



Institute for
Policy Integrity

NEW YORK UNIVERSITY SCHOOL OF LAW

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To: Office of Energy Efficiency and Renewable Energy, Department of Energy

Re: 2021 Process Rule NOPR (RIN 1904-AF13)

The Institute for Policy Integrity at New York University School of Law¹ submits these comments on the Department of Energy (“DOE”)’s proposed revisions to the Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/Industrial Equipment (“Process Rule”).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 first offer additional support for the proposed revisions. Adding these arguments to the final rule will strengthen DOE’s justifications and also help guide DOE in future determinations:

- DOE should **factor not just climate effects but also public health effects, consumer savings, and distributional justice into its assessment of whether energy savings are “significant.”** The proposed revisions to remove the numerical thresholds are therefore justified, as the rigid thresholds would arbitrarily not allow for consideration of such important factors.
- DOE should **tailor its early outreach to be cost-effective and useful**, following proposed recommendations from the Administrative Conference of the United States, and therefore should remove the mandatory requirements for repetitive pre-proposal publications.

These comments then offer additional recommendations for revisions to the Process Rule, which should be finalized as soon as possible, consistent with Executive Order 13,990’s instructions to propose additional revisions by June 2021:³

- DOE should remove **outdated references to the now-revoked Executive Order 13,783**, which led to the arbitrary devaluation of the social cost of greenhouse gases. DOE should commit to applying the global metrics calculated by the Interagency Working Group on the Social Cost Greenhouse Gases in its evaluations of whether standards are economically justified.
- DOE should revise the Process Rule to ensure the consistent and **meaningful consideration of all important effects to the environment, public health, consumers, and energy security**, including indoor air quality and toxic air and water pollution. Such significant impacts, including both upstream and downstream emissions, should be considered during—not after—the evaluation of whether standards are economically justified.
- DOE should revise the Process Rule to **incorporate consideration of distributional justice**. In the prioritization of rulemakings, the selection of standards, and the analysis of cumulative impacts, DOE should consider how certain energy conservation standards—and how regulatory inaction—can disproportionately affect disadvantaged communities, positively or negatively, through consumer savings, public health, and environmental impacts.
- DOE should **review its selection of discount rates** to ensure that calculations of private payback

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

² 86 Fed. Reg. 18,901 (Apr. 12, 2021).

³ Exec. Order 13,990 § 2(a)(iii), 86 Fed. Reg. 7037 (Jan 25, 2021).

periods are based on up-to-date data, and that calculations of national net present value are consistent with social discount rates. DOE should carefully monitor any forthcoming revisions to the selection of discount rates under *Circular A-4* and in the calculation of the social cost of greenhouse gases, and should update its procedures accordingly.

I. Support for Proposed Revisions

DOE provides persuasive justifications for the revisions it proposes to the arbitrary changes that were made to the Process Rule in 2020. This section offers some additional justifications for removing the significance threshold and removing the mandatory application of repetitive pre-proposal publication requirements. Including these additional arguments in the final rule will not just strengthen DOE's justifications for the revisions, but will also help guide DOE in the future on how to factor climate, health, consumer savings, and distributional justice into its assessments of "significance," and how to weigh the costs and benefits of various procedural requirements.

A. Additional Justifications for Removing the Significance Threshold

The 2020 changes to the Process Rule established an arbitrary and rigid numerical threshold, such that energy conservation standards could not be deemed to achieve "significant" energy savings unless they reduced in-site energy use by at least 0.30 quads or 10% over a 30-year period. DOE now proposes to eliminate that numerical threshold and return to a case-by-case determination of whether energy savings are "significant."⁴ DOE offers several persuasive rationales for removing the arbitrary numerical thresholds, but DOE could go even further in justifying its return to a case-by-case, context-specific approach to interpreting "significance." The additional justifications offered below would also help guide the department in the future as it determines the significance of energy savings.

