September 2, 2021

Dr. Stephanie Johnson  
U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy  
Building Technologies Office, EE-2J  
1000 Independence Avenue SW  
Washington, DC 20585  


Dear Dr. Johnson:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), Consumer Federation of America (CFA), National Consumer Law Center, on behalf of its low-income clients (NCLC), and Northwest Energy Efficiency Alliance (NEEA) on the supplemental notice of proposed rulemaking (SNOPR) for test procedures for microwave ovens. 86 Fed. Reg. 41759 (August 3, 2021). We appreciate the opportunity to provide input to the Department.

We support clarifying the instructions for testing standby power mode of a microwave oven but urge DOE to require that all microwave ovens be tested “as shipped.” DOE’s November 2019 proposed test procedure, which does not consider energy use from connected features, calls for network functionality to be disabled during testing. However, some microwave oven models do not provide instructions for disabling connected features. In the SNOPR, DOE proposes that the standby power mode test be conducted with the connected function in the “as-shipped” condition if the user manual does not provide instructions for disabling the connected function. While we agree that this would be a useful clarification, we are concerned that DOE’s proposal would allow many microwave ovens to be tested with network functions disabled even though those functions may be unlikely to be disabled in the field. Specifically, if a microwave oven with connected features is shipped with those features enabled, we believe that it is unlikely that most consumers will take the necessary steps to disable those features. Such a scenario would result in the test procedure being unrepresentative of the model’s standby power consumption. We therefore urge DOE to require that all microwave ovens be tested “as shipped,” regardless of whether the user manual provides instructions for disabling the network functions. Testing all microwave ovens “as shipped” will help provide a more representative measurement of energy use of the product as it is being used by consumers.

With internet enabled microwave ovens becoming more common, we urge DOE to investigate how to capture additional power use due to connected features. Microwave ovens with connected features such as voice command operation, Wi-Fi compatibility, and scan-to-cook are becoming increasingly
available.\textsuperscript{1} Incorporating energy use from connected functions in the test procedure will provide consumers with more accurate information on the energy consumption of the model. In addition, capturing the power consumption of these features can incentivize manufacturers to develop ways to provide these features with low power consumption. DOE should continue examining network functionality in order to develop test procedures that incorporate the additional power use from connected features.

\textbf{In the future, DOE should establish an active mode test procedure for microwave ovens.} This SNOPR does not address previous comments filed by ASAP and other organizations regarding active mode energy consumption. We continue to urge DOE to amend the test procedure to measure active mode energy consumption. The test procedure should reflect real-world operation of microwave ovens and provide consumers with accurate energy consumption information. Without a test procedure for active power mode consumption, consumers are not able to compare cooking efficiencies of different models or understand the true energy use of their microwave ovens. Additionally, without an active mode test procedure, manufacturers are not able to distinguish the potential improved performance of microwave ovens using new technologies.

Thank you for considering these comments.

Sincerely,

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\textsuperscript{1} See for example, \url{https://shop.sharpusa.com/1-4-cu-ft-1000w-sharp-stainless-steel-smart-carousel-countertop-microwave-oven-smc1449fs/} and \url{https://www.geappliances.com/appliance/GE-0-9-Cu-Ft-Capacity-Smart-Countertop-Microwave-Oven-with-Scan-To-Cook-Technology-JES1097SMSS}. 