

State of California

Memorandum



Date: April 22, 2021

To: Ryan Cho, Southern California Edison (SCE); Jay Bhatka, SCE; Danielle Dragon, Pacific Gas and Electric (PG&E); Chan Paek, Southern California Gas (SCG); Ed Reynoso, San Diego Gas and Electric (SDG&E); John Zwick (SDG&E); Nancy Goddard, PacifiCorp

CC:

From: Peter Biermayer P.E., Utilities Engineer, EE Planning & Forecasting Section, Energy Division, CPUC

Subject: Disposition Approving Ductless HVAC, Residential – Fuel Substitution: **SWHC044-02**

1. Discussion and Direction

The California Public Utilities Commission (CPUC) approves the statewide workpaper for Ductless HVAC, Residential – Fuel Substitution: SWHC044-02. This workpaper is a revised Phase 2, 2021 workpaper submission and will become effective 90 days after approval.¹

2. Workpaper Summary

This fuel substitution workpaper supports measures SWHC044A through SWHC044P for residential applications to replace existing gas wall furnace and electric window AC with an electric ductless split heat pump for heating and cooling. This workpaper revision includes additional measures requested by BayREN, for heating load only, due to some customers not having any existing air conditioning. In addition, this workpaper updated baseline and measure case efficiency based on MASControl tech workbook. This workpaper meets all fuel substitution guidance document requirements.²

¹ Revised Phase 2 workpapers are effective 90 days after approval.

² Fuel Substitution Technical Guidance for Energy Efficiency, V1.1, dated 10/31/2019.
<https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442463564>

3. Critical Review Issues

Fuel substitution measures may face market barriers and Program Administrators (PAs) may choose to offer rebates to the customer that exceed the net cost to the participant of installing the more efficient measure, i.e., the Incremental Measure Cost (IMC). In the instances where the cost of the rebate exceeds the IMC, PAs will outline the reasons for such rebate in an addendum. Since each PA program may have different rebates, each PA will need to provide a separate addendum. If the program is third-party implemented, an addendum will be required for each instance.