DOE starts by noting that a rigid numerical threshold does not allow consideration of "special circumstances," such as "the importance of energy savings that reduce greenhouse gas emissions," in light of the administration's recommitment to American leadership on climate change.⁵ Indeed, past energy conservation standards that would have fallen below the threshold of 0.30 quads or 10% savings over 30 years have collectively achieved valuable greenhouse gas reductions, and future standards can collectively do the same even if individual actions would fall below that arbitrary numerical threshold. Take, for example, the energy conservation standards finalized for commercial warm air furnaces in 2016. The lifetime energy savings for furnaces purchased in 2023-2048 were estimated at 0.23 quads, or a 0.8% total savings.⁶ Under the arbitrary thresholds set in 2020, this energy conservation standard could not have been adopted.⁷ Yet the standard is estimated to reduce 12.4 million metric tons of carbon dioxide (then valued at over \$350 million in climate benefits), as well as significant reductions in criteria pollutants (with health benefits valued at \$110-\$243 million)—all while saving consumers \$1 billion (with an average payback period for consumers under 2 years).⁸ If the numerical thresholds blocked future standards of similar magnitude,⁹ the United States would forgo collectively large net

⁴ 86 Fed. Reg. at 18,905.

⁵ *Id.*

⁶ 81 Fed. Reg. 2419, 2426 (Jan. 15, 2016); *see also id.* at 2508 (table V-26, showing both primary energy and FFC energy cumulative savings at TSL 2).

⁷ *See id.* at 2508, 2520-21 (showing that TSL 1 would have also been below the thresholds).

⁸ *Id.* at 2426, 2509, 2520-21 (tables I-7, V-30, V-44, and V-45; reporting values at 3% discount rate).

⁹ *See also, e.g.*, 81 Fed. Reg. 4368, 4371 (Jan. 26, 2016) (finalizing standards for pumps, achieving energy savings of 0.29 quads (equal to a 1% reduction) and so delivering \$1.1 billion in net consumer savings plus "significant environmental benefits," including \$500 million in climate benefits).

consumer savings along with billions of dollars in climate benefits—which would significantly undermine commitments to American leadership on climate change. These are precisely the kinds of “cost-free chance[s] to save energy” and to advance the national need for conservation that courts have said that Congress did not intend for DOE to pass up.¹⁰

Indeed, as the example above shows, energy conservation standards falling under the numerical thresholds still deliver not just significant climate benefits, but significant health benefits and consumer savings as well. Both \$110-\$243 million in health benefits and \$1 billion in consumer savings are surely significant sums—particularly in light of the additional unquantified health benefits not reflected in those figures.¹¹ Both health benefits and consumer savings should be weighed as key factors, along with climate benefits, in assessing the significance of energy savings.¹²

This is especially true to the extent health benefits and consumer savings may advance distributional fairness. President Biden has instructed agencies to address climate change as well as the recent economic downturn and systemic racial inequalities, and to develop “procedures that take into account the distributional consequences of regulations, including as part of any quantitative or qualitative analysis of the costs and benefits of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden disadvantaged, vulnerable, or marginalized communities.”¹³ For some communities, the operating costs of certain appliances could constitute a disproportionate share of their budgets. Some communities may also experience a disproportionate share of the indoor air quality effects associated with some appliances, or the air quality effects from proximity to power plants and other energy infrastructure. DOE should consider health effects, consumer savings, and distributional effects in assessing the “significance” of energy savings. Because the numerical thresholds would not allow DOE to consider climate, health, consumers, or distributional justice in assessing significance, the numerical thresholds are arbitrary and should be eliminated. DOE should add these points to its justification, to strengthen its case and to guide its future determinations about significance.

These same principles reinforce the other rationales DOE offers in the proposed rule. DOE rightly notes that a 0.3 quad reduction in *peak* energy demand has “a greater impact on reducing the stress on U.S. energy infrastructure” compared to a non-peak reduction, and a rigid numerical threshold would not take such peak effects into account.¹⁴ But the timing of energy demand matters not just for the stress on infrastructure, but for climate, health, and consumer impacts as well. The electricity generators that satisfy peak demand can sometimes be among the most-polluting generators.¹⁵ Some consumers may

¹⁰ *NRDC v. Herrington*, 768 F.2d 1355, 1372 (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.”).

¹¹ Compare 81 Fed. Reg. at 2523 (showing annualized consumer savings of up to \$81 million per year and annualized monetized health benefits of up to \$17.61 million per year, plus unquantified health benefits) with Exec. Order 12,866 § 3(f)(1) (Oct. 4, 1993) (defining any regulatory action with a \$100 million annual effect as “significant”).

¹² “Significant” is a relative term, a comparator that implicitly calls for the balancing of factors. See, e.g., *Entergy Corp. v. Riverkeeper, Inc.*, 129 S. Ct. 1498, 1506, 1510 (2009) (explaining that comparative terms that “admit[] of degree” 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”).

