

Appliance Standards Awareness Project  
Alliance to Save Energy  
American Council for an Energy-Efficient Economy  
Consumer Federation of America  
Consumers Union  
National Consumer Law Center  
Natural Resources Defense Council  
Northwest Power and Conservation Council

September 21, 2016

Ms. Ashley Armstrong  
Appliance and Equipment Standards Program  
U.S. Department of Energy  
Building Technologies Office  
Mailstop EE-5B  
1000 Independence Avenue, SW  
Washington, DC 20585

**RE: Docket Number EERE–2012–BT–TP–0013/RIN 1904–AC71: Supplemental Notice of Proposed Rulemaking for Test Procedures for Cooking Products**

Dear Ms. Armstrong:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), Alliance to Save Energy, American Council for an Energy-Efficient Economy (ACEEE), Consumer Federation of America (CFA), Consumers Union (CU), National Consumer Law Center (NCLC), Natural Resources Defense Council (NRDC), and Northwest Power and Conservation Council (NPCC) on the supplemental notice of proposed rulemaking (SNOPR) for test procedures for cooking products. 81 Fed. Reg. 57374 (August 22, 2016). We appreciate the opportunity to provide input to the Department.

**We encourage DOE to initiate work to develop a test procedure for conventional ovens.** In the SNOPR, DOE proposes to repeal the existing test procedure provisions for conventional ovens. After reviewing comments related to “commercial-style” ovens, DOE concluded that “additional investigation is required to establish a representative test procedure for conventional ovens.”<sup>1</sup> We encourage DOE to initiate work to develop a test procedure to measure the cooking efficiency of conventional ovens. DOE’s analysis for the standards rulemaking for cooking products found that there are significant potential savings from improving the cooking efficiency of ovens. For example, the max-tech levels in DOE’s analysis for the September 2016 SNOPR would reduce oven energy consumption by 5-27% relative to ovens just meeting the proposed prescriptive requirements.<sup>2</sup> Further, while DOE screened out as a design option optimized burner/cavity design for the SNOPR due to concerns related to commercial-style ovens, DOE’s

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<sup>1</sup> 81 Fed. Reg. 57376.

<sup>2</sup> 81 Fed. Reg. 60819-20. (September 2, 2016). Tables IV.25-IV.28. Savings from max-tech levels relative to EL 1 for electric ovens and EL 2 for gas ovens.

analysis for the NOPR found that optimizing the burner and cavity design can reduce the energy consumption of gas standard ovens by 22%.<sup>3</sup> A test procedure for ovens will allow DOE to set efficiency performance standards for ovens in the future that could achieve significant savings and will also provide information to consumers about the cooking efficiency of ovens.

**We support DOE's proposal to use a water-heating test method for electric and gas cooking tops.** DOE had previously proposed to test conventional cooking tops with a hybrid (aluminum body and stainless steel base) test block. In the SNOPR, DOE proposes to instead use a water-heating test method based on EN 60350– 2:2013 for both electric and gas cooking tops. DOE determined that the test methods in EN 60350– 2:2013 produce repeatable and reproducible results and that the specified test vessels are compatible with all cooking top technologies.<sup>4</sup> We support the proposal to use a water-heating test method for cooking tops.

**We support DOE's proposal to require each diameter setting of “multi-ring” cooking top heating elements to be tested separately.** In the SNOPR, DOE continues to propose that electric cooking tops with surface units with flexible concentric sizes (or “multi-ring” heating elements) be tested at each unique size setting.<sup>5</sup> DOE testing for the 2014 test procedures NOPR found that efficiency decreases significantly at the smaller-diameter settings compared to the largest-diameter setting of a multi-ring surface unit. For example, for one surface unit in DOE’s test sample, cooking efficiency with three rings energized was 71.9% but decreased to 57.8% with just a single ring energized.<sup>6</sup> Testing each diameter setting of multi-ring heating elements separately will both better capture the energy consumption of cooking tops with these elements as well as encourage manufacturers to develop ways to improve the efficiency of the smaller-diameter settings.

**DOE’s proposal for calculating annual energy consumption for cooking tops appears to be reasonable.** In the SNOPR, DOE proposes to calculate the annual energy consumption of cooking tops by multiplying the normalized test energy consumption of the cooking top by the normalized cooking frequency and the number of days in a year. The normalized cooking frequency incorporates a normalization factor of 0.47 applied to the cooking frequency from RECS 2009 such that the annual energy consumption of cooking tops as measured by the test procedure aligns with field data from FSEC and the 2010 RASS.<sup>7</sup> DOE’s proposed methodology for calculating the annual energy consumption of cooking tops appears to be reasonable.

**DOE’s proposal to allocate a portion of the low-power mode energy consumption of combined cooking products to the cooking top component appears to be reasonable.** The efficiency metric for cooking tops—integrated annual energy consumption (IAEC)—incorporates low-power mode energy consumption. However, DOE notes in the SNOPR that for combined cooking products (e.g. ranges), low-power mode energy consumption can only be measured for the product as a whole and not for the individual components. DOE is proposing to allocate a portion of the low-power mode energy consumption of combined cooking products to

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<sup>3</sup> 81 Fed. Reg. 60818. Table IV.23.

<sup>4</sup> 81 Fed. Reg. 57376.

<sup>5</sup> 81 Fed. Reg. 57384.

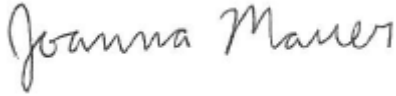
<sup>6</sup> 79 Fed. Reg. 71906. (December 3, 2014).

<sup>7</sup> 81 Fed. Reg. 57387-88.

the cooking top component based on the ratio of the annual cooking hours for the cooking top to the total annual cooking hours for the combined cooking product.<sup>8</sup> This method for calculating the low-power mode energy consumption of cooking tops that are part of combined cooking products appears to be reasonable.

Thank you for considering these comments.

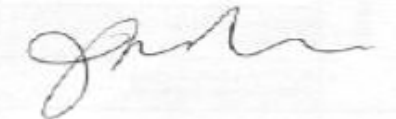
Sincerely,



Joanna Mauer  
Technical Advocacy Manager  
Appliance Standards Awareness Project



Kateri Callahan  
President  
Alliance to Save Energy



Jennifer Amann  
Director, Buildings Program  
American Council for an Energy-Efficient  
Economy



Mel Hall-Crawford  
Energy Projects Director  
Consumer Federation of America



Shannon Baker-Branstetter  
Policy Counsel, Energy and Environment  
Consumers Union



Charles Harak, Esq.  
National Consumer Law Center  
(On behalf of its low-income clients)



Lauren Urbanek  
Energy Efficiency Advocate  
Natural Resources Defense Council



Tom Eckman  
Senior Advisor  
Northwest Power and Conservation Council

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<sup>8</sup> 81 Fed. Reg. 57388.