

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF AIR AND RADIATION

December 20, 2017

Dear ENERGY STAR® Commercial Dishwasher Manufacturer or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) is extending the ENERGY STAR Version 3.0 Commercial Dishwasher specification revision data assembly effort. EPA distributed a Discussion Guide and Data Assembly Template to stakeholders on July 14, 2017, indicating the Agency's intent to assemble wash energy performance data in support of the upcoming specification revision and to collect feedback on proposed updates to the specification under consideration. In light of the limited amount of data received, EPA is extending the deadline for data until February 28, 2018 and seeking some additional feedback.

To ensure that ENERGY STAR continues to represent the top performing products in the marketplace, EPA continues to work with the industry to assemble energy performance data to inform the Version 3.0 specification performance levels. In an effort to streamline the data submission process, EPA reminds stakeholders that certification requirements for wash energy will be included in the Version 3.0 specification, and this new metric is the driving reason for the data assembly effort. For currently certified products, EPA would like to remind stakeholders that repeat testing of idle energy and water consumption is not necessary, although EPA will accept any updated information stakeholders wish to submit.

As a reminder, the following ASTM test methods will be used to evaluate the energy and water performance of commercial dishwashers:

- ASTM Standard F1696-15, *Standard Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines*
- ASTM Standard F1920-15, *Standard Test Method for Performance of Rack Conveyor Commercial Dishwashing Machines*

In response to initial feedback received from stakeholders, the Agency is highlighting two additional topics for stakeholder consideration.

Voltage Testing Guidance

For products with a single voltage configuration, EPA is proposing that those products would be tested based on the electrical rating on the product name plate. However, the Agency has learned that many manufacturers also carry products that are capable of operating in multiple voltage configurations. In some cases, manufacturers program the voltage setting before installation, to meet the needs of the customer. In other cases, products have variable voltage controls such that an end-user is able to adjust the voltage setting post-installation. Based on stakeholder discussions and market research, EPA understands that the majority of eligible commercial dishwashers with dual-voltage (approximately 80%) are installed and operated at a 208V rating. For this reason, EPA proposes that commercial dishwashers with dual-voltage configurations would be tested at 208V, as the most representative scenario.

EPA welcomes data on product performance in different voltage configurations; however, manufacturers certifying products will only be required to submit performance data on a single electrical rating. EPA intends to include a reporting requirement for the electrical rating at which a product is tested. In sharing this information, the Agency will also include a customer-facing caveat that energy performance may vary if the installed voltage configuration varies from the tested electrical rating.

EPA understands there is no voltage testing guidance for compliance with NSF 3 (standard for commercial warewashing equipment). In the interest of reducing the testing burden on manufacturers, EPA anticipates that products tested for ENERGY STAR certification will be tested at the same electrical rating as they are for NSF 3. EPA is seeking input on how to best ensure clear testing guidance as it relates to NSF 3 testing and developing the most accurate and comparable dataset.

External Booster Heater Energy Consumption

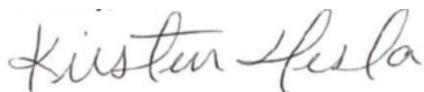
Based on market research, EPA understands that some commercial dishwashers have an integral (or self-contained) booster heater while other models are designed to operate with an external (or remote) booster heater. Overall energy use for these products is characterized by both idle and wash energy consumption for the tank heater and booster heater. The ASTM F1920-test method measures dishwasher and booster heater energy consumption separately. In preliminary comments, one stakeholder suggested that test results may be skewed toward external booster heater models, because some end-users may not factor in the additional external booster heater energy when they evaluate idle and wash energy performance. In an effort to more fairly compare different models, EPA is proposing to set certification requirements and report on the Product Finder the combined dishwasher and booster heater energy consumption for idle and wash energy. This approach is similar to how the ASTM test method measures integral booster heater and dishwasher energy consumption. EPA believes that reporting the combined energy consumption may more accurately inform consumer choice.

Submittal of Energy Performance Data and Written Comments

EPA is extending the commercial dishwasher data assembly effort deadline. Energy and water performance data, along with any additional comments on the Discussion Guide or testing guidance in this memo should be submitted via email to commercialdishwashers@energystar.gov no later than **February 28, 2018**. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise. EPA correspondence and specification documents are posted on the ENERGY STAR Commercial Dishwashers specification development [webpage](#),

Stakeholders with questions or comments can contact me directly at (202) 564-2984 and Hesla.Kirsten@epa.gov or Adam Spitz, ICF, at (916) 231-7685 and Adam.Spitz@icfi.com.

Sincerely,



Kirsten Hesla, Product Manager
ENERGY STAR Commercial Food Service