SCE17HC054 REV1

Residential Smart Thermostat (ST)

Workpaper Update (Resubmission) Plan for 2019 and 2020 Program Cycles

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Per latest CPUC’s disposition - SCE17HCO54 R1 - Smart Communicating Thermostat\_2019-04-05, SCE is directed to revise the workpaper for claims effective 07/06/2019 through 12/31/2019. Implementation reporting expiry for REV0 of the Workpaper will be update to 7/5/2019. The following summarizes approach and methods being adopted by IOUs for updating Residential Smart Thermostat workpaper (SCE17HC054 REV1) to comply with CPUC’s disposition.

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| Workpaper Parameter | **Reference DEER Year** | **Disposition Guidance** | **Workpaper Update Description** |
| Installation  Type | 2019 | NR | Adopted per disposition guidance without modifications |
| Non-DEER  EUL | 2019 | 9.1 Years | Adopted per disposition guidance without modifications |
| NTG | 2019 | 0.55 | Adopted per disposition guidance without modifications |
| Electric (Cooling) Savings | 2019 | Adopt savings per SCE17HC054 REV1 (02/28/2019) Submission | **Adopted with adjustments.** Adjust measure savings using **DEER-Weighted Tstat Schedule.** REV1 originally evaluated savings using **DEER Tstat 3 Schedule.** This adjustment to measure’s baseline energy better aligns with ex-ante procedures generally used for the evaluation of Residential measures. While no variations are expected for hotter climates, adjustments will slightly increase measure savings for mild climate zones, e.g., CZ06, CZ07, and CZ08. See enclosed supporting analysis and documentation. |
| Heating (Gas) Savings | 2019 / 2020 | Carryover from SCE17HC054 Rev0 to SCE17HC054 Rev1 through 12/31/2019 | * **For 2019**, adopted per disposition guidance without modifications * **For 2020** measure savings and reporting, SCG will be working with Nexant to develop a research plan vetted by IOUs/CPUC (Final on May 31st). Gas savings analysis and submittal of workpaper planned for September 30th. Disposition has directed that the savings analysis and gas savings workpaper update be complete by August 1st |
| Heat Pump Savings | 2019 |  | * For Cooling, adopted with adjustments. Adopt adjusted (DEER-Weighted Tstat schedule) electric (kWh) savings * For Heating, adopted as directed. Assume no savings contributions OR zero savings |
| Delivery Method | 2019 | Commission Staff also note that the workpaper includes both upstream and midstream program designs and  that neither of these two models lend themselves to verification of the equipment type | Offering will be updated (and limited) to **Downstream and Downstream DI** Only |
| DEER2020 Peak Demand (kW) | 2020 | Peak demand to be updated per Resolution E-4952 | As with current version of the workpaper, future updates to the workpaper (e.g., REV2 for 2020) will exclude peak demand (kW) savings. Current methodology and experimental design used for evaluating energy savings potentials, e.g., Randomized Encouragement Design (RED) (appropriate alternative to a Randomized Control Trial (RCT)), is not “granular” enough and/or does not include the proper experimental design for evaluating peak demand (kW) savings attributed to the technology. |

Workpaper update submission on SCE17HC054 REV1 addressing CPUC’s latest disposition is expected to be submitted by 05/31/2019.

Appendix

1. Disposition - SCE17HCO54 R1 Smart Communicating Thermostat\_2019-04-05
2. ResHVAC\_kWhBaseline\_tstatwtg\_Rev4DRAFT