Appliance Standards Awareness Project
Natural Resources Defense Council

October 18, 2021

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

RE: Docket Number EERE–2019–BT–STD–0034/RIN 1904–AE56: Notice of Proposed Determination for Commercial Prerinse Spray Valves

Dear Mr. Berringer:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP) and Natural Resources Defense Council (NRDC) on the notice of proposed determination (NOPD) for commercial prerinse spray valves. 86 Fed. Reg. 46330 (August 18, 2021). We appreciate the opportunity to provide input to the Department.

We urge DOE to consider an alternative approach to structuring the standards for commercial prerinse spray valves (CPSVs). Currently, DOE divides CPSVs into three product classes based on spray force, which the Department describes as a driving factor of consumer utility and satisfaction,[1] and the standards set a maximum flow rate in gallons per minute (gpm) for each product class. In the analysis for the proposed determination, DOE found that amended standards could result in consumers switching product classes if they are unsatisfied with the spray force available to them in their current product class. DOE has therefore tentatively determined that amended standards for CPSVs would decrease consumer utility and lead to product switching to higher flow-rate products. However, as described below, we believe that alternative approaches to structuring the standards could reduce water consumption without limiting the range of available spray forces, thus maintaining consumer utility and decreasing the risk of product switching.

As part of the 2016 final rule for CPSVs, DOE found a theoretical relationship between spray force and flow rate at 60 psi which adheres to the following equation:[2]

*Flow Rate (gpm) = 0.15 * Spray Force (ozf)*

In its analysis, DOE notes that CPSV manufacturers have little ability to deviate from this relationship;[3] however, we analyzed CPSVs in DOE's Compliance Certification Database (CCD) and found models with flow rates that significantly exceed the theoretical value according to the equation. For example, Figure 1[4] shows that there are models available at 5.4 ozf with flow rates of 1.1 gpm, while the equation would

[1] https://www.regulations.gov/document/EERE-2019-BT-STD-0034-0013. p. 65.
[2] 86 Fed. Reg. 46338-39.
[3] https://www.regulations.gov/document/EERE-2019-BT-STD-0034-0010. p. 5-11.
[4] Models in the DOE CCD as of 8/20/21.

predict a flow rate around 0.8 gpm for this spray force. Furthermore, there are various models on the market with flow rates of 1.15 gpm and spray forces that range from 6.7 ozf to 7.76 ozf. Likewise, products with similar spray forces can vary in flow rate. This seems to suggest that manufacturers may be able to reduce flow rate without losing spray force.

Figure 1. Spray force vs. flow rate for CPSV models

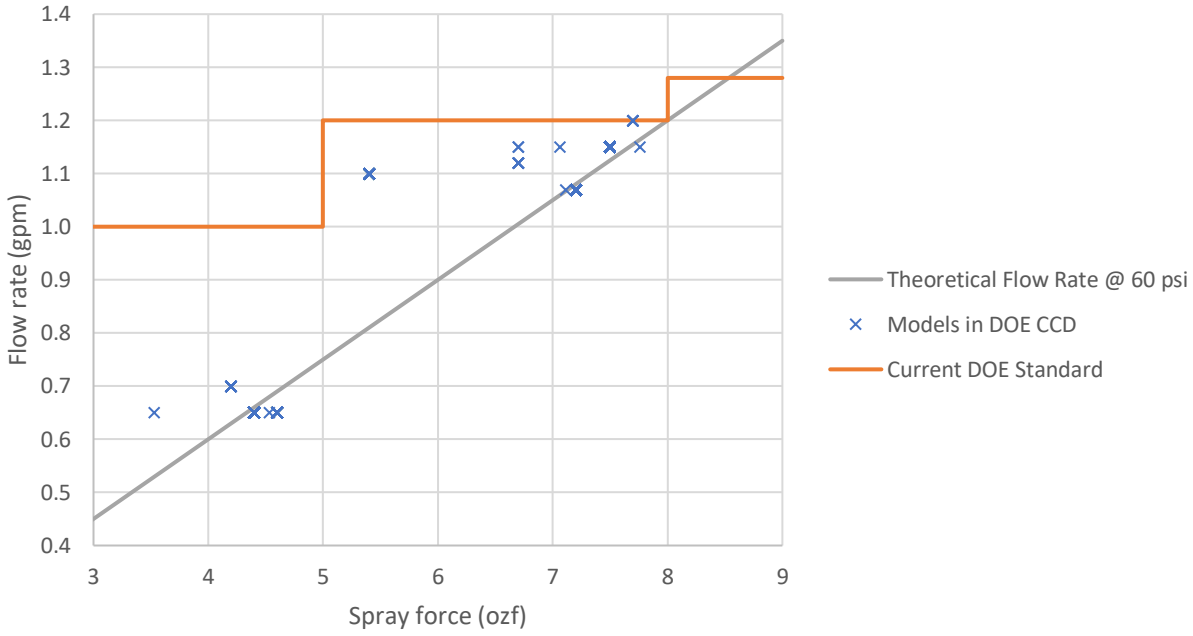

Figure 1 also demonstrates how the CPSV standards could be structured as an equation with flow rate as a function of spray force. While the current standard for Product Class 3 (spray force >8.0 ozf) could remain as it is, an equation could be beneficial for models with spray forces below 8 ozf. A linear relationship that is equivalent or similar to the theoretical equation that DOE recognizes in its analysis would encourage manufacturers to deliver a certain spray force with lower water consumption. If CPSV products are able to deliver the same consumer utility with lower water use, consumers would be less likely to switch to higher water use products, like faucets. Thus, we encourage DOE to reevaluate this proposed determination and consider alternative methods to structuring the CPSV standards.

Thank you for considering these comments.

Sincerely,

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