

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

July 15, 2025

Mr. David Taggart
U.S. Department of Energy
Office of the General Counsel, GC-1
1000 Independence Avenue SW
Washington, DC 20585

RE: EERE-2025-BT-STD-0014: Energy Conservation Standards for Microwave Ovens

Dear Mr. Taggart:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), Ceres, Consumer Federation of America (CFA), Earthjustice, National Consumer Law Center, on behalf of its low-income clients (NCLC), and Natural Resources Defense Council (NRDC) on the notice of proposed rulemaking (NOPR) for standards for microwave ovens. 90 Fed. Reg. 20,895 (May 16, 2025).¹ We appreciate the opportunity to provide input to the Department.

1. About the signatories

ASAP advocates for appliance, equipment, and lighting standards that cut planet-warming emissions and other air pollution, save water, and reduce economic and environmental burdens for low- and moderate-income households. ASAP's steering committee includes representatives from environmental and efficiency nonprofits, consumer groups, the utility sector, and state government.

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.

Ceres builds a cleaner and more resilient economy by working alongside over 80 major businesses to support clean energy policies at the state and national level.

¹ Relevant excerpts of documents cited below, except for statutes, regulations, published judicial decisions, and Federal Register notices, are provided in an appendix to these comments.

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.

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, non-profit environmental organization with more than three million members and online activists. NRDC advocates to reduce greenhouse gas emissions that cause climate change, increase the resilience of communities to the unavoidable impacts of climate change, and safeguard human health for all. NRDC advocates for clean energy policies that will build the U.S. economy, reduce air pollution, help keep electricity prices affordable and strengthen the electricity grid.

2. Introduction

Energy and water conservation standards save consumers significant amounts of money by reducing utility bills. According to DOE, efficiency standards reduced Americans' utility bills by \$105 billion in 2024 alone, with a typical household saving \$576.² Efficiency standards also saved 6.0 quadrillion Btus ("quads") of primary energy in 2024, which is equivalent to 6.5% of total U.S. annual energy consumption, and 1.7 trillion gallons of water, which is equivalent to approximately 12% of the annual water withdrawals for public supply in the United States in 2015.³ These tremendous savings can help avoid costly buildout of new infrastructure like power plants, power lines, and water treatment facilities, which would further increase energy and water prices.

In the NOPR, DOE is proposing to rescind the energy conservation standards for microwave ovens in their entirety, eliminating the standby mode energy use requirements. This action does not stand on its own. It is one of 17 proposals issued the same day to roll back efficiency standards.

² U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy, Appliance Standards Fact Sheet (March 2025). www.energy.gov/sites/default/files/2025-03/Appliance%20Standards%20Fact%20Sheet-02.pdf.

³ Lawrence Berkeley National Laboratory, Energy and economic impacts of U.S. federal energy and water conservation standards adopted from 1987 through 2024 Report (January 2025). eta-publications.lbl.gov/sites/default/files/2025-01/standards_1987-2024_impacts_overview3.pdf. p. 4.

On his first day in office, President Trump issued an Executive Order “Declaring a National Energy Emergency.”⁴ That order focused on the “active threat to the American people from high energy prices,” highlighted the “high energy prices that devastate Americans, particularly those living on low- and fixed-incomes,” and described “our Nation’s inadequate energy supply.” Weakening efficiency standards would only exacerbate these issues. If less efficient appliances are allowed to enter the market, consumers will end up using more energy and spending more money, worsening the “Energy Emergency” described in President Trump’s order.

Below we describe how DOE’s proposal would raise costs for consumers; increase energy waste and strain the electric grid; increase emissions that harm public health and the environment; and undermine manufacturer investments. We also outline the numerous reasons why DOE’s proposal is unlawful. DOE should therefore withdraw the proposed rule.

3. DOE’s proposal would raise costs for consumers. Rescinding the standards would increase costs for consumers who purchase the more than 12 million microwave ovens that are sold annually.⁵ In the June 2013 final rule, DOE found that the standards save consumers who purchase countertop microwaves, the most common type, an average of \$26 in electricity bills over the life of the product compared to a baseline model at the time of the rulemaking.⁶ Taking into account the additional upfront cost, DOE estimated that the standards net consumers \$21 in savings.⁷ Additionally, DOE found that the recently amended standards finalized in the June 2023 final rule will net consumers who purchase countertop microwaves an additional \$4 over the life of the product compared to a baseline model at the time of the rulemaking (i.e., a model that just meets the current standards).⁸ DOE also found that the 2013 final rule will provide net present value (NPV) savings for purchasers of between \$1.53 billion and \$3.38 billion over 30 years of sales⁹ and that the 2023 final rule will provide NPV savings of between \$160 million and \$350 million.¹⁰ In other words, rescinding the standards for microwave ovens could cost consumers up to several billion dollars in the coming decades.

