Appliance Standards Awareness Project American Council for an Energy-Efficient Economy Consumer Federation of America National Consumer Law Center, on behalf of its low-income clients Natural Resources Defense Council Northeast Energy Efficiency Partnerships

March 11, 2021

Mr. John Cymbalsky 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–0004: Request for Information Concerning Prioritization of Rulemakings

Dear Mr. Cymbalsky:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), Consumer Federation of America (CFA), National Consumer Law Center, on behalf of its low-income clients (NCLC), Natural Resources Defense Council (NRDC), and Northeast Energy Efficiency Partnerships (NEEP) on the request for information (RFI) concerning prioritization of rulemakings. 86 Fed. Reg. 10211 (February 19, 2021). We appreciate the opportunity to provide input to the Department.

In summary, DOE must advance all rulemakings with legal deadlines that have passed or are upcoming and should move quickly to undo the harmful rules finalized under the Trump administration. In addition, in order to achieve even greater savings, DOE should work to complete discretionary rulemakings for dedicated-purpose pool pump motors, circulator pumps, and commercial and industrial fans, and consider initiating rulemakings for additional products not currently covered by federal standards such as air purifiers, portable electric spas, and linear tube lamps.

DOE must advance all rulemakings with legal deadlines. As of March 2021, DOE had missed legal deadlines for considering updates or finalizing amended standards for 28 products.¹ DOE is required to review and consider amending the standards for another 19 products over the next four years. DOE must advance all these rulemakings to catch up on missed deadlines as quickly as possible and meet upcoming deadlines. In addition, there are at least three rulemakings with legal deadlines that do not appear on the fall 2020 regulatory agenda. These cover central air conditioners and heat pumps, oil-fired and weatherized furnaces, and general service lamps. For central air conditioners and heat pumps, DOE is required to issue a proposed rule to amend the current standards or a determination of no change by December 2022,² but there is no listing for these products in the fall 2020 regulatory agenda. For oil-fired furnaces and weatherized gas furnaces, DOE was required to review the standards by June

¹ <u>https://appliance-standards.org/sites/default/files/Missed_deadlines_as_of_March_2021.pdf.</u>

² The last final rule was issued on December 5, 2016.

2017,³ but DOE has yet to initiate a rulemaking and there is no listing in the regulatory agenda. DOE should add these rulemakings to the spring 2021 regulatory agenda. Finally, DOE was required to initiate a rulemaking for general service lamps by January 1, 2020 and publish a final rule by January 1, 2022,⁴ but DOE has yet to initiate this rulemaking and there is no listing in the regulatory agenda. This rulemaking is the second required review for general service lamps under the statute. Pending litigation concerning rules issued in 2019 is unrelated to this obligation for a second review. Because a swift resolution of the dispute over the 2019 rules that restores the 2020 backstop standard is warranted and feasible, DOE should add this second lamp rulemaking to the spring 2021 regulatory agenda.

An ASAP report published in November 2020 found that updates to appliance standards could provide the average household more than \$100 annually in utility bill savings by 2030, increasing to \$230 in 2035 and nearly \$350 in 2050, and potential cumulative utility bill savings through 2050 for consumers and businesses are \$1.1 trillion.⁵ Potential cumulative CO₂ emissions reductions through 2050 are 1.5 to 2.9 billion metric tons. Figure 1 below shows the top dozen products ranked by potential CO₂ reductions under two power sector carbon intensity scenarios. We encourage DOE to accelerate progress on the products with the largest potential savings. However, as the figure shows, the collective savings from products beyond the top dozen ("others" in the figure) is also very large. DOE should not allow work on these products to fall further behind legal deadlines.

Figure 1. Potential cumulative CO₂ reductions through 2050 for the top dozen products (and all others combined) based on the AEO reference case (left) and a low-carbon grid scenario (right)



Source: https://appliance-standards.org/sites/default/files/Powerful Priority Report.pdf.

DOE should move quickly to undo the harmful rules finalized under the Trump administration. In a February 19, 2021 memo concerning a review of actions of the prior administration,⁶ DOE listed 13 rules

³ The last final rule was issued on June 6, 2011.