¹³ Presidential Memorandum on Modernizing Regulatory Review §§ 1, 2(b)(ii) (Jan. 20, 2021).

¹⁴ 86 Fed. Reg. at 18,905.

¹⁵ See Richard L. Revesz & Burcin Unel, *Managing the Future of the Electricity Grid: Energy Storage and Greenhouse Gas Emissions*, 42 Harv. Envtl. L. Rev. 139 (2018) (explaining how the rise of energy storage systems to meet peak demand may perversely increase emissions); Jason A. Schwartz et al., *Peak Efficiency: How Regulating Electricity Demand Could Save Lives in New York City* (Policy Integrity Brief, Sept. 2012), https://policyintegrity.org/files/publications/Peak_Efficiency_Policy_Brief.pdf (explaining how in the past, New York City has relied on especially dirty and local oil-burning plants to meet peak demand).

also experience increased electricity prices during periods of peak demand.¹⁶ Consequently, energy savings for appliances that operate during peak demand periods can have greater benefits for climate, health, and consumers than the raw numbers may imply. The impacts to climate, health, and consumers from reducing peak demand should be considered in determining “significance.”

Similarly, climate and health impacts should be incorporated into DOE’s final rationale for removing the numerical thresholds. DOE explains that numerical thresholds do “not allow DOE to account for differences in primary energy and full-fuel-cycle (FFC) effects for different covered products,” noting, for example, that 1 quad of site electricity consumption corresponds to 3.05 quads of FFC consumption, while 1 quad of site gas consumption corresponds to just 1.11 FFC consumption.¹⁷ But for similar reasons, 1 quad of site energy consumption will also be associated with different amounts of FFC emissions depending on the fuel type. Those different emissions will, in turn, be associated with different climate and health impacts. DOE should consider climate and health impacts in assessing the significance of energy savings, and so DOE should combine these points with its discussion of FFC effects as an even stronger justification for repealing the numerical thresholds.

B. Additional Justifications for Removing Mandatory Application of Repetitive Pre-Proposal Requirements

The 2020 changes to the Process Rule converted previously flexible guidance into binding requirements. DOE now proposes restoring its discretion to depart from default procedures if necessary, for example, to meet statutory deadlines. As DOE explains, the 2020 changes to the Process Rule made mandatory both an early assessment request for information (RFI) as well as either an advanced notice of proposed rulemaking (ANOPR) or a framework document with preliminary analysis. DOE observes that while early stakeholder input is valuable, “an RFI followed by a[n] ANOPR may not be the most efficient method for gathering early stakeholder input in all rulemakings,” and such repetitive pre-proposal requirements “could in some circumstances make it more difficult for DOE to meet its statutory deadlines, while adding little to no value to the rulemaking process.”¹⁸

As support for removing the mandatory application of repetitive pre-proposal publications, DOE should consider some proposed guidance from the Administrative Conference of the United States (ACUS). ACUS’s Committee on Regulation has drafted proposed “Recommendations on Early Input on Regulatory Alternatives,” which will be presented for approval at ACUS’s June 2021 Plenary Session. If adopted as drafted, the first recommendation will encourage agencies to weigh “[t]he time and resources that conducting such [early stakeholder] outreach would require,” as well as “[t]he deadlines the agency faces, if any, and the harms that might occur from the delay required to solicit and consider early feedback,” against other factors.¹⁹ The draft preamble further explains that because “agencies face resource constraints and competing priorities, . . . agencies may wish to limit early public input . . . [and] consider whether the benefits of early outreach outweigh the costs, including the resources required to

¹⁶ See Burcin Unel et al., *Retail Electricity Tariff Design, Distributed Energy Resources, and Emissions* 14 (Policy Integrity Working Paper, Mar. 2021),

https://policyintegrity.org/files/publications/Unel_et_al_Retail_Rate_Design_DERs_and_Emissions_March_2021.pdf (showing how time-of-use pricing and critical peak pricing change consumer costs during peak periods).

¹⁷ 86 Fed. Reg. at 18,905. Full fuel-cycle values reflect the energy consumed in producing and distributing electricity, gas, oil, or other energy types, while on site energy does not consider that upstream consumption.

¹⁸ *Id.* at 18,904.

