Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
National Consumer Law Center
New York State Energy Research and Development Authority
Northwest Energy Efficiency Alliance

May 30, 2023

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

RE: Docket Number EERE-2020-BT-STD-0039: Notice of Proposed Rulemaking for Energy Conservation Standards for Miscellaneous Refrigeration Products

Dear Mr. Adin:

This letter constitutes the comments of the Appliance Standards Awareness Project, the American Council for an Energy-Efficient Economy (ACEEE), the National Consumer Law Center (NCLC) on behalf of its low-income clients, the New York State Energy Research and Development Authority (NYSERDA), and the Northwest Energy Efficiency Alliance (NEEA) on the notice of proposed rulemaking for miscellaneous refrigeration products (MREF). 88 Fed. Reg. 19382 (March 31, 2023). We appreciate the opportunity to provide input to the Department.

We support the proposed standards. DOE has proposed standards that would deliver 0.31 quads of energy savings and associated consumer net present value (NPV) savings of up to $691 million. At the proposed efficiency levels, the average life-cycle cost (LCC) savings for all product classes are positive, and the payback periods are less than the lifetime of the equipment. For the most common product class, freestanding compact coolers (FCCs), a model that just meets the proposed standards would use 30% less energy than a baseline model today.

DOE has likely overestimated the decrease in industry net present value. DOE explains in the technical support document (TSD) that given the 10% increase in shipment-weighted average manufacturer production cost (MPC) at the proposed trial standard level (TSL 4), the Department estimates a 10% reduction in shipments in the compliance year compared to the no-new-standards case.[1] However, this description does not appear to reflect DOE's methodology for estimating the impact of amended standards on shipments. In Section 9.4.1 of the TSD, DOE presents an equation to calculate shipments that incorporates impacts from both price elasticity and efficiency elasticity.[2] DOE used a price elasticity of -0.45 for the first year of compliance and explains that "a price increase of 10 percent would result in

[1] https://www.regulations.gov/document/EERE-2020-BT-STD-0039-0026. p. 12-40.
[2] The price elasticity coefficient is negative, which has the effect of decreasing shipments (all else equal). However, the efficiency elasticity coefficient is positive, which has the effect of increasing shipments (all else equal). The weight of these two competing terms results in either an overall increase in shipments or decrease in shipments.

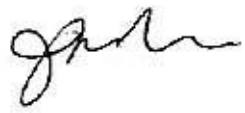
a shipments decrease of 4.5 percent, all other factors held constant."[3] The proposed standards would result in an increase in product installed cost of at most 10% (associated with FCCs). Therefore, ignoring the efficiency elasticity (which would have the effect of increasing shipments), we would expect to see a shipment decline of no more than 4.5%. It is thus unclear how DOE arrived at the estimate of a 10% decline in shipments. Accordingly, we think that it is likely that DOE has overestimated the decline in shipments, which would result in overestimating the decrease in industry net present value (INPV).

We support DOE's incorporation of price learning curves. DOE has updated the analysis to include price learning based on historical refrigerator freezer data. In addition, the analysis now reflects the price decline for variable speed compressor controls that is associated with semiconductor components. We believe that this approach more appropriately captures the future cost of MREFs, which has allowed the Department to more accurately assess the cost-effectiveness of potential amended standards.

Thank you for considering these comments.

Sincerely,

Rachel Margolis
Technical Advocacy Associate
Appliance Standards Awareness Project



Jennifer Amann
Senior Fellow
American Council for an Energy-Efficient Economy

Berneta Haynes
National Consumer Law Center
(On behalf of its low-income clients)

Chris Corcoran
Team Lead – Codes, Products, & Standards
New York State Energy Research and Development Authority (NYSERDA)

Blake Ringeisen
Sr. Engineer, Codes and Standards
Northwest Energy Efficiency Alliance

[3] https://www.regulations.gov/document/EERE-2020-BT-STD-0039-0026. p. 9-5.