May 17, 2023

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Submitted via Regulations.gov

Re: "Energy Conservation Standards for Residential Clothes Washers," Docket No. EERE-2017-BT-STD-0014

Dr. Shapiro,

Thank you for the opportunity to provide comments on the Department of Energy's (DOE) Notice of Proposed Rulemaking (NOPR), in which the DOE proposes to tighten energy and water efficiency standards for residential clothes washers.¹

EXECUTIVE SUMMARY

The energy and water efficiency standards for residential clothes washers proposed in the NOPR:

- 1. Are not technologically feasible;
- 2. Are not economically justified;
- 3. Will not result in significant energy conservation;
- 4. Overestimate climate impacts; and
- 5. Violate the Energy Policy and Conservation Act.

The DOE should modernize its approach to energy and water efficiency standards and decline to adopt the proposed standards.

Before delving into finer details, we want to briefly touch on the Agency's initial, truncated comment period for this proposed rule. The Energy Policy and Conservation Act (EPCA) establishes the Department of Energy's statutory authority to review and, if it determines necessary, update energy efficiency standards for consumer products.² According to EPCA, and as noted in the proposed rulemaking, "the length of the comment period for a [notice of proposed rule] will vary depending upon the circumstances of the particular rulemaking, but will not be less than 75 calendar days."³ However, for these proposed standards, the Department of Energy initially established an abbreviated, 60-day comment period.

¹ The views expressed in this comment should not be construed as representing any official position of The Heritage Foundation.

² 42 U.S. Code § 6295, (m)(1), <u>https://www.law.cornell.edu/uscode/text/42/6295</u> (accessed April 17, 2023).

³ *Federal Register*, Vol. 88, No. 42 (March 3, 2023), p. 13528, <u>https://www.govinfo.gov/content/pkg/FR-2023-03-03/pdf/2023-03862.pdf</u> (accessed May 17, 2023).

The Agency's justification for this initial timeline was that "the analytical methods used…are similar to those used in previous rulemaking notices."⁴ While this may be true, it is not grounds for the DOE to ignore its statutory requirements.

Given the highly technical nature of this rule, its numerous supporting documents, and following numerous requests for extension, the Agency did finally extend the comment period to meet the 75-day, statutory minimum.⁵

While this gives the public additional, valuable time to submit comments on this highly technical and sweeping proposed rule, the Agency should have met these statutory requirements when it initially published its proposed standards in the Federal Register.⁶

1. The Proposed Standards Are Not "Technologically Feasible"

When evaluating new energy efficiency standards, EPCA requires the DOE to determine whether proposed standards are "technologically feasible."⁷ For this rulemaking, the DOE has concluded that its proposed standards meet this criterion.

The DOE is proposing for residential clothes washers to meet some of the highest measured efficiency that the Secretary of Energy has deemed "feasible,"⁸ specifically applying the standards set forth in trial standard level 4.

To achieve this, the Department is proposing for the energy efficiency ratio for standard-sized top-loading washers to be 4.78 lb/kWH/cycle, or a 35 percent increase, and for standard-sized front-loading washers to be 5.73 lb/kWH/cycle, or a 14 percent increase.⁹ The regulation also updates standards for semi-automatic residential washers, but the standard is significantly less stringent.

The DOE's primary justification is that the rule is technologically feasible because "the technologies proposed are being used or have previously been used in commercially available products or working prototypes."¹⁰

At the same time, the proposed rule references concerns about how the proposed standards will impact technological feasibility from industry leaders like Whirlpool and the Association of Home Appliance Manufacturers (AHAM).¹¹

Also, as outlined in the technical support document, these proposed regulations would require manufacturers to overhaul many design features which have the potential to impact performance,

⁴ Federal Register, Vol. 88, No. 42 (March 3, 2023), pp. 13528-13529.

⁵ *Federal Register*, Vol. 88, No. 83 (May 1, 2023), pp. 26511-26512, <u>https://www.govinfo.gov/content/pkg/FR-2023-05-01/pdf/2023-09019.pdf</u> (accessed May 17, 2023).

⁶ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13528.

⁷ 42 U.S. Code § 6295 (n)(B).

⁸ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13526.

⁹ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13621.

¹⁰ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13543.

¹¹ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13534.

which is another metric the DOE is supposed to consider when proposing new or updated standards. Specifically, for standard-sized top loading washers under trial standard level 4, the DOE anticipates for its standards to result in spin time increases, and wash temperature decreases.¹² Both of these changes as a result of the proposed rule could be considered as impacting the general performance of residential clothes washers.