¹⁹ ACUS Comm. on Reg., Proposed Recommendation: Early Input on Regulatory Alternatives 3-4 (Apr. 27, 2021) (Draft Recommendation 1(g) & (i)), *available at*

<https://www.acus.gov/sites/default/files/documents/Recommendation%20from%20the%20Committee%20-%204.27.2021%20-%20Early%20Input%20on%20Regulatory%20Alternatives.pdf>.

conduct the outreach and any delays entailed.”²⁰ The draft preamble concludes that “[w]hen agencies do solicit early input, they will still want to tailor their outreach to ensure that they are soliciting input in a way that is cost-effective, is equitable, and maximizes the likelihood of obtaining diverse, useful responses.”²¹

DOE should consult whatever final recommendations that ACUS will likely adopt in June, which will likely provide additional support for DOE’s proposed removal of the mandatory application of repetitive pre-proposal publication requirements.

II. Suggestions for Additional Revisions to Make As Soon As Possible

Executive Order 13,990 instructed DOE to first propose by March “major revisions” to the Process Rule, followed by “any remaining revisions proposed by June 2021.”²² The proposed rule corrects many of the most problematic changes that were made to the Process Rule in 2020. However, the Process Rule still requires further revisions, in particular to more meaningfully build consideration of climate change, public health, and distributional justice into the process for setting energy conservation standards. Consistent with Executive Order 13,990, DOE should propose these additional revisions as soon as possible.

A. Correct Outdated References on the Social Cost of Greenhouse Gases

The Process Rule’s only discussion of the social cost of greenhouse gases appears in an outdated and confusing subsection on cross-cutting analytical assumptions. This provision should be revised as soon as possible.

To begin, it is unclear why the reference to “monetizing the value of changes in reductions in CO₂ and nitrous oxides emissions” appears in a subsection that otherwise seems to focus exclusively on “upstream” emissions from fuel production chains, as distinct from “downstream” emissions from combustion.²³ All effects from emissions that can readily be monetized—including not just the social cost of carbon dioxide and the social cost of nitrous oxide (N₂O), but also the social cost of methane and other greenhouse gases, as well as monetizable health effects from nitrogen oxides (NO_x) and other pollutants—should be monetized for both upstream and combustion-related emissions, as well as emissions from leakage from the covered appliance or equipment.

Referencing the social cost of greenhouse gases only in the subsection on upstream emissions is particularly problematic because the reference follows a line about considering such effects only “after assessing the seven factors required to demonstrate economic justification.”²⁴ As explained further in the next section of these comments, neither upstream nor downstream emissions should be relegated to a post hoc evaluation conducted only after determining which standard is economically justified; instead, upstream and downstream climate impacts, as valued by the social cost of greenhouse gases, should be an integral part of assessing which standards are economically justified.

A second major concern is that the Process Rule continues to state that climate damages will be monetized “consistent with Executive Order 13783.”²⁵ That Executive Order has been rescinded,²⁶ and

²⁰ *Id.* at 3.

²¹ *Id.*

²² Exec. Order 13,990 § 2(a)(iii).

²³ *See* 86 Fed. Reg. at 18,921.

²⁴ *Id.*

²⁵ *Id.*

²⁶ Exec. Order 13,990 § 7.

consequently the reference should be removed from the Process Rule. This outdated reference is misleading and problematic, as it suggests that DOE may continue to follow that Executive Order’s misguided approach to the social cost of greenhouse gases.

Executive Order 13,783 was issued in March 2017 and then applied by the Trump administration to severely undervalue the climate damages caused by greenhouse gas emissions. Following Executive Order 13,783, several agencies, including DOE, applied deeply flawed social cost values that relied on an inappropriately high discount rate and ignored climate damages beyond the U.S. borders and so reduced the social cost of carbon dioxide emissions, for example, from \$51 per ton down to \$1 per ton.²⁷ Those values were rejected by a federal court as being “soundly rejected by economists as improper and unsupported by science,”²⁸ and were criticized by the Government Accountability Office for ignoring international spillovers and disregarding modeling limitations.²⁹

Executive Order 13,783 was revoked by Executive Order 13,990.³⁰ The latter order, issued by President Biden in January 2021, specifically calls on agencies to take “global damages into account” in order to “capture the full costs of greenhouse gas emissions as accurately as possible”—instructions that stand in stark contrast to agencies’ previous choices under Executive Order 13,783 to cast global damages aside.³¹ The Biden executive order also reconvened the Interagency Working Group on the Social Cost of Greenhouse Gases (Working Group),³² which the Trump administration had disbanded.³³

