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September 11, 2014

Via E-Mail

Ann Bailey  
Director  
ENERGY STAR Product Labeling  
U.S. Environmental Protection Agency

appliances@energystar.gov

Re: ENERGY STAR Most Efficient 2015 Proposed Recognition Criteria

Dear Ms. Bailey:

On behalf of the Association of Home Appliance Manufacturers (AHAM), I would like to provide our comments on the Environmental Protection Agency's (EPA) ENERGY STAR Most Efficient 2015 Proposed Recognition Criteria.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM supports EPA and the Department of Energy (DOE) in their efforts to provide incentives to manufacturers, retailers, and consumers for continual energy efficiency improvement, as long as product performance can be maintained for the consumer. But, AHAM is concerned that EPA continues to establish Most Efficient criteria in a way that is not sufficiently transparent, supported by data, consistent with EPA's Guiding Principles for the ENERGY STAR program, or consistent with actions it has taken with regard to its baseline specifications, thus resulting in

actions that could be deemed arbitrary and capricious.<sup>1</sup> A case in point is EPA’s proposal to add dishwashers to the Most Efficient program in 2015 as further discussed below.

For the first time, EPA proposed ENERGY STAR Most Efficient criteria for dishwashers. That proposal includes the following elements:

1. Exclusion of compact dishwashers from eligibility;
2. Eligibility criteria reflecting energy and water savings over the Federal standard of 22 and 36 percent respectively;
3. A cleaning performance metric; and
4. A cleaning performance reporting requirement.

The only data EPA presented to support this proposal was an indication that 38 products from five brands would meet the proposed energy and water criteria. And that data was presented only during a webinar—it did not accompany the written proposal and, as of the date of these comments, has not been posted on EPA’s website. This data would be required to support EPA’s decision to include dishwashers in the Most Efficient Program. But it is not the only data that EPA should consider and present to stakeholders. Consistent with EPA’s Guiding Principles, EPA should also evaluate other factors, including, but not limited to, 1) whether significant energy savings can be realized on a national basis; 2) whether purchasers will recover their investment in increased energy efficiency within a reasonable period of time; and 3) whether the proposed levels can be achieved through one or more technologies.<sup>2</sup> If EPA analyzed those factors, it has not described or presented its analysis for stakeholder review. Accordingly, it is difficult to comment on whether dishwashers should be included in the Most Efficient program.

Similarly, EPA has presented no data to support its decision not to include compact dishwashers in the program. AHAM is not commenting on whether or not those products should be eligible for the Most Efficient designation. We simply note that EPA must present its rationale for excluding those products. It is not enough to state—only when asked—that EPA did not think there was sufficient opportunity; that is a conclusion, not a reason. EPA should present the data upon which it relied to draw that conclusion.

EPA stated in its proposal that there is a “higher risk of trade-offs between energy savings and performance at these high efficiency levels” as its rationale for including a minimum per cycle Cleaning Index of 70 for the heavy test cycle. But EPA presented no data to support its conclusion that there is a higher risk of trade-offs between energy savings and performance at the levels it proposed. Although it may be true that as efficiency increases, good cleaning performance is more difficult to achieve, EPA did not demonstrate that the models meeting the

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<sup>1</sup> Note that AHAM is not commenting on whether or not dishwashers should be included in the Most Efficient program. We expect that our member companies will provide individual comments on that point.

<sup>2</sup> See, e.g., ENERGY STAR Products Program Strategic Vision and Guiding Principles, at 1-6 (May 2012) (“EPA specifications “are established to recognize products that: are cost-effective from the purchaser standpoint; offer at least equivalent functionality and features as standard products; and are proven and broadly available. . . . This process relies on rigorous market, engineering, and pollution savings analyses . . .”)

proposed levels suffer from performance deficiencies. Nor did EPA indicate that stakeholders have presented data-driven information indicating that the proposed levels would cause a cleaning performance-related concern. In short, EPA has presented nothing to support its bald assertion that the proposed levels risk a trade-off between energy savings and performance. And, therefore, EPA has not demonstrated a need for a cleaning performance reporting requirement or minimum per cycle cleaning index score.

EPA proposed a minimum per cycle Cleaning Index of 70 for the heavy test cycle as assessed under the ENERGY STAR Test Method for Determining Residential Dishwasher Cleaning Performance (Rev. Feb-2014). Yet again, EPA presented no data to support 1) the proposed required minimum score of 70; or 2) the decision to evaluate cleaning performance based only on the heavy cycle. EPA has presented no consumer data indicating the minimum level of cleaning performance consumers find acceptable. It does not appear EPA has even considered that. Nor did EPA present test data indicating that it tested any of the models it identified as meeting its proposed criteria to see whether those would meet its proposed minimum cleaning performance criterion. Without having tested those models, the only data EPA did present—the number of models and manufacturers that could meet the proposed criteria—is essentially meaningless because it considers only the energy and water criteria and ignores the cleaning performance requirement.

