



May 6, 2019

Attn: Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy
Re: Energy Conservation Program for Appliance Standards: Proposed Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment (“Process Rule NOPR”)

Docket No.: EERE-2019-BT-STD-0062

The Institute for Policy Integrity (“Policy Integrity”) at New York University School of Law¹ respectfully submits comments on the Department of Energy (“DOE”)’s proposed changes to the Process Rule for prescribing energy conservation standards.² Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

These comments address three issues:

- DOE’s proposed thresholds for defining whether energy savings are “not . . . significant” are arbitrary; “significance” should instead be weighed by considering all important costs and benefits.
- DOE’s proposed replacement of its “walk-down” approach with an “economically rational consumer” test is insufficiently defined and inadequately justified: the agency vaguely alludes to “economic theory” but provides no citations; does not detail how it is defining a “rational consumer” or how the test will be conducted; does not explain whether or how the new test will weigh important social externalities; and does not provide any illustrations or guidance on how its new test will compare to the old one. DOE has failed to sufficiently justify its proposal and has not given the public enough information to provide meaningful comments.
- DOE proposes to continue to monetize the social cost of carbon dioxide “consistent with the guidance contained in OMB Circular A-4.” The 2016 estimates of the social cost of carbon published by the federal Interagency Working Group are the best available estimates and are consistent with *Circular A-4*, and the agency should continue to use those estimates, as it has done in the past.

We elaborate on each of these points in turn below.

¹ This document does not purport to present New York University School of Law’s view, if any.

² 84 Fed. Reg. 3910 (Feb. 13, 2019).

I. “Significance” Should Be Weighed By Comparing Costs and Benefits, Not Based on Arbitrary Thresholds

DOE arbitrarily attempts to draw lines and classify any potential energy savings of less than 0.5 quads over a 30-year period or less than a 10% improvement in a product’s energy efficiency as “not . . . significant” under the statute.³ Setting such thresholds regardless of the costs and benefits of individual standards makes no economic sense and is contrary to congressional intent. What if, for example, a newly technologically feasible and otherwise economically justified standard would reduce a product’s energy consumption by 9.99%, or save 0.499 quads of energy, and do so all for the incredibly low pricetag of \$1? It is unreasonable to assume that a statute like the Energy Policy and Conservation Act, aimed at advancing the national need for energy conservation, would bar such a standard on the grounds of insignificance. Indeed, as the U.S. Court of Appeals for the District of Columbia Circuit held, Congress did not intend for the agency to pass up an essentially “cost-free chance to save energy.”⁴ The D.C. Circuit elaborated that significance could be evaluated by comparing whether the “value” of the energy savings “outweighed” the “cost.”⁵

Contrary to the assumption DOE makes here, there is no single numerical threshold at which energy savings suddenly and obviously stop being “significant.” Rather, “significant” is a relative term, a comparator that implicitly calls for the balancing of factors. As the U.S. Supreme Court has indicated, comparative terms that “admit[] of degree” like “significant,” “minimize,” or “reasonable” typically should be assessed by comparing costs and benefits, because “whether it is ‘reasonable’ to bear a particular cost may well depend on the resulting benefits.”⁶

To take one recent example, DOE’s energy conservation standards for dehumidifiers, finalized in 2016, were projected to save 0.3 quads over a 30-year period, representing a savings of 7.4% relative to the products’ baseline energy use.⁷ Presumably, such standards would not pass DOE’s newly proposed thresholds. Yet those standards were projected to save consumers \$2.71 billion and reduce 18.6 million metric tons of carbon dioxide, thereby reducing \$600 million in climate damages (not to mention reducing \$70 million in human health and environmental damages from emissions of nitrogen oxides, plus reducing thousands of tons of sulfur dioxide and methane, as well as significant mercury emissions).⁸ For many dehumidifiers, the payback period for consumers would be less than half a year.⁹ The idea that such energy savings would not be “significant,” or that Congress

³ 84 Fed. Reg. at 3924.

⁴ *NRDC v. Herrington*, 768 F.2d 1355, 1374 (D.C. Cir. 1985) (“We think it unlikely that the Congress that enacted NECPA and its four related energy statutes intended DOE to throw away a cost-free chance to save energy unless the amount of energy saved was genuinely trivial.”).

⁵ *Id.* at n.19 (discussing administrative costs and other costs, and concluding that “If . . . the value of saving small amounts of energy was outweighed by the cost and trouble of undertaking any appliance program at all, DOE might be justified in determining that those small savings were not significant.”).

⁶ *Entergy Corp. v. Riverkeeper, Inc.*, 129 S.Ct. 1498, 1506, 1510 (2009).

⁷ 81 Fed. Reg. 38,338, 38,340 (June 13, 2016).

