

July 19, 2019

Ms. Tanja Crk
US Environmental Protection Agency
Ariel Rios Building 6202J
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. Crk:

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments in response to the Draft 1, Version 3 ENERGY STAR® Commercial Dishwashers Product Specification, released by the Environmental Protection Agency (EPA) on April 3, 2019.

CEE is the binational organization of energy efficiency program administrators and a staunch supporter of the ENERGY STAR® Program. CEE members are responsible for ratepayer-funded efficiency programs in 38 US states, the District of Columbia, and four Canadian provinces. In 2017, CEE members directed over 70 percent of the nearly \$9 billion in energy efficiency and demand response program expenditures in the two countries. These comments are offered in support of the local activities CEE members carry out to actively leverage the ENERGY STAR brand CEE consensus comments are offered in the spirit of strengthening ENERGY STAR, so it may continue to serve as the national marketing platform for energy efficiency.

CEE highly values the role ENERGY STAR plays in differentiating energy efficient products and services that the CEE membership supports locally throughout the US and Canada. We appreciate the opportunity to provide these comments.

CEE Supports Specification Revisions That Leverage Energy Savings Opportunities in the Commercial Dishwashing Machine Market

CEE supports the EPA decision to revise the existing ENERGY STAR specification for commercial dishwashing machines given the relatively high market penetration of

ENERGY STAR qualifying machines (67% of shipments in 2017), the availability of revised American Society of Testing and Materials (ASTM) test standards that include washing energy performance test procedures, and the availability of washing energy performance data collected by EPA since 2017. A revision to the ENERGY STAR specification allows for continued identification of the highest performing models in the market. Additionally, it has the potential to provide continued support to CEE members with programs for this category including capturing additional washing energy savings based on the new washing energy metric. In 2018, 50 CEE member programs included offerings for commercial dishwashers, and 41 of those programs referenced the ENERGY STAR Specification.

CEE Supports Responsible Introduction of Washing Energy Performance Criteria into the ENERGY STAR Specification

During the development of the ENERGY STAR Commercial Dishwashers Version 2 Specification from 2010-2012, CEE highlighted the need for total energy consumption performance data for all dishwasher machine types to determine energy savings and cost-effectiveness with confidence. At that time, CEE commended EPA and DOE for committing to work with industry to revise the dishwasher test procedure to include a metric to account for all energy consumed by a machine in wash and idle modes. That was accomplished through the ASTM processes to revise ASTM F1920-15, *Standard Test Method for Energy Performance of Rack Conveyor Commercial Dishwashing Machines*, and ASTM F1696-18 *Standard Method for Testing Energy Performance of Stationary-Rack, Door-Type, Commercial Dishwashing Machines* that were completed in 2015 and 2018 respectively. CEE understands ASTM International to be a reputable standards development organization that employs an open, transparent process to develop voluntary consensus standards. Given manufacturer involvement in the standard's development, CEE finds the introduction of the new washing energy metric to the ENERGY STAR Commercial Dishwasher Specification Version 3 to be a responsible course of action.

EPA has been working with stakeholders since July 2017 to collect washing energy performance data in accordance with the ASTM test procedures. The dataset for the Draft 1 proposal includes 308 models from 15 manufacturers. In the Draft 1 Specification EPA notes:

While the Agency has substantial data for idle energy and water consumption, the Agency has a select set of wash energy data points. Upon evaluation of the data,

EPA believes the levels for idle energy rate, washing energy, and water consumption in Tables 1 and 2 [of the draft specification], collectively recognizes leadership products within each category and reflects a conservative approach that accounts for uncertainty in wash energy. Addressing wash energy is new to ENERGY STAR and this Version 3.0 specification provides an opportunity to improve the efficiency of wash energy and build a more robust dataset.

EPA sought to identify performance criteria that identify approximately the top 25% of models while recognizing that the data on washing energy is limited. CEE understands that EPA is working to gather additional washing energy data from manufacturers to inform subsequent drafts.

CEE staff analysis indicates that out of the 308 models in the dataset, there is washing energy performance data for 22 percent of the models (22 out of 102 of low temperature machines and 45 out of 206 high temperature machines). While EPA shared the dataset used to develop the draft 1 specification, it's not clear how many manufacturers are represented that meet proposed criteria. CEE encourages EPA to assess the impact of the proposed criteria, particularly washing energy, on individual manufacturer's ability to qualify products across categories, and share that assessment with stakeholders. Insight into whether multiple major manufacturers would be able to qualify products at proposed levels across product categories is an essential data point for program consideration and specification adoption.

CEE Appreciates the Data Set and Basis Provided by EPA But Additional Information is Required to Enable Robust Stakeholder Assessment

CEE appreciates EPA providing the data set, including the graphical analysis used to identify proposed washing energy criteria, and estimated annual energy savings for units meeting Draft 1 criteria. We also appreciate the detailed explanation of how the proposed criteria were developed provided in the notes of the Draft 1 Specification, and the breakdown of shipment data by product category that EPA is using as a proxy for market penetration provided in the stakeholder webinar slides. This information helps to support program administrators and other ENERGY STAR Partners in assessing whether the proposed performance levels will enable cost-effective offerings, consumer value, and regulator support.

CEE Requests Additional Data to Enable Partner Assessment

While the data provided in Draft 1 supports a portion of the necessary stakeholder assessment described above, additional information is needed for program administrators to justify program support, including:

- Transparency to how the energy savings values included in the dataset were calculated.
- Number of models, brand, or unique model groups “available” that would meet the proposed performance criteria for each product type. While the necessary data may be included in the dataset that was shared, it is not intuitive how to derive such pass rates based on the column headings. Further, as some of the manufacturer names are masked, it would not be possible for stakeholders to derive the number of manufacturers with models that meet proposed criteria.
- Cost-effectiveness analysis and incremental retail price of the base unit relative to the ENERGY STAR unit.

This level of data enables program administrators to evaluate proposed changes in energy performance levels. CEE members need this information to determine impact, understand the size of the energy savings opportunity in terms of market potential and total energy savings, and the energy savings and the incremental costs of higher performing models. Having access to this level of data better enables program administrators to justify programs and support the ENERGY STAR criteria.

CEE would once again like to thank the EPA for the opportunity to comment on Draft 1, Version 3 ENERGY STAR® Commercial Dishwashers Product Specification. Please contact CEE Program Manager Bjorn Jensen at 617-337-9280 with any questions about these comments.

Sincerely,



Ed Wisniewski
Executive Director