⁴ Exec. Order No. 14,156, Declaring a National Energy Emergency, 90 Fed. Reg. 8,433 (Jan. 29, 2025), available at www.govinfo.gov/content/pkg/FR-2025-01-29/pdf/2025-02003.pdf.

⁵ DOE, Microwave Ovens, June 2023 Final Rule Technical Support Document (TSD), p. 9-11. www.regulations.gov/document/EERE-2017-BT-STD-0023-0032.

⁶ 78 Fed. Reg. 36,353 (June 17, 2013). Table V-2. Calculated as the difference between the lifetime operating cost at the baseline efficiency level (\$35) and the lifetime operating cost at the standard level adopted, Trial Standard Level (TSL) 3 (\$9).

⁷ *Id.* Calculated as the difference between the total life-cycle cost (LCC) at the baseline efficiency level (\$269) and the LCC at the standard level adopted, TSL 3 (\$248).

⁸ 88 Fed. Reg. 39,943 (June 20, 2023). Calculated as the difference between the total LCC at the baseline efficiency level (\$265.54) and the LCC at the standard level adopted, TSL 2 (\$261.81).

⁹ 78 Fed. Reg. 36,317 (June 17, 2013). NPV = present value of operating cost savings – present value of total incremental installed costs; range corresponds to 7% and 3% discount rates, respectively.

¹⁰ 88 Fed. Reg. 39,914 (June 20, 2023).

These higher costs for consumers would come at a time when both electricity prices and bills are rising. The U.S. Energy Information Administration's (EIA's) forecast shows average residential electricity prices rising by 13% in 2025 and 18% in 2026 relative to 2022 prices.¹¹ Some regions of the country are experiencing even larger increases in electricity prices, with the EIA forecast showing electricity price increases of 19% between 2022 and 2025 for New England and the Middle Atlantic and an increase of 26% for the Pacific region in the same period.¹² Rising prices are resulting in higher bills; the average U.S. household spent about \$1,750 on electricity costs in 2023, hundreds of dollars more than the average of about \$1,500 in 2020.¹³ These high costs hurt families, with one in five American households (nearly 25 million families) foregoing necessary expenses, such as food or medicine, to pay their energy bills in 2020.¹⁴ Repealing the standards for microwave ovens would further increase electricity costs and strains on household budgets.

Independent of the harm caused by eliminating the standard, the proposed rule would also harm consumers by depriving them of information to make purchasing decisions. Manufacturers must test and certify all covered products, and the efficiency metrics they report for each model are made public through DOE's Compliance Certification Management System. This data can be used by consumers, consumer advocates, consumer reporting publications, and retailers to inform purchasing decisions across the full range of efficiency levels for a given product. The proposed rule, by proposing to eliminate coverage for microwave ovens would deprive consumers of this valuable information.

4. DOE's proposal would increase energy waste and strain the electric grid unnecessarily. In the June 2013 final rule, DOE found that the standards for microwave ovens will save 0.48 quads of energy over 30 years of product sales.¹⁵ DOE's current proposal threatens those savings. DOE further found in the June 2013 final rule that the standards will reduce electricity consumption by 2,370 gigawatt-hours (GWh) in 2030 and 2,570 GWh in 2040 and lower total installed generation capacity by 0.32 gigawatts (GW) in 2030 and 0.48 GW in 2040.¹⁶ In the June 2023 final rule, DOE found that the amended standards for microwave ovens will save 0.06 quads over 30 years of sales,¹⁷ reduce 2040 electricity consumption by 183 GWh, and lower total installed generation capacity in 2040

¹¹ U.S. EIA, Today in Energy. U.S. electricity prices continue steady increase (May 2025). www.eia.gov/todayinenergy/detail.php?id=65284.

¹² *Id*; see also Federal Reserve Bank of St. Louis, Average Price: Electricity per Kilowatt-Hour in U.S. City Average (May 13, 2025). fred.stlouisfed.org/series/APU000072610.

¹³ U.S. EIA, Today in Energy. U.S. electricity prices continue steady increase (May 2025). www.eia.gov/todayinenergy/detail.php?id=65284.