⁸ *Id.* (values are calculated at a 3% discount rate).

⁹ *Id.* at 38,339 (showing the payback period for portable dehumidifiers of under 50 pints per day at 0.4-0.5 years).

intended to block an energy conservation standard that would achieve such important cost-savings for consumers and environmental benefits, is unreasonable. Consequently, DOE's proposed definition and thresholds are unreasonable.

II. DOE's "Rational Consumer" Test Is Insufficiently Defined and Inadequately Justified

In Appendix A § 7(e)(2)(G), DOE proposes to assess the economic justification for an energy conservation standard in part by considering "whether an economically rational consumer would choose a product meeting the candidate/trial standard level over products meeting the other feasible trial standard levels after considering all relevant factors, including but not limited to, energy savings, efficacy, product features, and life-cycle costs."¹⁰ In the proposed rule's preamble, DOE indicates that "[i]f an economically rational consumer would not choose the candidate trial standard level after considering these factors, [the candidate TSL] would be rejected as economically unjustified."¹¹ In other words, DOE proposes that, notwithstanding all the other statutory factors for economic justification, this new test may determine whether a standard is justified or not. This potentially determinative new test, however, is insufficiently defined and inadequately justified. For example:

- DOE says that this new approach is dictated by "economic theory";¹² yet the agency cites no theory or supporting literature.
- DOE provides no details on how it would define an "economically rational consumer"¹³ or on how this analysis would be conducted. Importantly, for example, DOE does not explain if or how its "rational" consumer will weigh social externalities. Given the statutory mandate to assess "the need for national energy...conservation" as part of determining economic justification,¹⁴ and given court rulings that "the expected reduction in *environmental costs needs to be taken*

¹⁰ 84 Fed. Reg. at 3948.

¹¹ *Id.* at 3938.

¹² *Id.*

¹³ Various definitions for "rationality" exist in various economic texts, based on factors like information and foresight. *E.g.*, Christine Jolls, Cass Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 *Stanford L. Rev.* 1471 (1998), https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12172&context=journal_articles; Sanjit Dhami, Ali al-Nowaihi & Cass Sunstein, *Heuristics and Public Policy: Decision Making under Bounded Rationality* (Olin Center Discussion Paper No. 962, 2018), http://www.law.harvard.edu/programs/olin_center/papers/pdf/Sunstein_963.pdf. But DOE neglects to specify a definition, discuss any of the factors of "rationality," or, crucially, explain how its definition of "rationality" will fit into the statutory framework and the need to consider social externalities. Will DOE's rational consumer have "full" information or "optimal" information, and how will that be defined? Will DOE's rational consumer have stable preferences and perfect foresight, or will foresight and information lead to fluctuating preferences? Will DOE's rational consumer consider all costs and benefits, only private costs and benefits, or a combination of private costs and benefits plus some social costs and benefits? Does DOE's rational consumer view environmental benefits as a "product feature" or as part of measuring "energy savings" under the proposed definition? *See* 84 Fed. Reg. at 3948. DOE must answer these and many other questions before proposing this kind of a test.

¹⁴ 42 U.S.C. § 6295(o).

into account” in the assessment of economic justification,¹⁵ the agency must clarify whether and how this new test will incorporate all the other statutory factors for assessing economic justification.

- DOE provides no illustrative examples to show how this new analysis would play out or how it would differ in practical application from the longstanding “walk-down” approach.

Without more information, it is both impossible for the public to meaningfully comment on the proposed change, and DOE has failed to provide sufficient justification to support why the proposed change is consistent with economic theory and with statutory requirements.

III. DOE Must Continue Using the Best Available Estimates of the Social Cost of Greenhouse Gases

In Appendix A § 17(h)(3), DOE proposes that, “Consistent with Executive Order 13783 . . . when monetizing the value of changes in reductions in CO₂ and nitrous oxides emissions . . . DOE ensures . . . that any such estimates are consistent with the guidance contained in OMB Circular A-4.”¹⁶ As Policy Integrity has explained to DOE previously,¹⁷ the estimates of the social cost of greenhouse gases developed by the federal Interagency Working Group (IWG) in 2016 are most consistent with the guidance of *Circular A-4* and with best economic practices.

Specifically, DOE should use the global estimates of the social costs of greenhouse gases. In August 2016, the U.S. Court of Appeals for the Seventh Circuit determined that a global perspective on climate damages was the reasonable approach for DOE to take in setting energy conservation standards.¹⁸ DOE should not attempt to calculate and base its energy conservation standards on a domestic-only value of the social cost of carbon. Not only is it inconsistent with Circular A-4 and best economic practices to fail to estimate the global damages of U.S. greenhouse gas emissions in regulatory analyses, but existing methods for estimating a “domestic-only” value are unreliable, incomplete, and inconsistent with Circular A-4. A domestic-only estimate fails to use models built for the purpose of calculating regional damages, ignores recent literature on significant U.S. climate damages, and fails to reflect international spillovers to the United States, U.S. benefits from foreign reciprocal actions, and the extraterritorial interests of U.S. citizens including financial interests and altruism.

