

State of California

Memorandum



Date: February 19, 2020

To: Henry Liu, Pacific Gas & Electric (PGE); Cassie Cuaresma, Southern California Edison (SCE); Chan Paek, Southern California Gas (SCG); Ed Reynoso, San Diego Gas & Electric (SDGE)

CC:

From: Peter Biermayer - Utilities Engineer, Industrial/ Agricultural Programs and Portfolio Forecasting Section, Energy Efficiency Branch, Energy Division, CPUC

Subject: Disposition Approving Statewide Food Services Commercial Steam Cooker Workpaper: **SWFS005-02**

1. Discussion and Direction

The CPUC approves the revised statewide Food Services Commercial Steam Cooker workpaper SWFS005-02. This workpaper is a Phase 1 submission for 2020 effective date on May 19, 2020 and with an expiration date of 12/31/2021.

The currently active workpapers listed below will remain effective until May 19, 2020, at which time they will expire, superseding expiration dates previously noted in the December 23, 2019 disposition.

PGEFST102-6

SCE17CC004.0

WPSDGENRCC0014-4

The effective date for SWFS005-02 allows for a 90-day notification period between workpaper approval and the workpaper effective date.

The Program Administrators (PAs) are advised that any resubmission of SWFS005-02 for 2022 implementation requires a research-based revision of the Percent Time in Steam mode (PTS). Any workpaper revision must be preceded by a reviewed and approved workpaper plan which specifies the research scope and timeline.

2. Workpaper Summary

This workpaper supports these measures:

- Steam Cooker, electric
- Steam Cooker, gas

A steam cooker (“steamer”) provides a fast cooking option for preparing large quantities of food, while retaining vital nutrients in the cooked product. In addition, a steamer can be used to gently heat food products. Steamers are available in a variety of configurations, including countertop models, wall mounted models, and floor models mounted on a stand, pedestal, or cabinet style base. A steamer may consist of one to four stacked cavities, though two-compartment steamers are the most prevalent in the industry. Each cavity typically accommodates a standard 12-inch x 20-inch hotel pan. Steam is produced by a steam generator located within (or directly connected to) the cooking cavity. The steam is produced at (or slightly above) the compartment operating pressure (i.e., atmospheric pressure). This configuration is not used for pressure steamers. A steamer may produce steam from boiling water poured directly into the cooking compartment prior to operation (this is the simplest form of an internal steam generator, typically referred to as a “connectionless” steamer). The electric or gas heaters are typically located directly beneath the compartment floor.

A January 11th, 2019 disposition¹ directed the program administrators to carry out additional research:

- Further investigate relevant parameters driving steam cooker efficiency (such as the cooking energy efficiency, idle energy rate, pre-heat energy, and the PTS)

Except for the PTS, the factors were satisfactorily revised. In addition to the disposition requirements, the program administrators conducted a survey of knowledgeable customers about their food service practices. The results of the survey were used to revise the daily average amount of food cooked (in pounds per day) and the average hours the equipment remains in operation each day. These revisions were completed in accordance with the January 11th disposition and are appropriate and calculated correctly. Staff is satisfied with the revisions to the workpaper based on research findings with exception of the PTS.

The PTS factor characterizes how well the steamer is controlled in standby mode. There was no satisfactory field-based data available that supported either the baseline or efficient case PTS factor. Consequently, estimated values were used in the workpaper that are more conservative than the previous workpaper values. Further research is warranted and should entail equipment performance research and potentially a survey of a sample of both efficient and baseline recently purchased steamer equipment. If the PAs intend to offer these measures in 2022, any workpaper revision must be preceded by a reviewed and approved workpaper plan which specifies the research scope and timeline. The workpaper plan schedule should allow for time to complete the research, revise the work paper, undergo review and approval by the CPUC and to allow for a 90-day notification period prior to the effective date.

¹<http://deeresources.net/workpapers>