Leaving the outdated reference to Executive Order 13,783 in the text of the Process Rule also disregards the fact that the Working Group has recently published new interim values of the social cost estimates, which are based on the best available science and economics.³⁴ In February 2021, the recently reconvened Working Group released new interim estimates for the social cost of carbon dioxide, social cost of methane, and social cost of nitrous oxide. Unlike the Trump-era interim estimates, which ignored cross-border effects and applied inappropriately high discount rates, the Working Group’s new interim values once again show a commitment to follow the best available science and economics.³⁵ Executive Order 13,990 advised agencies that they should apply the Working Group’s new interim values until the Working Group publishes final values in January 2022.³⁶

²⁷ See, e.g., Dep’t of Energy, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Room Air Conditions 14-1 (June 2020); see also 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). *But see* 85 Fed. Reg. 1504, 1506 (Jan. 10, 2020) (energy conservation standards for air compressors, which instead properly used the global estimates of the social cost of greenhouse gases).

²⁸ *California v. Bernhardt*, 472 F. Supp. 3d 573, 613 (N.D. Cal. 2020).

²⁹ GAO, SOCIAL COST OF CARBON: IDENTIFYING A FEDERAL ENTITY TO ADDRESS THE NATIONAL ACADEMIES’ RECOMMENDATIONS COULD STRENGTHEN REGULATORY ANALYSIS, GAO-20-254 (June 2020).

³⁰ Exec. Order 13,990 § 7.

³¹ *Id.* § 5(a).

³² *Id.* § 5(b).

³³ Exec. Order No. 13,783 § 5(b), 82 Fed. Reg. 16,093 (Mar. 28, 2017). As noted above, this Executive Order has now been rescinded.

³⁴ Interagency Working Group on the Social Cost of Greenhouse Gases, United States Government, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide – Interim Estimates under Executive Order 13990 (Feb. 2021), <https://perma.cc/5B4Q-3T5Q> [hereinafter 2021 TSD].

³⁵ Specifically, these new interim numbers start by readopting the Working Group’s prior methodology from 2016 and adjusting the values for inflation. 2021 TSD at 4. Note that the 2016 values are updated to 2020\$ using U.S. Bureau of Economic Analysis’ (BEA) NIPA Table 1.1.9. *Id.* at 5 n3. See Richard L. Revesz et al., *Best Cost Estimate of Greenhouse Gases*, 357 SCIENCE 6352 (2017) (praising the Working Group’s 2016 methodology).

³⁶ Exec. Order No. 13,990 §§ 5(b)(ii)(A)-(B).

DOE should use the Working Group’s new interim estimates of the social costs of greenhouse gases to monetize the damages from carbon dioxide, methane, and nitrous oxide emissions.³⁷ As the Working Group continues to refine and update those estimates in the future, DOE should follow suit. The Process Rule should commit DOE to monetize climate damages using the best available science and economics—and so should delete the outdated and misleading reference to a rescinded, misguided Executive Order.

B. Ensure Consistent and Meaningful Consideration of Environmental, Health, and Other Economic and Social Impacts

Under Energy Policy and Conservation Act—and particularly under the “need for national energy conservation” factor—DOE must consider important impacts to climate change, the environment, public health, and energy security and reliability.³⁸ Yet various provisions in the Process Rule highlight different subsets of environmental and other effects that DOE should consider. These inconsistencies create confusion, and none of the provisions include a sufficiently comprehensive list or ensure meaningful consideration. DOE should revise the Process Rule to engrain a more consistent and meaningful approach to the consideration of climate, environmental, health, and other economic and social impacts.

For example, Section 6(e)(4)(v) lists various national energy, economic, and employment impacts that will be considered in selecting proposed standards,³⁹ but fails to mention energy security or reliability benefits. By comparison, “energy security” is mentioned in Section 4 on setting priorities.⁴⁰ This inconsistency raises questions about if and how energy security is considered beyond when setting priorities.