¹⁴ U.S. EIA, RECS 2020, Table HC11.1. Household energy security, 2020. www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%2011.1.pdf.

¹⁵ 78 Fed. Reg. 36,317 (June 17, 2013).

¹⁶ DOE, Residential Microwave Ovens, June 2013 Final Rule TSD, Table 14.3.4. p. 14-5. www.regulations.gov/document/EERE-2011-BT-STD-0048-0021.

¹⁷ 88 Fed. Reg. 39,913 (June 20, 2023).

by 69 megawatts (MW).¹⁸ By rescinding the standards for microwave ovens, DOE's proposal would increase electricity demand at a time when the electric grid is already challenged by increased demand from data centers, growing domestic manufacturing, and other factors.

A recent report estimates that U.S. electricity demand will grow 25% by 2030 and 78% by 2050 relative to 2023 levels, with peak demand growing 14% by 2030 and 54% by 2050.¹⁹ Greater electricity demand means increased spending on generation, transmission, and distribution infrastructure, which translates to higher electricity bills for consumers. The same recent report projects that rising electricity demand could result in residential retail electricity rates increasing by between 15% and 40% by 2030, with electricity rates doubling for some utilities by 2050.²⁰ Repealing the standards for microwaves would further exacerbate these trends.

5. DOE's proposal would increase emissions that harm human health and the environment. In the June 2013 final rule, DOE found that the standards will result in cumulative emissions reductions over 30 years of sales of 38.11 million metric tons of carbon dioxide, 27.14 thousand tons of sulfur dioxide, 32.67 thousand tons of nitrogen oxides, and 0.095 tons of mercury.²¹ In the June 2023 final rule, DOE found that the amended standards will result in additional cumulative emissions reductions over 30 years of sales of 1.87 million metric tons of carbon dioxide, 0.85 thousand tons of sulfur dioxide, 2.88 thousand tons of nitrogen oxides, 12.64 thousand tons of methane, 0.02 thousand tons of nitrous oxide, and 0.005 tons of mercury.²² In other words, rescinding the standards for microwave ovens would increase emissions of these harmful pollutants.

6. DOE's proposal would undermine manufacturer investments. Manufacturers have been required to comply with the standards in the 2013 final rule since June 2016. To meet the standards, manufacturers likely incurred conversion costs including capital costs (one-time investments in plant, property, and equipment) and product conversion costs (research and development, testing, and marketing costs). DOE estimated that manufacturers would incur total conversion costs of \$42.7 million to comply with the current standards for microwave ovens.²³ These investments, as well as any investments made to comply with the updated standards scheduled to take effect in June 2026, would be undermined by DOE's proposal to rescind the standards. Furthermore, the

¹⁸ DOE, Microwave Ovens, June 2023 Final Rule TSD, p. 15-8 (see TSL 2).

www.regulations.gov/document/EERE-2011-BT-STD-0048-0021.

¹⁹ ICF, Rising current: America's growing electricity demand. www.icf.com/-/media/files/icf/reports/2025/energy-demand-report-icf-2025_report.pdf?rev=c87f111ab97f481a8fe3d3148a372f7f. p. 3.

²⁰ *Id.*

²¹ 78 Fed. Reg. 36,317, 36,318 (June 17, 2013).

²² 88 Fed. Reg. 39,914 (June 20, 2023).

²³ Table V-7. 78 Fed. Reg. 36,354 (June 17, 2013). DOE adopted TSL 3.

manufacturers that made these investments and who sell products in the U.S. could be undercut by manufacturers that currently serve other markets.

7. DOE does not have the authority to rescind standards. The proposed rule repeatedly states that DOE is proposing to “rescind” the energy conservation standards for microwave ovens. EPCA authorizes DOE to promulgate new standards and to prescribe amended standards.²⁴ But no provision in EPCA authorizes DOE to rescind or repeal existing standards.²⁵

8. The proposed rule fails to identify the statutory authority under which the Department is acting. To the extent DOE believes it is exercising some lawful authority to rescind energy conservation standards, the proposed rule must notify the public of that legal authority.²⁶ DOE has ignored this obligation. Nowhere in the proposed rule does the Department identify the source of statutory authority to rescind the energy conservation standards for microwave ovens. The proposed rule’s failure to “include ... [a] reference to the legal authority under which the rule is proposed” denies the public a meaningful opportunity to comment on the proposed action.²⁷

If DOE is instead prescribing an amended standard for microwave ovens—a “no-standard standard”²⁸—it still must identify the section of EPCA that it is relying on and explain how it has complied with the requirements of that provision.²⁹ Among other things, DOE must explain how any such authority is available to it in light of its (erroneous) contention that microwave ovens are not a “covered product” under EPCA.