⁴ 42 U.S. Code 6295(i)(6)(B).

⁵ https://appliance-standards.org/sites/default/files/Powerful Priority Report.pdf.

⁶ https://www.energy.gov/sites/prod/files/2021/02/f82/eere eo13990 memo 1.pdf.

that the Department will consider "suspending, revising, or rescinding" consistent with Executive Order 13990 "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." Of the 13 rules, 11 concern the appliance standards program. These rules undermine existing appliance standards and impose barriers to setting strong future standards, and DOE should move quickly to undo them.

DOE should complete three discretionary rulemakings that are already far along. In addition to advancing all the rulemakings with legal deadlines, DOE should work to complete discretionary rulemakings for dedicated-purpose pool pump motors, circulator pumps, and commercial and industrial fans:

- <u>Dedicated-purpose pool pump motors</u>: The standards for dedicated-purpose pool pumps which will take effect on July 19, 2021 do not address replacement motors, which presents a significant loophole. A recently published UL standard—UL 1004-10:2020—includes requirements for pool pump motors that align with the standards for pool pumps. Requiring the UL label on pool pump motors would thus ensure that when a consumer replaces a motor on a pump that meets the pool pump standards, the new motor will continue to provide the same energy savings. In October 2020, DOE issued a proposed rule for test procedures and labeling requirements for dedicated-purpose pool pump motors.⁷ However, the October 2020 proposed rule would make certification to the UL standard voluntary, which would mean that consumers would continue to be sold inefficient, wasteful products unnecessarily. We urge DOE to quickly finalize the labeling rule and to make certification to the UL standard mandatory.
- <u>Circulator pumps</u>: There are currently no standards for circulator pumps, which are commonly used as part of a domestic hot-water recirculation system or to circulate hot water provided by a boiler. An Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) working group reached consensus on test procedures and standards for circulator pumps in 2016,⁸ but DOE has yet to publish proposed rules based on those term sheets. We urge DOE to promptly advance test procedures and standards for circulator pumps based on the ASRAC working group recommendations.
- <u>Commercial and industrial fans</u>: As shown in Figure 1 above, standards for commercial and industrial fans represent one of the top opportunities for reducing carbon emissions through appliance standards. An ASRAC working group reached consensus on items related to scope, test procedures, and metrics in 2015,⁹ but DOE has yet to advance rulemakings for either test procedures or standards. In 2020, the Air Movement and Control Association (AMCA) International, Air Conditioning Contractors of America (ACCA), and Sheet Metal & Air Conditioning Contractors of America (SMACNA) submitted a petition to DOE requesting that the Department establish test procedures for commercial and industrial fans based on AMCA 214.¹⁰ We strongly supported such action by DOE,¹¹ and urge the Department to move forward with both test procedures and standards for fans.

⁷ 85 Fed. Reg. 62816 (October 5, 2020).

⁸ <u>https://www.regulations.gov/document/EERE-2016-BT-STD-0004-0034;</u>

https://www.regulations.gov/document/EERE-2016-BT-STD-0004-0098.

⁹ https://www.regulations.gov/document/EERE-2013-BT-STD-0006-0179.

¹⁰ <u>https://www.regulations.gov/document/EERE-2020-BT-PET-0003-0001</u>.

¹¹ <u>https://www.regulations.gov/comment/EERE-2020-BT-PET-0003-0007</u>.

DOE should consider initiating rulemakings for additional products not currently covered by federal standards. DOE may be able to achieve significant energy savings by adding additional products to the federal standards program. Three potential candidates are air purifiers, portable electric spas, and linear tube lamps:

Air purifiers

About 5 million air purifiers were shipped in 2019,¹² and sales increased by 57% in 2020 mainly due to the COVID-19 pandemic.¹³ More than half of all shipments as of 2019 did not meet the ENERGY STAR specification, and air purifiers that do not meet the ENERGY STAR specification typically use more than 500 kWh per year on average.¹⁴ As shown in Figure 2, the most efficient air purifiers certified to ENERGY STAR are more than 5 times more efficient than the least efficient products.



