provide data	Standard appliances
Compact freezer	SACE to provide data	standard Freezer
Compact refrigerator	SACE to provide data	Standard Refrigerator (18 cf w/top-mount freezer, no through-door ice)
Room air cleaner	SACE to provide data	14 SEER. Florida-specific climate zone data required. Clarify what this measure is.
Refrigerator, freezer and room AC recycling	SACE to provide data	EER 11. Need A/C recycling data. Florida-specific climate zone data required.
Occupancy sensors	SACE to provide data	
Ceiling Fan	SACE to provide data	
Whole house fan	SACE to provide data	
AC SEER 21	SACE to provide data	14 SEER. Split between straight cool & heat pump. Florida-specific climate zone data required.
Stoves	SACE to provide data	
Printer/fax/copier	SACE to provide data	
Pool heater	SACE to provide data	
Hot tub pumps and heaters	SACE to provide data	
Well pump	SACE to provide data	
Solar hot water with peak period lock out	SACE to provide data	Standard domestic water heater. Need incremental data for peak period lock out.
Behavior changes from utility provided information	SACE to provide data	
Hot water saver	SACE to provide data	Standard domestic water heater. Florida-specific climate zone data required Clarify what this measure is.
Energy Star Home	Not an individual measure (compilation of many)	
Interior and exterior LEDs	Already identified by utilities	
T-5, Super T-8	Already identified by utilities	
Efficient ballasts and fixtures	Already identified by utilities	
Attic Fan	Already identified by utilities	
Room AC SEER 10.8 (energy star)	Already identified by utilities	
Central AC ductless mini split	Already identified by utilities	
Heat pump ductless mini split	Already identified by utilities	
Duct sealing	Already identified by utilities	
Programmable thermostats	Already identified by utilities	
Smart strip surge protection	Already identified by utilities	
Commercial		
Daylighting	SACE to provide data	Standard T8, electronic balast
Chiller economizer	SACE to provide data	Standard Centrifugal Chiller, 0.58 kW/ton, 500 tons
Refrigerator recycling	SACE to provide data	Standard refrigeration system
High efficiency windows	SACE to provide data	Packaged HP System, EER=10.3, 10 tons.
Hot water high efficiency circulation pump	SACE to provide data	Clarify what this measure is.
Icemaker	SACE to provide data	Standard refrigeration system
Dishwasher	SACE to provide data	Standard electric resistance water heater
Clothes washers	SACE to provide data	Standard electric resistance water heater
Clothes dryers	SACE to provide data	Standard dryer
Dimmable ballasts	SACE to provide data	
Indoor lighting controls	SACE to provide data	
Task lighting	SACE to provide data	
Heat pump maintenance	SACE to provide data	
Programmable thermostats	SACE to provide data	
Plug load occupancy sensors	SACE to provide data	Identify which loads are included
Pool Pump timers	SACE to provide data	Commercial pools have 24-hour run time requirement
Hot food container	SACE to provide data	
Steamers	SACE to provide data	
Griddle	SACE to provide data	
POS terminal	SACE to provide data	
Server	SACE to provide data	Standard Desktop PC? Clarify what this measure is.
Pool pump	SACE to provide data	
Pool heater	SACE to provide data	
Elevator motor	SACE to provide data	
Building commissioning (in the measure list there is refrigerator commissioning)	Not an individual measure (compilation of many)	
T-5, super T-8	Already identified by utilities	
LEDs	Already identified by utilities	
HID lighting	Already identified by utilities	

SACE Suggested Measures for TPS Update

SACE Suggested Measure	Measure Status	Baseline (if Applicable) & Comments
Delamping and reflectors	Already identified by utilities	
Air cooled chillers	Already identified by utilities	
Duct less mini split for rooftop AC	Already identified by utilities	
Rooftop heat pump EER 9.3 -12	Already identified by utilities	
Rooftop AC EER 11.2, 12	Already identified by utilities	
Energy Management System	Already identified by utilities	
Hotel guest room controls	Already identified by utilities	
Refrigerator door gasket replacement	Already identified by utilities	
Hot water saver	Already identified by utilities	
Hot water pipe wrap	Already identified by utilities	
Ventilation hoods	Already identified by utilities	
Data center virtualization	Already identified by utilities	
Refrigerated vending machines	Already identified by utilities	
Industrial		
Synchronous fans	SACE to provide data	Clarify what this measure is.
Plant Energy Management	SACE to provide data	
Transformers	SACE to provide data	
HVAC Recommissioning	Not an individual measure (compilation of many)	
Properly sized fans	Already identified by utilities	
HVAC Improved controls	Already identified by utilities	
Efficient lighting	Already identified by utilities	
Lighting controls	Already identified by utilities	
Motor management plan for air compressors and other motors	Already identified by utilities	

SACE Suggested Measures for TPS Update - Data Table

Technology	Participant Incremental Impact (per install)			Utility System Impact (per install)			Data Source	Data Calculation Method	Comments
	Participant Cost	Measure Life (Yrs)	Annual kWh Savings	Annual kWh Savings	Summer Peak kW Savings	Winter Peak kW Savings			
Baseline - Technology 1	\$0	10	4,950	4,950	0.135	2.34			
Related Measure A	\$976	10	2,420	2,420	0.135	0.00			
Related Measure B									
Related Measure C									
Baseline - Technology 2									
Related Measure A									
Related Measure B									
Related Measure C									
Baseline - Technology 3									
Related Measure A									
Related Measure B									
Related Measure C									
etc....									
Measure X (No Baseline)									
Measure Y (No Baseline)									
Measure Z (No Baseline)									
etc....									