

Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
Consumer Federation of America
Consumer Reports
Earthjustice
National Consumer Law Center, on behalf of its low-income clients
Natural Resources Defense Council
Northwest Energy Efficiency Alliance
Pacific Gas and Electric Company

August 26, 2024

Mr. Lucas Adin
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–2020–BT–STD–0039/RIN 1904–AF62: Direct Final Rule for Energy Conservation Standards for Miscellaneous Refrigeration Products

Dear Mr. Adin:

The Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), Consumer Federation of America (CFA), Consumer Reports (CR), Earthjustice, National Consumer Law Center, on behalf of its low-income clients (NCLC), Natural Resources Defense Council (NRDC), Northwest Energy Efficiency Alliance (NEEA), and Pacific Gas and Electric Company (PG&E) write to provide our strong support for the U.S. Department of Energy's (DOE's) Direct Final Rule (DFR) establishing amended energy conservation standards for miscellaneous refrigeration products. 89 Fed. Reg. 38762 (May 7, 2024).

Our organizations include consumer advocates, efficiency and environmental advocates, and a utility; we have worked for decades advocating for energy and water efficiency standards that provide large savings for consumers and significant cuts in carbon dioxide and other air pollutant emissions. Our coalition includes organizations that are leaders in testing appliances; conducting field studies on appliance energy use; evaluating emerging technologies; developing and implementing programs to increase the market share of efficient products; analyzing the impacts of improved efficiency standards; and producing the energy powering appliances. Our coalition also includes leading environmental groups and organizations that advocate for consumers and, in particular, low-income consumers.

We strongly support the standards in the DFR. The standards in the DFR reflect the joint recommendation that we submitted to DOE in September 2023 with the Association of Home Appliance

Manufacturers (AHAM),¹ which was supported by States and additional utilities.² The standards for miscellaneous refrigeration products were part of a package of recommendations for six products (refrigerators/freezers, miscellaneous refrigeration products, residential clothes washers, clothes dryers, dishwashers, and cooking products). We appreciate that DOE has published DFRs consistent with our joint recommendation for all six products.

The new standards for miscellaneous refrigeration products will cost-effectively reduce energy consumption by 20-30% for the major product categories relative to the current standards; the average life-cycle cost savings for each of the product classes are positive.³ On a national level, the standards will save 0.32 quadrillion Btus of energy over 30 years of shipments, provide net present value savings for consumers of up to \$0.77 billion, and cut carbon dioxide emissions by about 6 million metric tons.⁴

We support DOE’s price learning methodology. In the analysis for the DFR, DOE incorporated price learning, reflecting the observation that real prices of products often decrease over time. Specifically, DOE utilized the learning rate developed for refrigerators and freezers, which are very similar products to miscellaneous refrigeration products. DOE also applied a separate learning rate for the control portion of variable-speed compressors, consistent with the analysis for refrigerators and freezers.⁵ We support DOE’s price learning methodology, which we believe improves the analysis compared to an assumption of constant prices over time considering the historical data on price trends for residential refrigeration products. We also specifically support DOE’s price learning methodology for the control portion of variable-speed compressors since we would expect that the price of variable-speed compressors will decline faster than the overall price of miscellaneous refrigeration products.⁶

We also note that DOE evaluated alternate economic scenarios, including a “low benefits scenario” which incorporated a lower price learning rate as well as a lower energy price trend and fewer new housing starts relative to the reference case; the net present value savings using both 3% and 7% discount rates are also positive in this alternate scenario.⁷

We do not expect the standards in the DFR to have any impact on product reliability. The standards in the DFR can be met with straightforward efficiency improvements available in products on the market today including higher-efficiency compressors and fan motors, improved heat exchangers, improved glass doors, and increased insulation.⁸ Furthermore, as noted above, miscellaneous refrigeration

¹ <https://www.regulations.gov/comment/EERE-2014-BT-STD-0005-12811>.

² See <https://www.regulations.gov/comment/EERE-2019-BT-STD-0039-0056> (supporting statement from the New York State Energy Research and Development Authority, California Energy Commission, and Massachusetts Department of Energy Resources, dated October 5, 2023); <https://www.regulations.gov/comment/EERE-2019-BT-STD-0039-0057> (supporting statement from San Diego Gas and Electric and Southern California Edison, dated October 17, 2023).

³ 89 Fed. Reg. 38764. Table I.2.

⁴ 89 Fed. Reg. 38765.

⁵ <https://www.regulations.gov/document/EERE-2020-BT-STD-0039-0037>. pp. 8-7 to 8-13.