Figure 2. Air purifiers certified to ENERGY STAR¹⁵

Portable electric spas

As of 2017, 5.5 million U.S. homes had a portable electric spa,¹⁶ and sales have increased significantly during the COVID-19 pandemic.¹⁷ In its analysis of standards for portable electric spas, the California Energy Commission (CEC) noted that "most spas are kept in standby mode year-round when not in use, since startup mode requires a lot of time and energy."¹⁸ CEC further noted that the energy consumed in

https://www.energystar.gov/sites/default/files/asset/document/2019%20USD%20Summary%20Report.pdf. ¹³ https://www.globenewswire.com/news-release/2021/01/26/2164712/0/en/Air-Purifier-Sales-Surge-in-the-U-S-Amid-the-COVID-19-Pandemic.html.

¹² ENERGY STAR reported 2.224 million shipments of ENERGY STAR certified "room air cleaners" and a market penetration rate of 43%:

¹⁴ <u>https://www.xcelenergy.com/staticfiles/xe/PDF/Regulatory/CO-Rates-and-Regs-DSM-Cadmus-RPP-Product-Analysis-August-2015.pdf</u>.

¹⁵ Air purifiers certified to ENERGY STAR as of March 4, 2021.

¹⁶ <u>https://www.phta.org/pub/?id=898F2DC4-1866-DAAC-99FB-7C36E0263A77</u>. p. 31.

¹⁷ https://www.knopnews2.com/2020/08/04/pool-and-hot-tub-sales-skyrocket-during-coronavirus/.

¹⁸ <u>https://efiling.energy.ca.gov/GetDocument.aspx?tn=222413&DocumentContentId=31256</u>. p. 16.

standby mode represents about 75% of the total energy consumed by a portable electric spa over its lifetime. The average standby power of "standard" spas certified to CEC is 188 W,¹⁹ which translates to almost 1,650 kWh per year.²⁰ As shown in Figure 3, the most efficient portable electric spa consumes less than a quarter of the standby power of a model just meeting the CEC standards.



Figure 3. Portable electric spas certified to the California Energy Commission²¹

Linear tube lamps

DOE has the authority to establish standards for "electric lights."²² As of 2015, there were over 2 billion linear fluorescent lamps installed in homes, businesses, and factories.²³ In recent years, LED replacements for fluorescent lamps in existing fixtures and for new fixtures have become widespread. While linear fluorescent lamps are currently subject to DOE standards, because the standards are technology-specific (they apply only to fluorescent lamps), DOE has not been able to evaluate potential standard levels based on more-efficient LED technology. DOE's Federal Energy Management Program (FEMP) estimates that replacing linear fluorescent lamps with LED tube lamps can reduce energy use by up to 50%.²⁴ We encourage DOE to initiate a rulemaking addressing linear tube lamps that includes all technologies.

Thank you for considering these comments.

Sincerely,

¹⁹ Portable electric spas certified to CEC as of March 4, 2021.

²⁰ In its analysis of standards for portable electric spas, CEC assumed annual standby power operating hours of 8,760: <u>https://efiling.energy.ca.gov/GetDocument.aspx?tn=222413&DocumentContentId=31256</u>. p. A-6.

²¹ "Standard" portable electric spas certified to CEC as of March 4, 2021.

²² 42 U.S. Code 6311(2)(B).

²³ <u>https://www.energy.gov/sites/prod/files/2017/12/f46/lmc2015_nov17.pdf</u>. Table 4.1.

²⁴ <u>https://www.energy.gov/sites/prod/files/2017/03/f34/led_troffer_retrofit_guide.pdf</u>. Table 1.

Joanna Mares

Joanna Mauer Technical Advocacy Manager Appliance Standards Awareness Project

Mil Holl- how A

Mel Hall-Crawford Energy Projects Director Consumer Federation of America

M. Capourel

Joe Vukovich Energy Efficiency Advocate Natural Resources Defense Council

Steven M. Nade

Steve Nadel Executive Director American Council for an Energy-Efficient Economy

Charles Haven-

Charles Harak, Esq. National Consumer Law Center (On behalf of its low-income clients)

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Dave Lis Director of Technology and Market Solutions Northeast Energy Efficiency Partnerships