

Proposed Action Memo: DOE Energy Conservation Program Rollbacks

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*This memorandum was prepared for the [Reversing Environmental Rollbacks](#) project led by the Center for Law, Energy and the Environment (CLEE) at UC Berkeley School of Law in partnership with Governing for Impact. The project seeks to track, analyze, and develop strategies to reverse the environmental policy rollbacks of the previous federal administration, offering a comprehensive database and targeted analyses to complement the efforts of peer institutions. CLEE thanks Julia Stein (Emmett Institute, UCLA) and Joe Vukovich (NRDC) for their thoughtful review and feedback on this memorandum.

I. Summary

Pursuant to its Energy Policy and Conservation Act (EPCA) authority to set efficiency standards for consumer appliances and industrial equipment, the Department of Energy (DOE) issued final rules that modify DOE's process for development of new standards and loosen energy efficiency requirements for lightbulbs and dishwashers, and proposed rules to loosen efficiency requirements for residential furnaces, hot water heaters, and electric motors used in a variety of appliances and equipment. DOE has also failed to update dozens of standards and test procedures as required by law. For a complete list of delayed standards, which are the subject of ongoing litigation, see Appliance Standards Awareness Project, "Missed Deadlines for Appliance Standards."¹

Rollbacks

- Energy Conservation Program for Appliance Standards: Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment, 85 Fed. Reg. 8626 (final rule) (Process Rule) and Procedures for Evaluation of Statutory Factors for Use in New or Revised Energy Conservation Standards, 85 Fed. Reg. 50937 (final rule) (Economic Justification Rule)
- Energy Conservation Program: Definition for General Service Lamps, 84 Fed. Reg. 46661 (rule withdrawal) (GSL Rule) and Energy Conservation Standards for General Service Incandescent Lamps, 84 Fed. Reg. 71626 (final determination) (GSIL Rule)
- Energy Conservation Program: Energy Conservation Standards for Dishwashers, 85 Fed. Reg. 68723 (final rule) (Dishwasher Rule); Energy Conservation Standards for Residential Furnaces and Commercial Water Heaters, 85 Fed. Reg. 60090 (proposed rule) (Furnace Rule); Test Procedures for Small Electric Motors and Electric Motors, 84 Fed. Reg. 17004 and Energy Conservation Standards for Small Electric Motors, 85 Fed. Reg. 24146 (proposed rules) (Motor Rules)

Agency

- Department of Energy

Impact

- Modified process for setting new standards by establishing a minimum efficiency savings threshold, requiring use of industry test procedures, lengthening the process, and restructuring assessment of costs and benefits—**significantly reducing DOE's ability to adopt stringent efficiency standards.**
- Eliminated standards requiring transition from incandescent to LED light bulbs and added regulatory exemptions for multiple bulb types—**sacrificing up to \$180 in household savings, 38 million tons of avoided carbon emissions, and \$1.9 billion of climate benefits per year.**
- Rolled back efficiency standards for heaters and furnaces, dishwashers, and electric motors, and delayed new standards for dozens of products—**adding millions of tons of carbon emissions and sacrificing tens of billions in consumer savings by 2050.**

Recommended Actions

- **Petition the Ninth Circuit for abeyance of the Process Rule litigation and the Second Circuit for abeyance of the GSL and GSIL Rules, and consider petitioning for voluntary remand of the rules.**
- **Initiate a rulemaking process to consider revisions to DOE's decision-making process and cost-benefit assessment requirements for new efficiency standards.**
- **Initiate a rulemaking process to develop efficiency standards for GSLs as required by the 2007 EPCA amendments, including prohibition of the sale of GSLs that do not meet the 45 lm/w backstop.**
- **Initiate a rulemaking process to reconsider the Dishwasher Rule's carve-out for short-cycle units.**
- **Withdraw the Furnace Rule and reorient the Motor Rules.**
- **Initiate rulemakings to update efficiency standards and test procedures for dozens of product types.**

¹ See also Harvard Environmental & Energy Law Program, "Energy Conservation Standards for Consumer Products," available at <https://ceelp.law.harvard.edu/2017/09/energy-conservation-standards-for-consumer-products/> and NYU State Energy & Environmental Impact Center, "Energy Efficiency Standards," available at <https://www.law.nyu.edu/centers/state-impact/issues/clean-energy-and-energy-efficiency/energy-efficiency-standards>.

