

**ADDITIONAL JUSTIFICATION
FOR AUDIT SAVINGS**

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Justification for Audit Savings

Order No. PSC -10-0678-PAA-EG approving Florida Public Utilities Company's (FPUC's) Demand-Side Management Plan and Solar Pilot Programs requests additional justification for the savings estimated for FPUC's Residential Energy Survey Program and Commercial Energy Survey Program.

FPUC is by far the smallest of the Florida Energy Efficiency and Conservation Act (FEECA) utilities. As such, it is not cost effective for FPUC to conduct significant research and analysis for its Conservation Programs. Instead, FPUC relies heavily on the research and analysis conducted by the other FEECA utilities along with relatively simple engineering models. Specific analysis of savings resulting from residential and commercial audits by FPUC would be very expensive relative to FPUC's customer base and may not yield statistically valid results due to the small sample size. The following sections discuss the development of FPUC's estimated residential and commercial audit savings.

Residential Energy Survey Program

FPUC used the estimated savings from Progress Energy Florida's (PEF's) Home Energy Check Program reported in PEF's 2008 DSM Annual Report for calendar year 2008 which was the latest information available at the time of the development of FPUC's 2010 DSM Plan. Those savings at the meter were 217 kWh and 0.066 kW. In addition to the general audit savings, FPUC added the installation of 10 CFL bulbs during the audit. These bulbs will be installed in lights that have the greatest potential to be on at the time FPUC's peak. The savings from the 10 CFL's was calculated by a simple, but conservative engineering model. The CFL's were assumed to be 23 watt replacing 100 watt incandescent bulbs. It was assumed that 50 percent of the CFL's would be on at the time of peak. From an energy standpoint, it was assumed that the CFL's would be used 15 percent of the time or approximately 3.6 hours per day. With those assumptions, the 10 CFL bulbs would save 1,012 kWh annually at the meter and 0.385 kW. When added to the general audit savings, 1,229 kWh per year were saved and demand reduced by 0.451 kW at the meter. Savings at the generator were 1,287 kWh per year and 0.47 kW. FPUC will survey audit customers approximately 4 weeks after the audit to monitor the customers continued behavior response along with the continued use of the CFL's along with the installation of other energy saving measures.

Commercial Energy Survey Program

FPUC used an identical method of estimating the savings for the Commercial Energy Survey Program. The audit savings were based on Orlando Utilities Commission's (OUC's) Commercial Energy Survey Program from OUC's 2010 DSM Plan. The estimated annual savings were 849 kWh and 0.149 kW at the meter. Like the Residential Energy Survey, FPUC provides 10 CFL's with the Commercial Energy Survey with the same energy and demand savings as assumed for the Residential Energy Survey. The resultant savings are 1,861 kWh annually and 0.534 kW at the meter or 1,949 kWh and 0.56 kW at the generator.