Overall, these considerations point to a determination that the proposed standards are in fact not technologically feasible.

2. The Proposed Standards Are Not "Economically Justified"

In addition to the rule's technological infeasibility, the Agency's stringent standards will also burden both manufacturers and consumers.

The rule is estimated to cost manufacturers about \$690 million¹³ to bring products into compliance. And we know that, generally, manufacturers pass along these production costs onto the consumer in the form of higher prices. In fact, the proposed rule estimates that consumers can expect to pay upwards of \$800 million per year in increased equipment costs.¹⁴

In the accompanying technical support document, the DOE estimates its proposed regulations to raise per-unit prices on standard-sized top-loading washers by \$117.90,¹⁵ and by \$43.64 for standard-sized front-loading washers. That represents price increases from the baseline of 43 percent and 8 percent respectively. While not initially discussed in this comment, there are also significant price increases for compact models of residential clothes washers, such as a 25 percent price increase for compact front-loading washing machines.¹⁶

Proposed standards that would result in price markups approaching the realm of 50 percent are the opposite of economically feasible or justified.

In addition, EPCA specifically calls for the DOE to consider the impact of lessening competition,¹⁷ and prevents the Secretary from implementing or amending a standard if it is "likely to result in the unavailability in the United States in any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially in the same as those generally available in the United States."¹⁸

Given that the Department is proposing significantly higher standards for different classes of residential clothes washers, it is possible for these regulations to impact competition, unintended or otherwise.

¹² U.S. Department of Energy, "Technical Support Document: Energy Efficiency Program For Consumer Products and Commercial and Industrial Equipment: Residential Clothes Washers," p. 5-25,

https://www.regulations.gov/document/EERE-2017-BT-STD-0014-0058 (accessed May 17, 2023). ¹³ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13522.

¹⁴ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13524.

¹⁵ U.S. Department of Energy, "Technical Support Document," pp. 5-25-5-32.

¹⁶ Ibid., p. 5-29.

¹⁷ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13520.

¹⁸ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13526.

We have seen this happen in the past with energy efficiency standards for lightbulbs. The Energy Independence and Security Act of 2007 introduced stringent efficiency standards for incandescent lightbulbs.¹⁹ This misguided proposal was primarily driven by climate concerns and claims that moving away from incandescent bulbs would save consumers money. Ultimately, these standards artificially distorted the market, and as of 2020 (most recent data available) only about 15 percent of households primarily used incandescent bulbs, a 53 percent reduction from when the updated standards were implemented.²⁰

The DOE's proposed standards would undoubtedly affect competition, and by nature degrade consumer choice. These standards make all kinds of presumptions about Americans' preferences in order to justify them, including that Americans undervalue efficiency. However, research shows that consumers care about energy efficiency—even before the government tells them to. According to a 2019 Environmental Protection Agency survey on the national awareness of Energy Star, which is a voluntary program for identifying energy-efficient products and practices, over 50% of participants knowingly purchased an Energy Star-labeled appliance.²¹

It also indicates that nearly 50% of participants did not buy Energy Star-labeled appliances. This is not some mistake on the part of consumers. These are freely made choices based on many other considerations, because consumers care about a lot of other factors, too—such as features, safety, convenience, and durability—when choosing what appliances to put in their homes.²²

So, by regulating based on one or two characteristics, and by prioritizing energy efficiency over other compelling factors, the government is stifling the free market, hindering broader innovation, and discouraging the production of products that consumers actually want to buy.²³

It's also important to remember who fares the worst when consumers have fewer options. Research indicates that energy efficiency regulations adversely affect lower-income consumers, which is a consumer subgroup that the DOE targets as part of its analysis in the proposed rule.²⁴ Lower-income Americans already spend a greater portion of their after-tax income on basic necessities, and at a time when inflation remains consistently high across virtually all sectors of the economy, the last thing these families need are higher prices and more limited choices in terms of home appliances.

This rule has the potential to impact almost an entire class of appliances, in turn harming consumer choice. The DOE should throw out its proposed standards as they have the potential to

¹⁹ Nick Loris, "Government's Light Bulb Ban Is Just Plain Destructive," Heritage Foundation *WebMemo* No. 3024, September 23, 2010, <u>http://thf_media.s3.amazonaws.com/2010/pdf/wm3024.pdf</u> (accessed April 17, 2023).

²⁰ U.S. Energy Information Administration, "Nearly Half of U.S. Households Use LED Bulbs for All or Most of Their Indoor Lighting," <u>https://www.eia.gov/todayinenergy/detail.php?id=51858</u> (accessed April 17, 2023).