II. Relevance

Under EPCA, DOE has the authority to create, update, and implement energy efficiency standards for consumer products and appliances.² Following the statute's goal of increasing efficiency as technology improves, DOE is required to set and periodically update standards that are "designed to achieve the maximum improvement in energy efficiency that is technologically feasible, economically justified," and "result[s] in significant conservation of energy."³ In addition, EPCA's "anti-backsliding" provision bars DOE from setting new standards that decrease energy efficiency, ensuring that standards only improve over time.⁴ To develop the energy performance measurements needed to evaluate and set efficiency standards, DOE is also required to establish and update product test procedures that are "reasonably designed" and "not unduly burdensome to conduct."⁵

Since enactment, EPCA has expanded to cover 60 products and approximately 90% of home energy use, 60% of commercial building energy use, and 30% of industrial energy use. The program has had an enormous impact on national energy savings. The standards promulgated prior to 2016 were estimated to save 71 quadrillion BTUs (quads) of energy through 2020 and nearly double that by 2030, representing more energy than the nation consumes in a year. DOE estimated the program will generate \$1 trillion in cumulative consumer energy bill savings through 2020 and an additional \$1 trillion by 2030, translating to over \$300 in typical annual household savings.⁶ Current savings from existing standards have been estimated at 13% of total U.S. electricity use and 4% of total U.S. gas/heating oil use; by 2030, these standards could save up to eight billion metric tons of avoided carbon emissions.⁷ These federal minimum standards especially benefit low-income communities and communities of color, whose residents face disproportionately high energy burdens and are more likely to rent their homes (and thus have limited ability to purchase energy-saving appliances, relying instead on minimum federal standards).

The actions discussed in this memorandum include major changes in the processes DOE uses to update efficiency standards and to assess the costs and benefits of new rules, adding a new savings threshold and cost comparison requirements that could severely reduce the agency's ability to incrementally promote savings in the future. They also include DOE rollbacks and carve-outs from existing or in-process standards that would, if fully implemented, generate hundreds of millions of tons of avoidable carbon emissions and sacrifice tens of billions of dollars in consumer savings in coming decades. DOE's rollbacks of lightbulb efficiency standards alone could sacrifice annual savings of up to 38 million metric tons of carbon dioxide emissions and \$14 billion in consumer

² 42 USC §§ 6201 et seq.; §§ 6291-6309 (energy conservation program).

³ 42 USC §§ 6295(o)(2)(A), 6295(o)(3)(B), 6317(b)(1).

⁴ 42 USC § 6295(o)(1).

⁵ 42 U.S.C. §§ 6293(b)(3)-(4), 6314(a)(2)-(3).

⁶ DOE, "Saving Energy and Money with Appliance and Equipment Standards in the United States," available at https://www.energy.gov/sites/prod/files/2017/01/f34/Appliance%20and%20Equipment%20Standards%20Fact%20Sheet-011917_0.pdf.

⁷ Joanna Mauer and Andrew deLaski, Appliance Standards Awareness Project (ASAP) and American Council for an Energy-Efficient Economy (ACEEE), *A Powerful Priority: How Appliance Standards Can Help Meet U.S. Climate Goals and Save Consumers Money* (November 2020), pp. iv, 1, available at <https://www.aceee.org/sites/default/files/pdfs/a2001.pdf>.

utility bills.⁸ And Trump-era failures to update standards and procedures timely under EPCA could forego economic savings of \$22 billion per year and emissions savings of 80 million metric tons of carbon by 2035—a matter this memorandum does not discuss in detail but proposes to address via new rulemaking.⁹

III. Background

1. The Process Rule and the Economic Justification Rule

In the Process Rule and the Economic Justification Rule, DOE substantially altered its decision-making processes for developing new efficiency standards, most importantly by setting a minimum threshold for anticipated energy savings and requiring the agency to conduct additional cost-benefit comparisons—threatening to substantially reduce the agency’s ability to set the most stringent standards that are technologically feasible and economically justified, as required by law.

i. *The Process Rule*

In February 2020, DOE issued the Process Rule, implementing a number of changes to its process for setting energy efficiency standards and test procedures under EPCA that are likely to slow and/or weaken development of new standards.¹⁰ Among other changes to DOE’s decision-making procedures, the Process Rule:

