September 22, 2020

Mr. Bryan Berringer
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Office, EE-5B
1000 Independence Avenue SW
Washington, DC 20585


Dear Mr. Berringer:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), Alliance for Water Efficiency (AWE), American Council for an Energy-Efficient Economy (ACEEE), Natural Resources Defense Council (NRDC), and Northwest Power and Conservation Council (staff) on the request for information (RFI) for energy conservation standards for commercial clothes washers. 85 Fed. Reg. 44795 (July 24, 2020). We appreciate the opportunity to provide input to the Department.

Significant technological and market changes since the last DOE final rule for commercial clothes washers have resulted in the availability of products with efficiency performance that not only exceeds the current standard levels, but that significantly exceeds the “max-tech” levels from the 2014 final rule. These changes indicate that there is significant potential to improve the efficiency of commercial clothes washers. Eliminating the equipment class distinctions for top-loading and front-loading washers would enable even greater savings. Furthermore, DOE’s investigation for the May 2020 clothes washer test procedures RFI suggests that the current test procedure is not representative of an average use cycle. An improved test procedure that better reflects real-world use would likely significantly change the efficiency ratings of commercial clothes washers. For these reasons, which we expand on below, DOE must evaluate potential amended standard levels for commercial clothes washers.

There have been significant technological and market changes since the last DOE final rule for commercial clothes washers. As shown in the graphs below, there are a range of both top-loading and front-loading models with efficiency levels that significantly exceed both the current standard levels and the max-tech levels from the 2014 final rule. For top-loaders, the most-efficient model has an energy efficiency rating (MEFJ2) that is 63% higher than the minimum standard and 42% higher than the max-tech level from the 2014 final rule. That same model consumes almost 50% less water than a model

---

1 Based on models in the DOE Compliance Certification Database as of 9/11/20. https://www.regulations.doe.gov/certification-data/#q=Product_Group_s%3A*

2 The MEFJ2 rating of the most-efficient top-loader is 2.2. The minimum standard is 1.35, and the max-tech level from the 2014 final rule was 1.55.
just meeting the minimum standard, and 35% less water than the max-tech level from the 2014 final rule.\(^3\) For front-loaders, the most energy-efficient model has an MEF\(_{J2}\) rating that is 49% higher than the minimum standard and 35% higher than the max-tech level from the 2014 final rule.\(^4\) The most water-efficient front-loading model consumes 15% less water than a model just meeting the minimum standard, and 10% less water than the max-tech level from the 2014 final rule.\(^5\)

---

\(^3\) The IWF rating of the most-efficient top-loader is 4.5. The minimum standard is 8.8, and the max-tech level from the 2014 final rule was 6.9.

\(^4\) The MEF\(_{J2}\) rating of the most energy-efficient front-loader is 2.98. The minimum standard is 2.00, and the max-tech level from the 2014 final rule was 2.20.

\(^5\) The IWF rating of the most water-efficient front-loader is 3.5. The minimum standard is 4.1, and the max-tech level from the 2014 final rule was 3.9.
These data on available models indicate that there is significant potential to improve the efficiency of commercial clothes washers.

**Eliminating the equipment class distinctions for top-loading and front-loading commercial clothes washers would enable greater savings.** Under the current standards, a top-loading washer can consume almost 50% more energy and more than twice as much water as a front-loading washer of the same capacity. We do not believe that top-loading washers provide a distinct utility for the purchasers of such equipment, and we urge DOE to consider a single equipment class for all commercial clothes washers. Evaluating potential amended standards for a single consolidated equipment class would allow for achieving greater savings.

**DOE’s investigation of the clothes washer test procedure indicates the need to evaluate potential amended standards for commercial clothes washers based on an amended test procedure.** As described in our comments on the May 2020 clothes washer test procedures RFI, DOE has identified a range of issues that suggest that the current test procedure for clothes washers (which is used to test both residential and commercial clothes washers) is not representative of an average use cycle. For example, the test procedure is likely significantly underestimating drying energy for many clothes washers by not providing a representative measurement of remaining moisture content (RMC). DOE’s evaluation of potential amended standards for commercial clothes washers should be based on an amended test procedure that better reflects real-world use.

**DOE should consider card readers as a potential technology option.** We understand that commercial clothes washers with card readers can allow for offering a discounted price for a cold wash cycle, which could encourage more users to select a cold wash cycle. Commercial clothes washers with card readers may therefore provide energy savings relative to coin-operated machines. We encourage DOE to investigate card readers as a potential technology option.

---

Thank you for considering these comments.

Sincerely,

Joanna Mauer  
Technical Advocacy Manager  
Appliance Standards Awareness Project

Mary Ann Dickinson  
President & CEO  
Alliance for Water Efficiency

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

Edward R. Osann  
Senior Policy Analyst  
Natural Resources Defense Council

Kevin Smit  
Principal Analyst  
Northwest Power and Conservation Council (staff)