DEEMED SAVINGS TECHNICAL ASSUMPTIONS

Product: Smart Thermostat - CO

Description:
Residential electric and combo customers can receive a rebate for installing an Energy Star certified smart thermostat.

Program References:
See "Programmable Thermostat" from Home Energy Squad - CO' for equations and variables with the exception of Cooling_Delta_T and Heating_Delta_T which are documented in the Variable ID table below.

Equations:
- ENERGY STAR Smart Thermostat Demand Savings (Gross kW) = Baseline kW * (1 - ES_Reduction_Cooling)
- ENERGY STAR Smart Thermostat Electrical Energy Savings (Gross Annual kWh) = Baseline kW * (1 - ES_Reduction_Cooling) * EFLH
- ENERGY STAR Smart Thermostat Coincident Demand Savings (Gross PCKW) = Baseline kW * (1 - ES_Reduction_Cooling) * EnergyStar_CF
- ENERGY STAR Smart Thermostat Gas Savings (Gross Dth/Yr) = Baseline Dth * (1 - ES_Reduction_Heating)

Variable ID | Value | Description
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ES_Reduction_Cooling | 10% | Energy Star Connected Thermostat criteria for annual cooling equipment runtime reduction (Reference 1)
ES_Reduction_Heating | 8% | Energy Star Connected Thermostat criteria for annual heating equipment runtime reduction (Reference 1)
Baseline kW | 2.912 | Forecasted High Efficiency Thermostat demand from 'Home Energy Squad - CO'
EFLH | 573 | Forecasted High Efficiency Thermostat hours from 'Home Energy Squad - CO'
Baseline Dth | 60.2 | Forecasted High Efficiency Thermostat gas use from 'Home Energy Squad - CO'
Heating_Delta_T | 0.81 | Average degrees of setback during heating season for seasonal thermostat savings
Cooling_Delta_T | 0.38 | Average degrees of setback during cooling season for seasonal thermostat savings (Reference 2)
EnergyStar_CF | 76% | Coincidence Factor for High Efficiency Thermostat from 'Home Energy Squad - CO'
Measure Life | 10 | Measure life for programmable thermostat (Reference 4)
Incremental Cost | $215.00 | Incremental cost for ENERGY STAR smart thermostat.
NTG | 100% | Net-to-gross factor. Assumed to be 100% for a new program.

References:
2. 2017 Seasonal Savings Evaluation, Navigant, 3/5/2018
4. Lifetime of 10 years for programmable T-Stats from "Measure Life Report Residential and Commercial/Industrial Lighting and HVAC Measures", June

Changes from Recent Filing:
1. New program