²¹ Energy Star, "National Awareness of ENERGY STAR for 2019, Analysis of CEE Household Survey," pg. 3, <u>https://www.energystar.gov/sites/default/files/asset/document/National Awareness of ENERGY STAR 2019 DN</u> <u>VGL 050120 508.pdf</u> (accessed April 17, 2023).

²² Nimrod Moyal, "How Consumers Choose Appliances," ADK Insights, <u>https://adk-insights.com/how-consumers-choose-appliances/</u> (accessed April 17, 2023).

 ²³ Rachael Wilfong, "The Inefficiency of the Left's 'Energy Efficiency' Mandates," The Daily Signal, February 18, 2023, <u>https://www.dailysignal.com/2023/02/17/biden-said-no-to-outright-gas-stove-ban-is-willing-to-price-them-out-of-existence-instead/</u> (accessed April 17, 2023).

²⁴ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13573.

substantially impact competition and the availability of products. In short, the proposed rule is not economically justified.

3. The Proposed Standards Will Not Result in "Significant" Energy Conservation

In addition to technological feasibility and economic justifications, EPCA requires that the DOE's proposed standards must result in "significant" energy savings."²⁵

Congress did not define "significant," and historically, "significance" has been determined on a case-by-case basis.²⁶ However, in 2020, the DOE's Office of Energy Efficiency and Renewable Energy (EERE) finalized a rule that established a threshold. That threshold required energy conservation standards to result in either a reduction of 0.30 quadrillion BTUs (quads) or a 10 percent reduction in site energy use over a 30-year period.²⁷ For this rulemaking, the DOE estimates its proposed standards will result in energy use savings of approximately 1.45 quads over a 30-year period, meeting the EERE's established threshold.²⁸

However, unlike the assessments included in other rules, the DOE does not appear to have conducted a site energy reduction assessment for residential clothes washers. Instead, the impacts of these "significant energy savings," are translated into consumer operating cost savings. According to the DOE, the LCC impact at TSL 4 for standard-sized top loading washers is \$135, or only about \$11.25 per month.²⁹ For front-loading standard-sized clothes washers it's even less, at just \$19, or a meager \$1.60 per month.³⁰

This indicates that the reduction in energy use does not actually translate into real, "significant" consumer operating cost savings. Therefore, the DOE's determination that its proposed standard for residential clothes washers would result in "significant" energy savings is a misguided, overestimation.

4. The Proposed Standards Overestimate Climate Impacts

In addition to claiming that the proposed standards will result in substantial operating cost savings, the DOE also quantifies potential health and climate-related impacts of the proposed standards.

The rule references Executive Order 13990 as the basis for pursuing a climate-related assessment as part of its rulemaking. This is problematic because there are problems with the metrics the Agency uses to quantify climate impacts.

²⁵ 42 U.S. Code § 6295, (o)(3)(B).

²⁶ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13525.

²⁷ Ben Lieberman, "Department of Energy Finalizes Process Rule for Appliance Efficiency Standards," Competitive Enterprise Institute, January 29, 2020, <u>https://cei.org/blog/department-of-energy-finalizes-process-rule-for-appliance-efficiency-standards/</u> (accessed May 12, 2023).

²⁸ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13525.

²⁹ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13611.

³⁰ Ibid.

Specifically, the DOE references its use of the Social Cost of Carbon (SCC) as one of the primary measures for determining the value of the proposed standards' climate benefits.³¹

The SCC is an estimate in present-day dollars of the cumulative long-term damage caused by one CO₂ emitted in a specific year. That number also represents an estimate of the benefit of avoiding or reducing one ton of CO₂ emissions. The SCC is estimated by Integrated Assessment Models (IAMs), which have been used in the past by the federal government as a basis for regulatory policy. For example, the Obama administration's Interagency Working Group (IWG) had drawn upon three models—abbreviated as DICE, FUND, and PAGE—to estimate the SCC.^{32,33} It appears that the Biden Administration has begun using a series of new statistical models to estimate the SCC, namely DSCIM, GIVE, and a metanalysis model discussed in Howard and Sterner (2017).³⁴

Any model is only as good as the assumptions from which it is composed, and over the last several years, researchers at The Heritage Foundation have tested these models' sensitivity to a variety of important and reasonable assumptions. Heritage research found that under very reasonable assumptions, these models can offer a plethora of different estimates of the SCC, ranging from extreme damages to overall benefits.³⁵

This research makes it apparent that the vast potential estimates of the SCC suggest that the economic impact of climate change is highly questionable, and therefore understanding of climate-related risks is quite uncertain. The variability in the SCC that is used to justify this rule renders the rule as arbitrary and capricious and should therefore be rescinded.