9. The proposed rule incorrectly describes the status of microwave ovens. The NOPR asserts that microwave ovens are not a covered product because they are not a consumer product type specified in 42 U.S.C. 6292. The NOPR then concludes that DOE’s past issuance of energy conservation standards for microwave ovens must be “inconsistent with 42 U.S.C. 6295” because DOE cannot prescribe energy conservation standards “for products not deemed to be covered products.”

The NOPR is wrong on both counts. First, microwave ovens are a class of “kitchen ranges and ovens,” a type of covered product listed in 42 U.S.C. 6292.³⁰ Second, far from being

²⁴ 42 U.S.C. § 6295(a)(2), (l), (m), (n), (o), & (p).

²⁵ See also *NRDC v. Abraham*, 355 F.3d 179, 202 (2d Cir. 2004) (holding that under EPCA DOE lacks any “inherent power to reconsider a final rule following its announcement in the Federal Register.”).

²⁶ 5 U.S.C. § 553(b)(2).

²⁷ 5 U.S.C. § 553(b)(2); see also U.S. Dep’t of Justice, *Attorney General’s Manual on the Administrative Procedure Act* 29 (1947) (explaining that “[t]he reference [to legal authority] must be sufficiently precise to apprise interested persons of the agency’s legal authority to issue the proposed rule”); *Glob. Van Lines, Inc. v. I.C.C.*, 714 F.2d 1290, 1297–98 (5th Cir. 1983) (explaining that the agency’s “failure to articulate the legal basis” for its rule “effectively deprived the petitioners of any opportunity to present comments”).

²⁸ See *NRDC v. Herrington*, 768 F.2d 1355, 1363 (D.C. Cir. 1985) (reviewing DOE’s “no-standard standards”).

²⁹ Indeed, DOE appears to accept that it is amending a standard, as DOE recognizes that its action is subject to 42 U.S.C. § 6295(p).

³⁰ See 42 U.S.C. § 6292(a)(10).

inconsistent with section 6295, DOE's adoption of energy conservation standards covering the standby mode operation of microwave ovens was compelled by a provision of section 6295 that the NOPR fails to acknowledge.

The inclusion of "kitchen ranges and ovens" in section 6292's list of consumer products dates to the original enactment of EPCA in 1975.³¹ An "oven" is a "a chamber used for baking, heating, or drying."³² The term "ovens" thus encompasses multiple technological approaches to cooking in a kitchen, including conventional ovens, convection ovens, and microwave ovens. When Congress intended to limit the scope of a covered product to encompass only certain technologies, it did so explicitly—either by enacting definitions to identify covered products with particularity, or by excluding certain approaches. For example, the list of covered products in 42 U.S.C. 6292 excludes refrigerators that do not use a compressor from the scope of the covered product "Refrigerators, refrigerator-freezers, and freezers," but EPCA includes no similar restriction on the types of ovens that are covered products.³³

The legislative history of EPCA confirms that, far from intending to limit coverage to only certain oven technologies, Congress understood microwave ovens to be covered by the term "kitchen ranges and ovens." The Conference Report that accompanied the final version of the legislation used the statute's coverage of microwave ovens to illustrate the distinction between a "type" and a "class" of covered products under EPCA:

The term 'class of covered products' is defined in section 321 as a group of covered products, the functions or intended uses of which are similar. This term should be distinguished from the term 'type' which is used in section 322 and elsewhere in part B to refer to a generic classification of product, such as a classification listed in section 322(a) (e.g. 'refrigerator', 'room air conditioner', etc.). A class of covered products is a classification based on function or use, and could be a subcategory of a type (such as color television set, or a microwave oven), or a classification which includes 'hybrid' products which perform functions characteristic of more than one type (such as combination clotheswasher-clothesdryer).³⁴

Further demonstrating the clarity with which EPCA treats microwave ovens, for nearly 50 years, DOE has consistently understood microwave ovens to be encompassed by the covered product "kitchen ranges and ovens." In a 1977 proposal to establish certain test procedures, the Department stated that microwave ovens constitute a class of covered products "within the type designated by [EPCA] as kitchen ranges and ovens."³⁵ In the 1978 final rule, DOE codified the definition of "microwave oven" as "a class of kitchen ranges

³¹ See Energy Policy and Conservation Act of 1975, § 322(a)(9), 89 Stat. 871, 918 (1975).

