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February 24, 2022

Ga-Young Park
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Topic: EPA ENERGY STAR® Version 7 Residential Dishwashers Specification, Draft 2

Dear Ms. Park:

This letter comprises the comments of the Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE) in response to the United States (U.S.) Environmental Protection Agency (EPA) Version 7, Draft 2, ENERGY STAR® Residential Dishwasher Specification.

The signatories of this letter, collectively referred to herein as the California Investor-Owned Utilities (CA IOUs), represent some of the largest utility companies in the Western U.S., serving over 32 million customers. As energy companies, we understand the potential of appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of products. We have a responsibility to our customers to advocate for standards that accurately reflect the climate and conditions of our respective service areas.

We appreciate this opportunity to provide the following comments about this draft of the specification. We commend EPA for revisiting the specification for dishwashers, which was last finalized in 2015. We support sustaining the ENERGY STAR program for Residential Dishwashers; particularly the energy and water efficiency levels as presented and EPA's proposal to align with the U.S. Department of Energy's (DOE) recently proposed test procedure.¹

1. The CA IOU support the adoption of the ENERGY STAR Version 7 Draft 2 Residential Dishwasher Specification.

An analysis of DOE's Compliance Certification Management System (CCMS) database² shows that over 92 percent of all residential dishwashers meet the current Version 6 efficiency levels and over 48 percent exceed the current Version 6 efficiency levels with similar ratios across the standard and compact product classes.

It would be premature to sunset the residential dishwasher product category, as there are products available that offer significant energy and water efficiency improvements over the current ENERGY STAR levels while providing acceptable levels of cleaning performance and cycle times. As noted by other commenters³, dishwashers have some of the lowest market penetration

¹ 86 FR 72738 ([EERE-2016-BT-TP-0012-0013](#)).

² <https://www.regulations.doe.gov/certification-data/>. Data obtained January 25, 2022.

³ Comments regarding Residential Dishwashers Version 7.0 Draft 1 Specification, Future Collaboration Opportunities comment ([Whirlpool Comments](#)).

rates of major appliances and have a significant gap in households that have a dishwasher but do not use it.⁴ Consumer dissatisfaction, whether it be related to cleaning performance or cycle times are pushing some consumers to higher energy- and water-using behaviors, such as hand washing, pre-rinsing, or utilizing more intensive cycles for everyday use. As a voluntary program highlighting top-tier products, ENERGY STAR is well suited to address these issues through its Version 7 specification.

2. EPA should continue to promote connectivity by maintaining the connected allowance for dishwashers in this specification.

The CA IOUs affirm our strong commitment to connected functionality across product categories, including dishwashers and other home appliances. Connected functionality and an appliance’s capability to participate in demand response events are of strong interest for California. Through California Senate Bill 49 (SB 49), California is looking to demand response as an option in our flexible demand standards to meet the needs of a progressively dynamic electrical grid that is increasingly powered by renewables.⁵ By further encouraging manufacturers to produce connected appliances, ENERGY STAR certification could contribute to greater grid reliability and decarbonization. Given California’s priorities with SB 49 and the federal research into Grid-Interactive Efficient Buildings,⁶ we strongly urge EPA to continue to use all available tools to encourage market expansion of connected products.

In the March 2020 Draft 1 Version 7 Residential Dishwashers Specification,⁷ EPA maintained a five percent “adder” for standard-size connected dishwashers, which was finalized in the March 2015 Version 6 Specification⁸ but has been removed under this Draft 2 Specification. The CA IOUs recommend that EPA keep the connectivity “adder” of five percent for standard-size dishwashers and consider expanding coverage to compact-sized dishwashers.

EPA noted in its Draft 2 cover memo that “with diminishing returns for efficiency for dishwashers, providing a connected adder is not in the best interest of the consumer.”⁹ Of the 773 standard-sized dishwashers listed on the ENERGY STAR qualified products list, 21 are certified with connected functionality, and all 21 of these products would be ENERGY STAR certified regardless of the connected allowance.¹⁰ Maintaining a connected allowance is not diminishing the energy efficiency or performance of ENERGY STAR certified dishwashers and as such, not directly producing unsatisfactory results for consumers. Additionally, EPA’s statements do not accurately reflect the level of interest from both the CA IOUs and California state regulators in maximizing highly efficient connected loads to achieve efficiency, grid reliability, and decarbonization goals.

3. The CA IOUs support EPA’s proposed alignment with DOE’s Cleaning Performance Test Procedure and adoption of a minimum per-cycle cleaning index.

The CA IOUs support EPA’s proposal to align the Version 7 Specification with DOE’s Cleaning Performance Test Procedure and the Cleanliness Index of 65 as stated in DOE’s Notice of

⁴ US EIA: Today in Energy (June 19, 2017): [Dishwashers are among the least-used appliances in American Homes](#).

⁵ California Senate Bill 49: https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB49.

⁶ More information on Grid Efficient Buildings at: <https://www.energy.gov/eere/buildings/grid-interactive-efficient-buildings>.

⁷ [ENERGY STAR Draft 1 Version 7.0 Residential Dishwasher Specification](#)

⁸ [ENERGY STAR Residential Dishwasher Version 6.0 Final Draft Specification](#)

⁹ [ENERGY STAR Version 7.0 Residential Dishwasher Draft 2 Specification Cover Memo.pdf](#)

¹⁰ Based on a review of the ENERGY STAR Residential Dishwashers qualified product list on February 17, 2022.

Proposed Rulemaking (NOPR),¹¹ which proposes to apply a cleaning performance test method based on the Association of Home Appliance Manufacturers' (AHAM) DW-2-2020 test procedure to all covered residential dishwasher products.

The CA IOUs have been strongly supportive of efforts by both DOE and EPA to incorporate a cleaning performance test to ensure that the energy savings and water savings benefits of dishwashers are fully actualized. Stronger assurances in cleaning quality will ensure consumers utilize the “normal” cycle with greater regularity, reduce the amount of pre-rinsing and reduce hand washing. In our March 2015 comments to DOE’s Dishwasher Energy Conservation Standards NOPR, we highlighted that this provision would help ensure “(1) product utility is not compromised in the normal cycle in order to meet the energy and water use standards adopted and (2) the estimated energy and water savings are realized for the installed equipment.”¹²

To further decrease consumer pre-rinsing or pre-washing, the CA IOUs agree with Samsung¹³ that EPA should consider increasing the number of tableware that are soiled as part of the cleaning performance test to better align the performance test with the definition of a “normal cycle.” Current testing under DOE’s Appendix C1 and EPA’s 2014 Test Method for Determining Residential Dishwasher Cleaning Performance¹⁴ defines a “heavy” load as only having half of the dishes dirtied. Meanwhile, the medium and light test conditions include mostly clean dishes. While this might be representative of current or past pre-rinsing, it reinforces the design and development of products that require pre-rinsing.

¹¹ 86 FR 72738 ([EERE-2016-BT-TP-0012-0013](#))

¹² [EERE-2014-BT-STD-0021-0023](#) (Comment #3)

¹³ Comments regarding Residential Dishwashers Version 7.0 Draft 1 Specification, Extra Heavy Soil Loading comment ([Samsung Comments](#)).

¹⁴ [ENERGY STAR Final Test Method for Determining Residential Dishwasher Cleaning Performance](#)

In conclusion, we would like to reiterate our support for EPA's ENERGY STAR Version 7.0 Draft 2 Specification on Residential Dishwashers. We thank EPA for the opportunity to be involved in this process.

Sincerely,



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