³⁴ Nicholas Depsky et al, "DSCIM-Coastal v1.0: An Open-Source Modeling Platform for Global Impacts of Sea Level Rise," EGUsphere, May 6, 2022, <u>https://egusphere.copernicus.org/preprints/2022/egusphere-2022-198/</u> (accessed April 17, 2023); Kevin Rennert et al, "Comprehensive evidence implies a higher social cost of CO2, " Nature, September 1, 2022, <u>https://www.nature.com/articles/s41586-022-05224-9</u> (accessed April 17, 2023); and Peter Howard and Thomas Sterner, "Few and Not So Far Between: A Meta-analysis of Climate Damage Estimates," June 9, 2017, <u>https://link.springer.com/article/10.1007/s10640-017-0166-z</u> (accessed April 17, 2023).

³¹ Ibid.

³² IWG, Technical Support Document: - Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866, August 2016, p. 4, <u>https://www.epa.gov/sites/default/files/2016-12/documents/sc co2 tsd august 2016.pdf</u> (accessed April 17, 2023).

³³ For the DICE (Dynamic Integrated Climate and Economy) model, see William D. Nordhaus, "DICE/RICE Models," <u>https://williamnordhaus.com/dicerice-models</u>. For the FUND (Framework for Uncertainty, Negotiation, and Distribution) model, see "FUND Model, <u>http://fund-model.org</u> (accessed April 17, 2023). For the PAGE (Policy Analysis for the Greenhouse Effect) model, see Climate CoLab, "PAGE," <u>https://www.climatecolab.org/wiki/PAGE</u> (accessed April 17, 2023).

³⁵ See e.g. Kevin Dayaratna and David Kreutzer, *Loaded DICE: An EPA Model Not Ready for the Big Game*, Backgrounder No. 2860, The Heritage Foundation, November 21, 2013,

https://www.heritage.org/environment/report/loaded-dice-epa-model-not-ready-the-big-game (accessed April 17, 2023); Kevin Dayaratna and David Kreutzer, "Unfounded FUND: Yet Another EPA Model Not Ready for the Big Game," Backgrounder No. 2897, April 29, 2014, http://thf_media.s3.amazonaws.com/2014/pdf/BG2897.pdf (accessed April 17, 2023); Kevin Dayaratna, Ross McKitrick, and David Kreutzer, "Empirically Constrained Climate Sensitivity and the Social Cost of Carbon," *Climate Change Economics*, Vol. 8, No. 2 (2017), p. 1750006-1-1750006-12, https://www.worldscientific.com/doi/abs/10.1142/S2010007817500063 (accessed April 17, 2023); and Kevin Dayaratna, Ross McKitrick, and Patrick Michaels, "Climate sensitivity, agricultural productivity and the social cost of carbon in FUND," *Environmental Economics and Policy* Studies, 22: 433-448 (2020), https://link.springer.com/article/10.1007/s10018-020-00263-w (accessed April 17, 2023).

For this rulemaking, the DOE estimates that its proposed standards will result in a reduction of 53.21 million metric tons of CO₂ at trial standard level 4 (TSL 4) between 2027-2056, ³⁶ which is what the DOE is proposing for the updated standard.³⁷ To estimate the impact of the proposed rule on global temperatures, we assumed these reduction levels in climate simulations using the Model for the Assessment of Greenhouse Gas Induced Climate Change, developed by researchers at the EPA. We found that assuming a climate sensitivity of 5.0 degrees Celsius (the upper bound of the IPCC's climate sensitivity estimates), the DOE's estimated reduction in CO_2 —not only cumulatively but achieved every year going forward—would result in a global temperature mitigation of 0.002 degrees Celsius by 2050 and 0.003 degrees Celsius by 2100.³⁸

Thus, even upon assuming the climate has the highest sensitivity to CO2 emissions under the variety of possibilities envisioned by the IPCC, these standards do not have any tangible impacts on global temperatures, and therefore the DOE should refrain from considering environmental impacts in its assessment of the proposed standards. Moreover, this fact almost surely indicates that the DOE's projected, annualized climate benefits of \$155.7 million, or \$2.71 billion³⁹ over the course of nearly 30 years, is significantly overestimated.⁴⁰ As a result, the proposed rule is arbitrary and capricious and therefore should be rescinded.