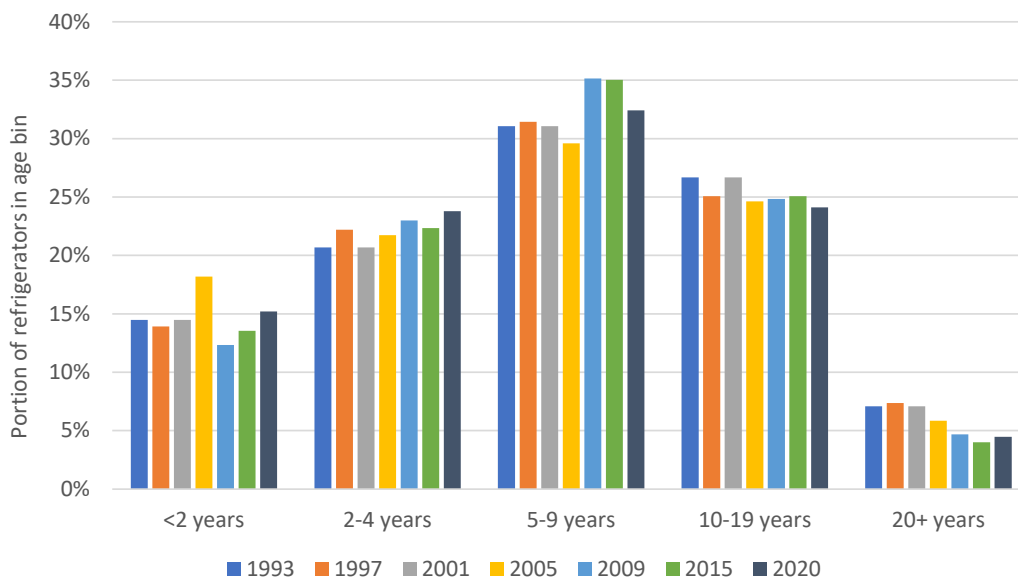
⁶ The learning rate for the control portion of variable-speed compressors is based on historical price data for “semiconductors and related device manufacturing.”

⁷ <https://www.regulations.gov/document/EERE-2020-BT-STD-0039-0037>. p. 10C-2. DOE adopted Trial Standard Level (TSL) 4.

⁸ <https://www.regulations.gov/document/EERE-2020-BT-STD-0039-0037>. pp. 5-17 to 5-18. For freestanding compact coolers (FCCs), freestanding coolers (FCs), and compact coolers with all-refrigerator and automatic

products are very similar to residential refrigerators; as shown in figure 1 below, historical RECS data show that the distribution of refrigerator age remained largely unchanged between 1993 and 2020 as refrigerator efficiency improved. Therefore, we do not expect the standards for miscellaneous refrigeration products to have any impact on product reliability.

Figure 1. Distribution of refrigerator age in RECS 1993, RECS 1997, RECS 2005, RECS 2009, RECS 2015, and RECS 2020⁹



Thank you for considering these comments.

Sincerely,

Joanna Mauer
Deputy Director
Appliance Standards Awareness Project

*On behalf of—
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defrost (C-13A), DOE adopted Efficiency Level (EL) 3; for coolers with all-refrigerator and automatic defrost (C-3A), DOE adopted EL 1.

⁹ <https://www.eia.gov/consumption/residential/>. Data for “most-used refrigerator.”

ASAP organizes and leads a broad-based coalition effort that works to advance, win, and defend new appliance, equipment, and lighting standards that cut emissions that contribute to climate change and other environmental and public health harms, save water, and reduce economic and environmental burdens for low- and moderate-income households.

ACEEE, a nonprofit research organization, develops policies to reduce energy waste and combat climate change. Its independent analysis advances investments, programs, and behaviors that use energy more effectively and help build an equitable clean energy future.

CFA is an association of more than 250 non-profit consumer and cooperative groups that was founded in 1968 to advance the consumer interest through research, advocacy, and education.

CR was founded in 1936 at a time when consumers had very few options to gauge the value, quality, or authenticity of goods and services. Today, CR's membership has grown to over 6 million members who fight with their voices and choices for a fair and just marketplace. As a mission-driven, independent, nonprofit member organization, CR continues to empower and inform consumers, incentivize corporations to act responsibly, and helps policymakers prioritize the rights and interests of consumers in order to shape a truly consumer-driven marketplace.

Earthjustice is the premier nonprofit public interest environmental law organization, wielding the power of law and the strength of partnership to protect people's health, to preserve magnificent places and wildlife, to advance clean energy, and to combat climate change.

NCLC has worked for consumer justice and economic security for low-income and other disadvantaged people in the U.S. since 1969 through its expertise in policy analysis and advocacy, publications, litigation, expert witness services, and training. Throughout its history, NCLC has advocated for policies and programs that increase energy efficiency in the homes of low-income consumers and that, therefore, reduce their energy bills.

NRDC is an international nonprofit environmental organization with more than 3 million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Beijing, and Delhi (an office of NRDC India Pvt. Ltd).

NEEA is a non-profit organization working to encourage the development and adoption of energy-efficient products, practices, and services. Funded by regional utilities, NEEA is a collaboration of 140 utilities and efficiency organizations working together to advance energy efficiency in the Northwest on behalf of more than 13 million consumers. This unique partnership has helped make the Northwest region a national leader in energy efficiency.

PG&E represents one of the largest combined gas and electric utilities in the Western U.S., serving over 16 million customers across northern and central California. As an energy company, PG&E advocates for appliance efficiency standards to cut costs and reduce consumption while maintaining or increasing consumer utility of products. PG&E has a responsibility to its customers to advocate for standards that accurately reflect the climate and conditions of its respective service areas.