State of California

Memorandum



Date: 4/01/2023

To: Anders Danryd, Southern California Gas Company (SCG); Andres Marquez,

SCG; Cassie Rauss, Southern California Edison (SCE); Ryan Cho, SCE; Jay Bhatka, SCE; Andres Fergadiotti, SCE; Danielle Dragon, Pacific Gas and Electric (PG&E); Henry Liu PG&E; Ed Reynoso, San Diego Gas and Electric

(SDG&E); John Zwick (SDG&E); Nancy Goddard, PacifiCorp; Kenneth

Liljestrom (SDG&E)

CC:

From: Peter Biermayer P.E., Utilities Engineer, EE Planning & Forecasting

Section, Energy Division, CPUC

Subject: Disposition Approving SEER Rated AC and HP HVAC Equipment,

Residential – Measure Package SWHC049-03

1. Discussion and Direction

The California Public Utilities Commission (CPUC) approves the statewide measure package for SEER Rated AC and HP HVAC Equipment, Residential – SWHC049-03. This is a revision to the existing measure package SWHC049-02. The measure package was updated mid-cycle because of a change in the federal minimum efficiency standard and a change in the efficiency metric used by the federal standard. The measure package was also updated in accordance with Resolution E-5152 in addition to updates for the base case and measure case metrics to SEER2 rated efficiency values. The federal efficiency standard change became effective on January 1, 2023. SWHC049-03 will become effective retroactively on January 1, 2023 to align with the federal standards. Measure package SWHC049-02 will be set to expire on December 31, 2022.

2. Measure Package Summary

The measure updates were in response to Resolution E-5152 and to update the base case and measure case values to SEER2 rated equipment per the federal code. Additional key updates to SWHC049-03 are listed below.

Key updates include:

- Adopted DEER energy impacts and updated calculations to EnergyPlus v5 models and CZ2022 weather data.
- Added data collection requirements in upstream delivery channels.
- Adopted a SEER-to-SEER2 crosswalk for SEER2-rated units to align with the updated federal code effective on January 1, 2023.
- Updated material and labor costs.

3. Critical Review Issues

Reviewers confirmed that all updates were completed in accordance with CPUC policy and guidance. The Ex Ante Review team had minor comments for San Diego Gas & Electric (SDG&E) requesting minor text edits and other clarifying comments. In addition, the Ex Ante Review Team talked through the SEER-to-SEER2 crosswalk values with SDG&E and the measure developers to ensure the federal standard has been accurately updated.