5. The Proposed Standards Violate the Energy Policy and Conservation Act

EPCA outlines seven statutory factors to consider when pursuing updated standards, including "other factors the Secretary considers relevant."⁴¹

One factor we believe the Secretary should consider is: How does the proposed standard meaningfully advance EPCA's intent given the abundant energy sources that the United States enjoys today that were not contemplated in 1975?

Congress clearly placed a high priority on maintaining a robust, competitive market and protecting consumer choice when contemplating EPCA. This is demonstrated throughout the Act, as detailed above, by virtue, among other things, of the factors it put in place for the Secretary to consider when determining efficiency standards. Nonetheless, given fears of energy scarcity, Congress decided to move forward with the Act.

Indeed, the 1975 Energy Policy and Conservation Act was born out of a time of perceived energy scarcity. In justifying the policies that the Act ultimately set in place, President Gerald Ford laid out three broad policy objectives. These included reducing oil imports, ending

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC AR6 WGI SPM.pdf (accessed April 17, 2023). ³⁹ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13523.

³⁶ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13525.

³⁷ Ibid., p. 13536.

³⁸ M. Meinshausen, S. C. B. Raper, and T. M. L. Wigley, "Emulating Coupled Atmosphere–Ocean and Carbon Cycle Models with a Simpler Model, MAGICC6– Part 1: Model Description and Calibration," Atmospheric Chemistry and Physics, Vol. 11 (2011), pp. 1417–1456, <u>https://acp.copernicus.org/articles/11/1417/2011/</u> (accessed April 17, 2023); and Intergovernmental Panel on Climate Change, "IPCC Sixth Assessment Report: Working Group 1: The Physical Science Basis," Summary for Policymakers,

⁴⁰ Federal Register, Vol. 88, No. 42 (March 3, 2023), p. 13524.

⁴¹ 42 U.S. Code § 6295, (o)(2)(B)(VII).

American vulnerability to economic disruption by foreign suppliers, and developing energy technology and resources to supply a significant share of the free world's energy needs.⁴²

In each case, the United States has achieved President Ford's objectives. In 1975, net imports of crude oil exceeded 5 million barrels per day. By 2020, the United States had become a net exporter.⁴³ Geopolitical shocks and cartels, specifically the Organization of Petroleum Exporting Countries (OPEC), which produces about 40 percent of the world's crude oil, can still have a near-term impact on American energy prices. However, due to the large amount of energy in global markets, energy disruptions do not present the sort of systemic threat that policy makers feared in the 1970's. The extent to which the United States economy remains vulnerable to energy shocks is more a function of our own energy restriction policies and has less to do with energy efficiency.

And finally, American technologies like fracking and commercial nuclear reactors are helping to power modern economies around the world. Again, to the extent that energy remains scarce is purely a function of policies that restrict access to American resources or prevent the export of peaceful technologies.

Thus, while efficiency certainly remains an important piece of the energy calculation for American consumers, it is no longer something that needs to be imposed at the systemic level. Instead, it is something that Americans should determine for themselves at the household and business levels.

Though EPCA clearly authorizes the Department of Energy to place restrictions on industry and consumer choice at the behest of the Secretary of Energy, the Department should recognize that the environment that gave rise to the Act has changed drastically given advances in technology and energy discovery. While this does not diminish the authority of the Secretary to impose standards, it does dramatically diminish the impact of those standards relative to the overall purpose of the Act, which is to secure adequate energy resources for the American economy.

Put succinctly, the value proposition for energy efficiency has shifted significantly since 1975 due to the broad availability of energy. Thus, forcing Americans to purchase certain products based on efficiency in an era of energy abundance no longer has the same impact on energy availability as it did during times of perceived energy scarcity. Thus, the proposed standards do not meaningfully advance the intent of EPCA and do not justify the restrictions the proposed rule will impose on American consumer choice or the increased costs.

⁴² President Gerald R. Ford, Address Before a Joint Session of the Congress Reporting on the State of the Union, Washington, D.C. January 15, 1975, <u>https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-</u> <u>congress-reporting-the-state-the-union-1</u> (accessed April 17, 2023).

⁴³ U.S. Energy Information Administration, "Oil and Petroleum Products Explained," updated April 19, 2022, <u>https://www.eia.gov/energyexplained/oil-and-petroleum-products/</u> (accessed April 17, 2023).

CONCLUSION

Thank you for the opportunity to comment on the proposed residential clothes washers rule. For the foregoing reasons, we urge the Department of Energy not to move forward with a final rule in this matter.

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