EPA's proposed cleaning performance score suffers from other fatal flaws. AHAM has commented numerous times (with supporting data from our round robin testing) that the ENERGY STAR Test Method for Determining Residential Dishwasher Cleaning Performance is not sufficiently repeatable or reproducible. And both DOE and EPA have recognized that laboratories need further experience with the test procedure. Because of these concerns, EPA proposed a voluntary reporting requirement in its Draft2, Version 6.0 dishwasher eligibility criteria for dishwashers. Yet, in the Most Efficient 2015 proposal, EPA has not presented a range of scores or a tolerance to account for the proven variation in the test procedure. More importantly, it does not appear that EPA has considered that variation in selecting its arbitrary Cleaning Index (nor has EPA indicated how the performance criterion would be evaluated for purposes of verification). It is impossible to appropriately set a Cleaning Index threshold without understanding how it is impacted by variation. In addition, EPA's voluntary data collection proposal in the Draft 2, Version 6.0 specification recognizes that EPA does not have data upon which to make a determination regarding a Cleaning Index requirement. Nor, as discussed above, does EPA have data demonstrating that a Cleaning Index (or a reporting requirement) is necessary in the first place. Accordingly, EPA has not been able to justify a cleaning performance metric in its ENERGY STAR specification for dishwashers. Yet, EPA proposes one here. Not only is EPA's proposal arbitrary and capricious, it contradicts other actions EPA is taking for the very same products in the ENERGY STAR program.

To support its proposal to require a minimum per cycle Cleaning Index of 70 for the heavy test cycle, EPA stated that “a dishwasher scoring below the threshold of 70 might have one quarter of the dishes rated the dirtiest possible score (9 out of 9).” This seems to be EPA's only rationale for selecting the score of 70. But EPA's reasoning is oversimplifying the test procedure and is unrealistic. It will not likely be the case that one quarter of the dishes will be uniformly rated with “the dirtiest possible score.” It is more likely that the scores will vary. Furthermore, it is

not realistic that a quarter of the dishes will be dirty and the rest will be entirely clean. Because of that, EPA's rationale does not make sense.

EPA indicated that it "has limited cleaning performance data at this time," and, so, it plans to review medium and light test cycle data to confirm the appropriateness of the use of the heavy test cycle for purposes of ENERGY STAR Most Efficient recognition. Here, EPA admits that it has limited data and that its decision is not based on adequate facts. Yet, EPA is essentially saying, "we will pick something for now and see if it was right later." This is the very definition of an arbitrary and capricious proposal that indicates an abuse of agency discretion. In addition, EPA's decision to rely on only one part of the total cleaning score is not consistent with the fact that, during the cleaning performance test procedure development, DOE agreed that a weighted performance score should not be used to qualify products for the ENERGY STAR program:

While DOE proposed a performance metric that combined the individual per-cycle cleaning metrics in the Draft 1 test method, it is not doing so in this [second] draft of the test method. Instead, DOE is proposing to calculate the individual cleaning performance score at each soil load that should meet minimum criteria to be set by EPA in the future for ENERGY STAR qualification. Stakeholders commented, and DOE agrees, that if a weighted performance metric is used to qualify dishwashers for the ENERGY STAR program, it is possible that a unit may have good performance at the sensor heavy response load but poor performance at the sensor low and still qualify. Further, a weighted performance metric could lead to circumvention of the test method. Therefore, DOE is proposing that the per-cycle cleaning performance score be calculated at each soil load.<sup>3</sup>

Basing the Most Efficient criteria on only one soil level is the same as assigning 100 percent of a weighted score to the heavy soil level. And that biased of a weighting would allow good performance in the heavy soil level and poor performance at lower soil levels, which is where most consumers do the majority of their loads according to the data DOE and EPA presented during the test procedure development. Thus, EPA's proposal could actually allow poor performers to hide behind a heavy soil cleaning performance score.

The above-outlined concerns with the dishwasher Most Efficient proposal serve as examples of the concerns AHAM has with the Most Efficient program as a whole. The Most Efficient program should be built on the foundation of the ENERGY STAR program. And yet, the Most Efficient criteria often are not developed in a way that is sufficiently transparent, supported by data, consistent with EPA's Guiding Principles for the ENERGY STAR program, or consistent with actions EPA has taken with regard to its baseline specifications. We urge EPA to follow its Guiding Principles in establishing Most Efficient criteria and to ensure that Most Efficient criteria proposals are consistent with EPA's existing ENERGY STAR specifications (and proposed specifications). Without consistency in the way specification and Most Efficient criteria are developed, stakeholders (i.e., EPA's partners in the ENERGY STAR program) will be confused and may lose confidence in the program.

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<sup>3</sup> See, e.g., Draft 2 Test Method for Determining Residential Dishwasher Cleaning Performance, lines 189-197 (Rev. Oct. 2012).

AHAM appreciates the opportunity to submit comments on the ENERGY STAR Most Efficient 2015 Proposed Recognition Criteria and would be glad to further discuss these matters should you so request.

Best Regards,

A handwritten signature in black ink, appearing to read "Jennifer Cleary". The signature is written in a cursive, flowing style.

Jennifer Cleary  
Director, Regulatory Affairs