³² See Merriam-Webster Dictionary, available at www.merriam-webster.com/dictionary/oven.

³³ See 42 U.S.C. § 6292(a)(1).

³⁴ S. Conf. Rep. 94-516, 169, 1975 U.S.C.C.A.N. 1956, 2010.

³⁵ 42 Fed. Reg. at 65,576.

and ovens which is a household cooking appliance consisting of a compartment designed to cook or heat food by means of microwave energy.”³⁶ The definition of “microwave oven” remains largely the same today.³⁷

However, even if the NOPR were correct in arguing that section 6292 does not reach microwave ovens, Congress compelled DOE to adopt the standards for microwave ovens that the Department now seeks to rescind. Section 6295(gg)(2) requires DOE to amend the “test procedures for all covered products . . . to include standby mode and off mode energy consumption” and establishes a deadline of March 31, 2011 for DOE to complete this action for microwave ovens.³⁸ The same subsection then requires that, based on those amended test procedures, DOE must either “incorporate standby mode and off mode energy use into a single amended or new standard,” or prescribe “a separate standard for standby mode and off mode energy consumption.”³⁹ The standards for microwave ovens that DOE is proposing to rescind cover standby mode energy consumption, so the relevance of section 6295(gg) to DOE’s authority for the proposed action seems clear. Accordingly, the NOPR’s failure to even mention section 6295(gg) suggests either that DOE has not carefully considered the proposed action, or has not explained its rationale for the proposed action at a level of detail that enables meaningful public comment.

10. DOE’s proposed change to the standards violates the anti-backsliding provision. Section 6295(o)(1), referred to as the “anti-backsliding” provision, states that the “Secretary may not prescribe any amended standard which increases the maximum allowable energy use . . . or decreases the minimum required energy efficiency, of a covered product.” The U.S. Court of Appeals for the Second Circuit has explained that “subsection (o)(1), read in the greater context of [42 U.S.C. § 6295] and in light of the statutory history of that section of the EPCA, admits to only one interpretation: that Congress, in passing the provision, intended to prevent DOE from amending efficiency standards downward once they have been published by DOE as final rules as required by the other provisions of [42 U.S.C. § 6295].”⁴⁰

The proposed rule violates the anti-backsliding provision. The proposed rule would amend energy conservation standards for microwave ovens codified at 10 C.F.R. § 430.32(j)(3) by removing the standards from the C.F.R. The proposed change would, therefore, “increase the maximum allowable energy use” for microwave ovens. The proposed rule does not contend otherwise. In fact, the proposed rule does not even mention the anti-backsliding provision. If DOE believes there is a reason why the anti-backsliding provision does not

³⁶ 43 Fed. Reg. at 20,119.

³⁷ See 10 CFR § 430.2. See also 55 Fed. Reg. at 39,626 (referring to microwave ovens as a product class); 63 Fed. Reg. at 48,046 (rejecting argument that microwave ovens are not covered products because “The Department has previously determined that microwave ovens fall within the definition of ‘kitchen ranges and ovens.’”)

³⁸ 42 U.S.C. § 6295(gg)(2)(A) & (B).

³⁹ *Id.* § 6295(gg)(3).

⁴⁰ *NRDC v. Abraham*, 355 F.3d 179, 199 (2d Cir. 2004).

constrain the proposed action, DOE's failure to notify the public of that interpretation deprives stakeholders of a meaningful opportunity to comment on a key legal issue.

11. DOE misinterprets and mis-applies EPCA's "economically justified" standard.

DOE claims that part of the rationale for the purported rescission is that the "current regulations . . . are not economically justified." This unexplained statement has no direct bearing on the decision-making process prescribed by EPCA. To amend a standard DOE must comply with the criteria in subsection (o). Those criteria require that the new or amended standard being *proposed* is economically justified, not that the existing standard is not economically justified. As explained below, the proposed rule does not even claim that the standard it is proposing is economically justified, much less support that claim with substantial evidence.

12. DOE fails to explain the legal relevance of its "policy to reduce regulatory burden wherever possible." The considerations governing DOE's amendment of energy conservation standards are set out in EPCA. DOE is not free to ignore the statutory criteria to pursue the administration's policy of "maximally reducing regulatory burdens." Even if the policy were a permissible "other factor" under subsection 6295(o)(2)(B)(i)(VII), the NOPR fails to explain how the new policy fits into EPCA's criteria for the amendment of standards.