Similarly, Section 6(e)(4)(vi) lists impacts on the environment that will be considered in selecting proposed standards, and specifically includes “emissions of carbon and relevant criteria pollutants.”⁴¹ However, the provision fails to mention any other important greenhouse gases, especially methane; any other harmful air pollutants beyond criteria pollutants, like mercury and other toxic pollutants; or any other important environmental impacts, like water pollution from power plants and energy infrastructure. The provision should be revised to specify these additional pollutants, to clarify that environmental justice should also be considered, and to add that indoor health risks from the operation of appliances should be considered as well. This includes indoor air quality risks that could be diminished by increasing the efficiency of appliances—such as indoor pollution from appliances that directly combust fossil fuels—as well as other kinds of indoor health risks. For example, the mercury content of compact fluorescent lightbulbs presents a persistent health risk both when lightbulbs break accidentally

³⁷ In its most recent technical support document, the Working Group explains why the appropriate discount rate of consumption in an intergenerational context, and therefore the appropriate central discount rate for calculating the social cost of greenhouse gases, may be well below 3%. *Id.* at 17. The Working Group suggested that agencies “consider conducting additional sensitivity analysis using discount rates below 2.5%” to reflect this growing body of evidence on intergenerational discounting. *Id.* at 21.

³⁸ *Zero Zone, Inc. v. Dept. of Energy*, 832 F.3d 654, 677 (7th Cir. 2016) (concluding that “the expected reduction in environmental costs *needs to be taken into account*” when “determin[ing] whether an energy conservation measure is appropriate under a cost-benefit analysis”) (emphasis added). When interpreting nearly identical statutory language in the EPCA, which applies to the Department of Transportation’s setting of vehicle efficiency standards (“the need of the United States to conserve energy”), the U.S. Court of Appeals for the D.C. Circuit observed in 1988 that the Department of Transportation has interpreted that language as “*requir[ing]* consideration of . . . environmental . . . implications,” *Pub. Citizen v. Nat’l Highway Traffic Safety Admin.*, 848 F.2d 256, 263 n.27 (D.C. Cir. 1988) (R.B. Ginsburg, J.) (quoting 42 Fed. Reg. 63,184, 63,188 (Dec. 15, 1977) and adding emphasis to the word “*requires*”).

³⁹ 86 Fed. Reg. at 18,917.

⁴⁰ *Id.* at 18,915-16.

⁴¹ *Id.* at 18,917.

in the home and when bulbs are disposed in landfills. Efficiency standards that increased the lifespan of bulbs and so decreased disposal rates, or that motivated consumers to switch to even more efficient LED bulbs, would decrease these serious health risks—and DOE should consider such public health effects more broadly when selecting proposed standards.

Section 16(h) on cross-cutting assumptions contains a somewhat more complete list of pollutants, by including methane and mercury as well as carbon dioxide and some criteria pollutants. But even this provision fails to list particulate matter, carbon monoxide (which may be important for indoor air quality), water pollutants, or other indoor air quality issues.⁴² And again, the inconsistency compared to other lists of environmental effects in the Process Rule creates confusion.

In the subsection on upstream emissions, Section 16(h)(3) says “DOE will consider the effects of the candidate/trial standard levels on these emissions *after* assessing the seven factors required to demonstrate economic justification under EPCA.”⁴³ Though this statement seems to apply only to upstream emissions, DOE has in the recent past failed to consider any environmental impacts in its assessment of economic justification, for example by saying that because it “concluded [that] amended standards for GSILs would not be economically justified . . . [,] DOE did not conduct . . . [an] emissions analysis.”⁴⁴ Such an approach puts the cart before the horse, as consideration of important emissions effects should never be an afterthought, but instead is a required and integral part of assessing the “need for national energy conservation” prong in the economic justification test.⁴⁵ DOE should make sure that an emissions analysis is part of the determination of whether standards are economically justified, and not done post hoc. Even if this subsection of the Process Rule is referring only to upstream emissions, given DOE’s commitment to a full-fuel-cycle analysis, it is unclear why upstream emissions would deserve less attention or why it would be appropriate to assess them only “after assessing the seven factors.” The seven factors include both “the need for national energy and water conservation,” which includes environmental impacts,⁴⁶ and also “other factors the Secretary considers relevant.”⁴⁷ Because DOE considers a full-fuel-cycle analysis to be relevant, it should consider upstream emissions as well as emissions from combustion or leakage.

Finally, as explained above, DOE should also consider revising the Process Rule to list climate change, other environmental impacts, public health, consumer savings, energy security, and distributional justice as key factors to consider in assessing whether energy savings are “significant.”

