CPUC Comments on SWAP006-02 Dishwasher, Residential

Lead PA: SCG

Workpaper Submittal Date: 11/23/2020

CPUC Review Date: 12/15/2020

SCG Response Date 12/31/2020 & 2/19/2021

Please note responses to comments in the table below, revise workpaper, and upload the entire package to the WPA. If needed, please reach out to Workpaper Review Team to set up a call to discuss.

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| CPUC Comment | PA Response |
| Please revise the following on the Cover Sheet:   * Please clarify the effective year. Currently it says Phase 1 2021. If this is a change due to resolution it should be 2022. If this is a Phase 2 not due to resolution, what is the effective year? | We have switched to P2 2021 |
| There is no match for **DEER:Res\_ClothesDishWasher** on Energy Impact Tab – please revise  There is no match for “DishWash” on Measure tab – please revise | This was resolved during an IOU+CPUC call that this load profile is valid. Please let us know if it is still not valid.  In the EAD file, “DishWash” is used in the **TechID** column and **TechType** column. It has been removed from **TechID** column as a matching Tech ID is not found in READI.  “DishWash” is still in the **TechType** column as in READI. |
| In the Technology Summary section, no sources are provided for the Energy Star data. | The source for the savings on ENERGY STAR website is added.  United States EPA 2015. “ENERGY STAR Residential Dishwasher Final Version 6.0 Cover Memo” Page 1. April 2015 |
| In the Measure Case Description section; the sources for this section are incomplete - no page number. For the first source (ENERGY STAR. 2016. "ENERGY STAR® Program Requirements for Residential Dishwashers - Eligibility Criteria Version 6.0." Effective January 29, 2016.), it should be page 2, for example. | The page number is added to the reference. |
| In the Program Requirements section; the source for the "Eligible Products" section is incomplete, should be page 2. | The page number is added to the reference. |
| The "Eligible Building Types and Vintages" does not include electric water heating. Why not? | This is text left from the previous revision. Gas water heating is assumed because DEER data contains very small or negative electric savings. However, we were not able to confirm this by looking at the DEER data through READI. Please let us know if this is not the case so the gas heating requirement can be removed. DEER 2017 Data specifies “Typical Water Heater Fuel” in the description, but this verbiage was removed in DEER 2020.  In the same section “Eligible Building Types and Vintages”, the other requirement about the existing washer with 307 kWh or greater usage is removed as it is inappropriate. |
| In the Program Exclusions section; compact dishwashers are included in Energy Star. Why are they not included for incentives? | Compact dishwashers are not in DEER and would have lower savings due to their smaller size. |
| What % of workpapers sold are energy start. If >80% new baseline is required. | ENERGYSTAR 2019 data says 91% market penetration, including compact dishwashers which are not part of this workpaper. Per CPUC direction, SCG has removed ENERGY STAR offering but left the baseline of the more efficient code as it is in DEER  The higher tier measure (199 kWh) has relatively lower adoption due to the cost of the units. ENERGY STAR is currently in the process of updating the program requirements from version 6.0 to version 7.0, expected in 2022. SCG proposes a future update upon ENERGY STAR dishwasher specification update in 2022 with new measure and base cases. |
| Please spell out all acronyms the first time they are used. For example: EAEU on page 5. | The narrative was corrected so acronyms are spelled out before they are used. |
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| In the Electric Savings (kWh) section; there is no calculation for the UES, the section just describes the methodology used to get them. There is no table of example savings. Provide sample calculation for scaled measures in the narrative and provide calculation in measure data spec workbook. | An example calculation and savings tables were added in the narrative. The calculation for scaled measure savings is provided in “DEER2020 CZ Data” worksheet of DataSpec workbook. |
| The peak demand savings are supposed to be derived with the same methodology for the electric savings (DEER), but there is also no calculation nor example. Provide sample calculation for scaled measures in the narrative and provide calculation in measure data spec workbook. | A table with example data is added in the narrative.  The calculation for scaled measure savings is provided in “DEER2020 CZ Data” worksheet of DataSpec workbook. |
| The gas savings are supposed to be derived with the same methodology for the electric savings (DEER), but there is also no calculation nor example. Provide sample calculation for scaled measures in the narrative and provide calculation in measure data spec workbook. | A table with example data is added in the narrative.  The calculation for scaled measure savings is provided in “DEER2020 CZ Data” worksheet of DataSpec workbook. |
| How will the eligibility requirements be ensured for upstream delivery offerings? | This measure is currently not offered through upstream channel. Program Administrators or Implementers will need to develop appropriate plan to ensure the eligibility before offering in upstream. |
| Energy Impact IDs are listed in the EAD tables as “SWAP006A” for efficient 199 EAEU residential dishwashers, and “Appl-Dishwash-StdSize-Tier1” for larger Energy Star 270 EAEU residential dishwashers.  However, the workpaper narrative table “DEER Measure Tech IDs” on page 5, does not list the energy impact IDs that are found in the EAD table. Please make sure the Impact IDs are in the narrative as found in the EAD tables. | The third column header in “DEER Measure Tech IDs” was revised from “*Energy Impact ID”* to “***DEER*** *Energy Impact ID”*. This table shows the relevant DEER energy impact ID used for energy savings.  In the EAD tables, the measure tab describes the offerings and what Impact ID are used in the Energy Impact table of the EAD. |
| The dishwasher material costs are derived from average of published list prices from retailers in 2017. These costs are 3 years old and should be updated to current retailer list prices in a future update. | This workpaper revision was supposed to be a quick revision to address DEER2020 Data as requested by CPUC. SCG proposes to update costs in the next revision of the workpaper. |
| In the Non-Energy Impacts section, “Water Savings Parameters” table on page 8. The water use (gal/cycle) is listed for both dishwater measures as 3.36 gal/cycle. While, in the “Measure Case Specification” table on page 3, 3.5 gal/cycle is listed for the Energy Star Qualified tier, and “n/a” water use for the 199 kWh/yr tier.  Please report the inputs consistently in the workpaper. | There is now one offering   1. <=199 EAEU which is the most efficient product on the market   ENERGY STAR cutoff criteria is Max. 270 EAEU and Max. 3.5 gal/cycle    The <=199 EAEU offering is more energy efficient than ENERGY STAR offering but doesn’t have a max water use per cycle as it is not an ENERGY STAR offering.  The 3.36 gal/cycle usage in the table on page 8 is an average of all ENERGY STAR qualifying models, which is used for both Tiers, and is different than the maximum qualifying criteria used for qualifying units. |