13. The NOPR misinterprets 42 U.S.C. § 6295(p)(1). Section 6295(p)(1) requires DOE, in a proposed rule, to "determine the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible for each type (or class) of covered products." (i.e. "max-tech"). As explained below, DOE has not fulfilled this requirement. Of course, EPCA does not require that DOE always select the max-tech standard level, and the last sentence of subsection 6295(p)(1) requires DOE to provide its reasons in the proposed rule for not selecting max-tech. The NOPR appears to assume wrongly that 6295(p)(1) is the only standard it need apply – that so long as DOE can explain why it is not implementing max-tech that concludes the statutory decision-making process. But the fact that DOE is not choosing to implement the max-tech standard does not relieve DOE from its obligation to fulfill the requirement of subsection 6295(o)(2)(A). That section requires that any new or amended standard be "designed to achieve the maximum improvement in energy efficiency...which the Secretary determines is technologically feasible and economically justified."

14. The proposed rule fails to determine "max-tech" as required by 42 U.S.C. § 6295(p)(1). Section 6295(p)(1) requires DOE, at the proposed rule stage, to determine the maximum improvement in energy efficiency that is technologically feasible.⁴¹ DOE

⁴¹ See 10 C.F.R. § Pt. 430, Subpt. C, App. A ("As required by 42 U.S.C. 6295(p)(1) of EPCA, the NOPR also will describe the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible and, if the proposed standards would not achieve these levels, the reasons for proposing different standards.").

colloquially refers to this maximum threshold as “max tech.”⁴² Of course, DOE is not obligated to select the max-tech efficiency level for every standard, and very frequently does not. The last sentence of section (p)(1) requires DOE to provide its reasons if it declines to set a standard based on max-tech.

As the D.C. Circuit has explained, EPCA “establishes a clear decisionmaking procedure,”⁴³ pursuant to which “DOE must first identify, for all product types or classes, the maximum improvement in energy efficiency that is technologically feasible.”⁴⁴ In the proposed rule, DOE has ignored that obligation entirely. Indeed, the proposed rule contains no discussion of microwave oven technology at all.⁴⁵ This omission is not one that DOE can remedy at the final rule stage. Congress specified that the determination of max-tech must be in the “proposed rule.”⁴⁶ DOE may not “ignore the decisionmaking procedure Congress specifically mandated because the agency thinks it can design a better procedure.”⁴⁷

15. The proposed rule fails to apply the statutory requirement for new or amended standards in 42 U.S.C. § 6295(o)(2)(A). Section 6295(o)(2)(A) requires that “Any new or amended energy conservation standard prescribed by the Secretary under this section for any type (or class) of covered product shall be designed to achieve the maximum improvement in energy efficiency ... which the Secretary determines is technologically feasible and economically justified.”⁴⁸ The proposed rule fails to acknowledge the existence of this benchmark let alone apply it to the proposed action.

16. DOE has failed to present any evidence to support its proposed rule. Even if it were otherwise permissible for DOE to pursue the proposed action, the proposed rule does not provide a rational basis for doing so. For an agency action to withstand judicial review, the agency “must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’”⁴⁹ This requirement applies in equal force when an agency, like DOE here, is proposing to rescind earlier rules that were themselves supported by substantial evidence. When an agency reverses itself, it must provide a “reasoned explanation . . . for

⁴² See, e.g., Energy Conservation Program: Energy Conservation Standards for Dedicated Purpose Pool Pump Motors, 88 Fed. Reg. 66,966, 66,978 (Sept. 28, 2023).

⁴³ *NRDC v. Herrington*, 768 F.2d 1355, 1391 (D.C. Cir. 1985).

⁴⁴ *Id.* at 1391 – 92.

⁴⁵ Compare Department of Energy, Energy Conservation Program: Energy Conservation Standards for Residential Clothes Washers, Direct Final Rule 89 Fed. Reg. 19,026 (Mar. 15, 2024) (presenting a lengthy discussion of higher efficiency levels for clothes washers along with a technical support document).

⁴⁶ 42 U.S.C. § 6295(p)(1).

⁴⁷ *NRDC*, 768 F.2d at 1396.

⁴⁸ *FDA v. R.J. Reynolds Vapor Co.*, 606 U.S. ___, 2025 WL 1716135 (June 20, 2025) (“Read naturally, the word ‘any’ has an expansive meaning, that is, ‘one or some indiscriminately of whatever kind.’”).

