

2014 Residential Smart Thermostat Analysis

- The SCTD demand response program pays in full for Ecobee smart thermostats if the customer agree to have their AC curtailed on event days
- Roughly 50 PCT were installed by May 2014 and 2,000 PCT were installed by August 2014.
- A control group of non-participants was selected based on 2013 smart meter data using propensity score matching.
- A difference of differences regression model was used to account for consistent differences between the treatment and control groups.
- Separate regression models were run for weekdays and weekends.
- A statically significant conservation effect of approximately 2% was found.

Proposed Residential 2015 Analysis

- Full year analysis of approximately 6000 PCT installed by November 2014.
- Estimates of both energy (kWh) and gas(therms) will be calculated.
- Results will be broken down by CEC climate zone.
- Results will be broken down by type of previous thermostat.
- Control Group of non-participants will be selected using propensity score matching.
- A difference of differences will be applied (likely using regression modeling).