The social costs of greenhouse gases metric, developed by the federal IWG, is the best available tool for measuring the economic damages from greenhouse gas emissions and it is consistent with Circular A-4. It has been used in analysis for over 100 federal regulations that affect greenhouse gas emissions, as well as by a number of states in electricity and

¹⁵ *Zero Zone v. Dept. of Energy*, 832 F.3d 654, 677 (7th Cir. 2016) (emphasis added).

¹⁶ 84 Fed. Reg. at 3952.

¹⁷ See https://policyintegrity.org/documents/PolicyIntegrity_Direct_Heating_RFI_Comments.pdf.

¹⁸ *Zero Zone*, 832 F.3d at 674.

climate policy.¹⁹ This metric takes into account the interconnected, global nature of our climate-vulnerable economy, as well as the devastating effects that climate change will have on younger and future generations.

In an energy conservation program rule for walk-in cooler and freezer systems released in July 2017, the Department made use of the IWG social cost of carbon estimates, including the 2.5-percent, 3-percent, and 5-percent discount rates, and global climate damages.²⁰ In fact, in the announcement of the final standards, DOE explicitly stated that it is appropriate to consider global benefits as greenhouse gas emissions accrue globally.²¹ Specifically, DOE found that “[t]he CO₂ reduction is a benefit that accrues globally. DOE maintains that consideration of global benefits is appropriate because of the global nature of the climate change problem.”²² The Department further stated that “preference is given to consideration of the global benefits of reducing CO₂ emissions,”²³ over domestic-only benefits of emissions reductions.

In that rule, DOE also included an explanation of why the Department used the range of social costs of greenhouse gases discount rates. On the question of appropriate discount rates, DOE stated, “The central value, 3 percent, is consistent with estimates provided in the economics literature and OMB’s Circular A-4 guidance for the consumption rate of interest,”²⁴ and that “for purposes of capturing the uncertainties involved in regulatory impact analysis, the IWG emphasizes the importance of including all four sets of SC-CO₂ values,”²⁵ which are reflected in DOE’s analysis for this 2017 rule.²⁶ Using the range of discount rates and focusing on global damages is consistent with best practices and is consistent with Circular A-4, and the agency should do so in this rule.

The Department should not rely on any “interim” estimates that do not include a range of discount rates or global climate impacts. Two agencies have developed new “interim” values of the social costs of greenhouse gases following Executive Order 13,783.²⁷ Relying on faulty economic theory, these “interim” estimates drop the social cost of carbon from \$50 per ton in year 2020 down to as little as \$1 per ton, and drop the social cost of methane from \$1420 per ton in year 2020 down to \$58. These “interim” estimates are inconsistent with accepted science and economics. The IWG’s methodology and estimates have been repeatedly endorsed by reviewers as transparent, consensus-based, and firmly grounded in the academic literature. By contrast, the “interim” estimates ignore the interconnected,

¹⁹ Institute for Policy Integrity, *Social Cost of Greenhouse Gases (2017)*, available at: [https://policyintegrity.org/files/publications/Social Cost of Greenhouse Gases Factsheet.pdf](https://policyintegrity.org/files/publications/Social%20Cost%20of%20Greenhouse%20Gases%20Factsheet.pdf).

²⁰ 82 Fed. Reg. at 31,808.

²¹ *Id.* at 31,881.

²² *Id.*

²³ *Id.* at 31,855.

²⁴ *Id.* at 31,856.

²⁵ *Id.* at 31,855.

²⁶ *Id.*

²⁷ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements, 82 Fed. Reg. 51,788 (Nov. 8, 2017); Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements, 82 Fed. Reg. 46,458 (Oct. 5, 2017).

global nature of our climate-vulnerable economy, and obscures the devastating effects that climate change will have on younger and future generations. DOE should not use the “interim” social cost of greenhouse gas estimates because of their methodological flaws.²⁸

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²⁸ For more details, see Environmental Defense Fund, Institute for Policy Integrity at New York University School of Law, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists, Comments to Bureau of Land Management on Proposed Rule, Regulatory Impact Analysis, and Environmental Assessment on the Delay and Suspension of Certain Requirements for Waste Prevention and Resource Conservation, (Nov. 6, 2017), *available at* <https://policyintegrity.org/projects/update/comments-on-delay-of-blm-waste-prevention-rule>.