⁴⁹ *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)); see also *id.* (a rule is arbitrary and capricious if the agency “entirely failed to consider an important aspect of the problem [or] offered an explanation for its decision that runs counter to the evidence before the agency”).

disregarding facts and circumstances that underlay or were engendered by the prior policy,”⁵⁰ a category that includes the technical and economic data that was presented to justify the existing standards.

In the NOPR, DOE has failed to provide any data or analysis to support its proposal. Again, per section 6295(o)(2)(A), DOE must establish that its proposed standard represents the “maximum improvement in energy efficiency” that is “technologically feasible and economically justified.” The NOPR provides no information at all regarding microwave oven technology or the alternative efficiency levels that might have been considered, either at the max-tech level or below. Nor does the NOPR provide any information to support the conclusion that its proposed standard is “economically justified.” Section 6295(o)(2)(B) provides that, when evaluating “whether a standard is economically justified” DOE must to the maximum extent practicable consider:

- (I) the economic impact of the standard on the manufacturers and on the consumers of the products subject to such standard;
- (II) the savings in operating costs throughout the estimated average life of the covered product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the covered products which are likely to result from the imposition of the standard;
- (III) the total projected amount of energy, or as applicable, water, savings likely to result directly from the imposition of the standard;
- (IV) any lessening of the utility or the performance of the covered products likely to result from the imposition of the standard;
- (V) the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the imposition of the standard;
- (VI) the need for national energy and water conservation; and
- (VII) other factors the Secretary considers relevant.

The NOPR does not consider any of these factors, even on a preliminary basis.

Nor has DOE provided any explanation for disregarding the analysis and data it presented in its 2013 and 2023 rules promulgating microwave oven standards. Those rules demonstrated the adopted efficiency requirements were warranted. The data and analysis they presented, which DOE ignores here, certainly do not support the conclusion that prescribing an amended standard at a no-standard level represents the “maximum improvement in energy efficiency” that is “technologically feasible and economically justified.”

⁵⁰ See *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 516 (2009).

When DOE finalized the rule for microwave ovens in 2013, it estimated significant energy savings (0.48 quads); average life-cycle cost (LCC) savings for purchasers of between \$11 and \$12, depending on the product class; and total NPV savings of \$1.53–\$3.38 billion.⁵¹ The savings for consumers vastly outweigh the costs to manufacturers; DOE estimated that the NPV savings outweigh the maximum estimated loss of industry net present value (INPV) by a factor of 16.⁵² Further, the NPV savings in the June 2023 final rule outweigh the maximum loss of INPV by a factor of 4.⁵³ For both final rules, DOE concluded that the levels adopted represent the maximum improvement in energy efficiency that is technologically feasible and economically justified.

17. DOE’s complete failure to substantiate its factual claims means that it must issue a new proposal for public comment if it wishes to proceed. Agencies must present critical factual material at the proposed rule stage in order to ensure a meaningful opportunity for public comment.⁵⁴ When it has new or revised data that it wants to rely on that arises after the publication of a NOPR, DOE will often issue a Notification of Data Availability and Request for Comment in order to fulfill this requirement.⁵⁵

In the NOPR, DOE has provided no evidence. Thus, any evidence relied upon at the final rule stage will necessarily be both new and critical to the ultimate decision. Any such critical factual material must be made available for public comment before DOE issues a final rule. This obligation to accept further comment applies as well to any analysis conducted under the National Environmental Policy Act (NEPA), as described below.

18. DOE has failed to comply with the National Environmental Policy Act (NEPA). The proposed rule fails to comply with the requirements of NEPA, which requires agencies to prepare detailed environmental analyses of major actions significantly affecting the quality of the environment.⁵⁶ Agencies may adopt categorical exclusions (CXs) to this requirement, but only for actions that do not “individually or cumulatively have a significant effect on the human environment.”⁵⁷ Not only would the proposed rule itself have a significant effect on the human environment by rolling back energy savings, but this

⁵¹ 78 Fed. Reg. 36,317 (June 17, 2013).

⁵² *Id.* Based on the NPV savings using the more conservative discount rate (\$1.53 billion) and the maximum estimated loss of INPV of \$96.6 million.

⁵³ 88 Fed. Reg. 39,913-14. Based on the consumer NPV savings using the more conservative discount rate (\$160 million) and the maximum estimated loss of INPV of \$37.2 million.