C. Incorporate Distributional Justice

As noted above, President Biden has instructed agencies to address climate change as well as the recent economic downturn and systemic racial inequalities, and to develop “procedures that take into account the distributional consequences of regulations, including as part of any quantitative or qualitative analysis of the costs and benefits of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden disadvantaged, vulnerable, or marginalized communities.”⁴⁸ For some communities, the operating costs of certain appliances could constitute a disproportionate share of their budgets. Some communities may also experience a disproportionate share of the indoor

⁴² *Id.* at 18,921.

⁴³ *Id.* (emphasis added)

⁴⁴ 84 Fed. Reg. 46,830, 46,835 (Sept. 5, 2019).

⁴⁵ *Zero Zone*, 832 F.3d at 677 (concluding that “the expected reduction in environmental costs *needs to be taken into account*” when “determin[ing] whether an energy conservation measure is appropriate under a cost-benefit analysis”) (emphasis added).

⁴⁶ *Id.*

⁴⁷ 42 U.S.C. § 6295(o)(2)(B)(VI)-(VII).

⁴⁸ Presidential Memorandum on Modernizing Regulatory Review §§ 1, 2(b)(ii) (Jan. 20, 2021).

air quality effects associated with some appliances, or the air quality effects from proximity to power plants and other energy infrastructure.

There are several provisions in the Process Rule that should be revised to more explicitly address distributional justice. Section 1(e) currently states that DOE “seeks to understand the distribution of those costs and benefits among consumers, manufacturers, and others.”⁴⁹ This language could be expanded to clarify that costs and benefits to climate, public health, and the environment can fall not just on consumers of covered products, but to the general public and to disadvantaged communities. The distribution of climate, health, and environmental impacts among such groups should also be considered by DOE. The same provision also talks about “tak[ing] into account cumulative impacts of regulation on manufacturers,”⁵⁰ but fails to mention cumulative impacts of regulation—or the cumulative impacts of regulatory inaction—on consumers, disadvantaged communities, or the general public. Section 6(e)(4)(i) similarly mentions that “impacts on manufacturers of multiple product-specific . . . requirements” will be considered in selecting a standard,⁵¹ but makes no mention of a similarly cumulative review of costs or benefits to consumers or disadvantaged communities.

Section 4(a) currently states that in setting priorities, DOE will consider, among other factors, “[p]otential energy savings” and “[p]otential social and private, including environmental or energy security, benefits.”⁵² DOE should make more explicit that distributional considerations will also be taken into consideration in assessing both energy savings and environmental and public health benefits. As Policy Integrity’s recent comments on the prioritization process explained:

DOE should use cost-benefit analysis to prioritize rulemakings that would result in the greatest net gains for society. *However*, DOE should also continue to promulgate energy efficiency standards that would result in smaller, but still overall positive net gains. ***This is especially true if certain rules may be important to advance distributional fairness.*** For example, even if the total energy savings achievable from some energy efficiency increases may appear relatively small, if such savings would accrue to “disadvantaged, vulnerable, or marginalized communities,” advancing such standards could help “ensure that regulatory initiatives appropriately benefit” such communities.⁵³

Section 6(e)(4)(vi), which was discussed above, should also explicitly add consideration of environmental justice as a factor in the development and selection of proposed standards.

D. Reevaluate Discount Rates

The Process Rule offers some potentially inconsistent guidance on selecting discount rates, which should be reconciled. DOE should also ensure that its discount rates always reflect up-to-date data and recent developments in the economic literature, and are appropriate for particular contexts like application of the social cost of greenhouse gases. In applying discount rates, DOE should aim to achieve the objective set out in Section 1(f) of the Process Rule: to use “quantitative analytical methods that are . . . as sound and well-accepted as possible.”⁵⁴

Three different sections of the Process Rule offer guidance on discount rates. Section 6(e)(4)(ii) currently states that DOE will conduct “sensitivity analyses using high and low discount rates reflecting both

⁴⁹ 86 Fed. Reg. at 18,915.

⁵⁰ *Id.*

⁵¹ *Id.* at 18,917.

⁵² *Id.* at 18,915.

⁵³ Presidential Memorandum on Modernizing Regulatory Review § 2(b)(ii), *supra* note 48.