⁵⁴ See *Ass’n of Data Processing Serv. Organizations, Inc. v. Bd. of Governors of Fed. Rsrv. Sys.*, 745 F.2d 677, 684 (D.C. Cir. 1984) (Scalia, J.) (“the most critical factual material that is used to support the agency’s position on review must have been made public in the proceeding and exposed to refutation.”); *Am. Med. Ass’n v. Reno*, 57 F.3d 1129, 1132 (D.C. Cir. 1995) (“Notice of a proposed rule must include sufficient detail on its content and basis in law and evidence to allow for meaningful and informed comment[.]”).

⁵⁵ See, e.g., *Energy Conservation Program: Energy Conservation Standards for Consumer Water Heaters*, 89 Fed. Reg. 59,692 (July 23, 2024).

⁵⁶ 42 U.S.C. § 4332(C); *NRDC v. Herrington*, 768 F.2d 1355, 1429-33 (D.C. Cir. 1985) (holding a DOE rule promulgated under EPCA violated NEPA).

⁵⁷ *Solar Energy Indus. Ass’n v. FERC*, 80 F.4th 956, 991 (9th Cir. 2023).

action must be considered cumulatively with the many other proposed rollbacks that have also been issued by DOE.⁵⁸

Nor does the proposed rule meet DOE's own regulatory conditions for the applicability of CXs. It is DOE's burden to demonstrate why it believes a CX applies, and it must consider whether a nominally excluded action would nevertheless significantly affect the environment.⁵⁹ Indeed, as a predicate matter, DOE has an affirmative obligation, before applying a CX, to determine whether the unique circumstances of an action would lead to significant environmental effects.⁶⁰ DOE has offered no explanation of its reasoning on this point, despite that, as described below, the proposed rule would undo significant benefits to the environment. Instead, in its proposal, DOE invites comment on the use of CX B5.1, which applies to "actions to conserve energy or water."⁶¹

But the plain language of CX B5.1 demonstrates its inapplicability. This CX applies specifically for "*improvements* in appliance efficiency ratings" and "*water conservation*." It makes sense that this CX would ordinarily apply to EPCA rules, because EPCA requires that new or amended standards must improve energy and/or water efficiency. When DOE adopted this CX to complement its EPCA rulemaking activities, it emphasized the purpose of energy conservation, and it further specified that the CX does not apply for appliance efficiency standards that would "have the potential to cause a significant increase in energy consumption in a state or region."

The proposed rule fails to meet the CX B5.1 requirements on numerous fronts. First, it is not "an action[s] to conserve energy or water" because it does the opposite: it would increase energy use. Second, it does not propose an improvement in efficiency ratings because it would result in a *diminishment* of efficiency ratings. Finally, it has the potential to cause a significant increase in energy consumption in a state or region because it would roll back the savings in energy consumption that provided part of the original justification for the standard.

19. The proposed rule does not acknowledge the statutory compliance period for kitchen ranges and ovens. The proposed rule does not indicate a compliance date. But section 6295(m)(4)(A)(i) requires that any amended standard for kitchen ranges and ovens apply to products "manufactured after the date that is 3 years after publication of the final rule establishing an applicable standard." Thus, should DOE seek to finalize this rule, it

⁵⁸ See *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976) ("when several proposals . . . will have cumulative or synergistic environmental impact . . . their environmental consequences must be considered together").

⁵⁹ *Pub. Employees for Env't. Responsibility v. Nat'l Park Serv.*, 605 F. Supp. 3d 28, 56 (D.D.C. 2022); see also *California v. Norton*, 311 F.3d 1162, 1176 (9th Cir. 2002) ("concern for adequate justification of the categorical exclusion is heightened because there is substantial evidence in the record that exceptions to the categorical exclusion are applicable").

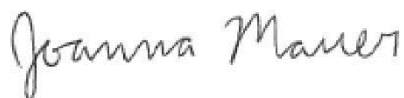
⁶⁰ 10 C.F.R. § 1021.102(b)(2); see also *Oak Ridge Env't. Peace Alliance v. Perry*, 412 F. Supp. 3d 786, 846-47 (E.D. Tenn. 2019).

⁶¹ See 90 Fed. Reg. 20,842.

must clarify that the amended standard it is proposing will take effect three years after the date of publication of the final rule.

Thank you for considering these comments.

Sincerely,



Joanna Mauer
Deputy Director
Appliance Standards Awareness Project



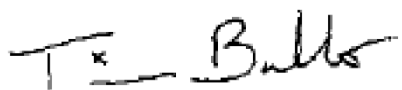
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