⁵⁴ 86 Fed. Reg. at 18,915.

private transactions and social discount rates.”⁵⁵ Section 7(c)(1) says that “private discount rates” will be used to assess the payback period.⁵⁶ Finally, Section 16, on cross-cutting assumptions, specifies that for residential consumers, DOE will pick a central discount rate equal to the “average financing cost (or opportunity costs of reduced savings) experienced by typical consumers,” with sensitivity analyses conducted with rates “more likely to be experienced by residential consumers with little or no savings and credit card financing” and also by “consumers with substantial savings.”⁵⁷ For commercial users and manufacturer impacts, Section 16 advises picking a range of discount rates based on real rates of return.

It may be appropriate to calculate private payback periods based on private consumers’ preferences for consumption over time, which may be reflected in financing costs and savings rates. However, DOE should note that market failures can affect the financing costs for some consumers, including consumers with little savings.⁵⁸ Additionally, recent trends in savings rates suggest that consumers’ discount rates have declined in recent years.⁵⁹ DOE should ensure that its application of private discount rates to calculate payback periods is based on recent data.

Section 16 next states that “[f]or national net present value calculations, DOE would use the Administration’s approximation of the average real rate of return on private investment in the U.S. economy.”⁶⁰ This statement comes in a subsection on “Private Discount Rates.” If DOE is referring to a calculation of national net present value *to private consumers*, to compare increased purchase prices passed on to consumers against longer term cost savings for consumers, DOE should not apply a discount rate based on the “average real rate of return on private investment.” Instead, DOE should apply a rate consistent with consumer preferences, which for residential consumers may be much lower than the rate of return on private investment. Similarly, if DOE more broadly is referring to a true “national net present value calculation” to include all private and social costs and benefits, exclusive application of a discount rate based on returns to private investment would also be inappropriate. Indeed, the very next subsection in the Process Rule, on “Social Discount Rates,” indicates that DOE should apply social discount rates when tallying up all costs and benefits.⁶¹ DOE should either clarify its intent or rectify the inconsistency.

In either case, DOE should also carefully monitor any future revisions to the discount rates recommended under *Circular A-4*. Recent evidence and theory indicate that both of *Circular A-4*’s default recommended discount rates are outdated and too high, given more recent data and also because those rates do not fully account for externalities and other factors.⁶² Finally, as explained above, when applying the social cost of greenhouse gases, DOE should follow the recommendations of the Interagency Working Group on the Social Cost of Greenhouse Gases in the selection of discount rates appropriate to the context of climate change.

⁵⁵ *Id.* at 18,917.

⁵⁶ *Id.* at 18,918.

⁵⁷ *Id.* at 18,921.

⁵⁸ See, e.g., Policy Integrity Comments on Proposals Under Consideration to Limit Certain Practices for Payday, Auto Title, and Similar Loans at 4-6 (Dec. 7, 2015), https://policyintegrity.org/documents/CFPBComments_Payday.pdf (exploring some of the barriers to credit that consumers face and related distributional concerns).

⁵⁹ See Council of Econ. Advisers, *Discounting for Public Policy: Theory and Recent Evidence on the Merits of Updating the Discount Rate* (Jan. 2017), https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701_cea_discounting_issue_brief.pdf.

⁶⁰ 86 Fed. Reg. at 18,921.

⁶¹ *Id.*

⁶² See Council of Econ. Advisers, *supra*.

Respectfully submitted,

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Attachments:

Policy Integrity's Comments on Proposed Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment (May 6, 2019), *available at*

https://policyintegrity.org/documents/DOE_Process_Rule_Comments_2019.5.6_final.pdf.

Policy Integrity's Comments on Supplemental Notice of Proposed Rulemaking on Procedures for Evaluating Statutory Factors for Use in New or Revised Energy Conservation Standards (Mar. 16, 2020), *available at*

https://policyintegrity.org/documents/DOE_Suppl_Process_Rule_Comments_2020.03.16.pdf.

Policy Integrity's Comments on the Prioritization Process (Mar. 11, 2021), *available at*

https://policyintegrity.org/documents/DOE_EE_Prioritization_Comments_2021.03.11_Final_.pdf

Joint Comments on Monetizing Emissions Reductions in the Technical Support Document for the Room Air Conditioners Request for Information (Sept. 8, 2020),

https://policyintegrity.org/documents/Joint_SCC_comments_DOE_Rm_AC_RFI_TSD_2020.09.08.pdf