- Added a “significant savings” threshold (0.3 quads over 30 years or a 10% improvement over existing standards) that DOE must use as a preliminary screen to abandon any proposed standard that fails to exceed the requirements.¹¹
- Required DOE to adopt industry test procedures for appliance efficiency in most cases, which can lead to use of tests that do not accurately reflect real-world energy consumption and over-estimate industry performance.¹² DOE has traditionally considered industry testing procedures when setting new efficiency standards, but the Process Rule requires adoption without modification, unless the procedure fails EPCA’s core testing requirements (“reasonably designed” and “not unduly burdensome to conduct”).¹³
- Added an “early assessment review” process by which DOE will solicit stakeholder input prior to initiating any new proceeding to amend existing standards and reach a preliminary determination of whether the new or amended standard would meet statutory criteria for

⁸ ACEEE, “DOE’s Light Bulb Standards Rollback Will Cost Americans \$14 Billion Each Year” (September 4, 2019), available at <https://www.aceee.org/press/2019/09/doe-s-light-bulb-standards-rollback>.

⁹ Earthjustice, “DOE Inaction Will Cost Consumers at Least \$22 Billion and Spew at Least 80 Million Tons of Carbon into the Air” (August 10, 2020), available at <https://earthjustice.org/news/press/2020/doe-inaction-will-cost-consumers-at-least-22-billion-and-spew-at-least-80-million-tons-of-carbon-into-the-air>; ASAP, “Missed Deadlines for Appliance Standards” (November 2020), available at https://appliance-standards.org/sites/default/files/Missed_deadlines_as_of_November_2020.pdf.

¹⁰ 85 Fed. Reg. 8626 (February 14, 2020).

¹¹ 85 Fed. Reg. at 8655, 8675. The rule also requires DOE to follow a site-based approach to calculating significant savings that focuses on household energy use (rather than a full fuel cycle approach focused on individual appliances, which DOE had previously supported), effectively increasing the stringency of the threshold.

¹² 85 Fed. Reg. at 8678, 8680. See Joe Vukovich, NRDC, “DOE About to Make and Appliance Efficiency Testing Error” (April 1, 2019), available at <https://www.nrdc.org/experts/joe-vukovich/doe-about-make-appliance-efficiency-testing-error>.

¹³ 42 U.S.C. §§ 6293(b)(3)-(4), 6314(a)(2)-(3).

energy savings, technological feasibility, and economic justification—which, efficiency advocates argued, would unduly delay new rules.¹⁴

- Made the Process Rule binding on all DOE standard-setting processes—whereas DOE has historically exercised case-by-case discretion as appropriate—reducing future agency flexibility in light of the new requirements.¹⁵

It is difficult to quantify the impact of the Process Rule. But as DOE noted when it proposed the “significant savings” threshold, approximately 40% of existing appliance standards would fail to meet this new requirement.¹⁶ In comments on the Process Rule proposal, a group of state attorneys general identified a number of serious issues that were not resolved in the final rule, including:

- The “significant savings” requirement is likely to result in considerable loss of energy savings, with over four quads of savings associated with the past rules that would not have met the threshold.
- The “significant savings” requirement ignores the D.C. Circuit’s ruling in *NRDC v. Herrington*, which rejected a prior DOE rule setting numerical energy savings thresholds as contrary to the EPCA’s requirement that DOE evaluate potential standards unless their expected savings are truly de minimis.¹⁷
- The requirement that DOE adopt industry test procedures will limit agency flexibility and risks industry manipulation of procedures in order to weaken standards.
- The requirement of a 180-day “waiting period” between issuance of test procedures and the start of rulemaking, and between determinations of product coverage and the start of rulemaking, will unnecessarily delay regulatory processes and potentially cause DOE to miss statutory deadlines.¹⁸

These and other flaws in the Process Rule undercut the purpose of EPCA by delaying rulemaking procedures and limiting the ability to achieve maximum efficiency improvements.

ii. *The Economic Justification Rule*

In August 2020, DOE issued the Economic Justification Rule, further altering its EPCA decision-making process. As noted above, EPCA requires new efficiency standards to “achieve the maximum improvement in energy efficiency” that is technologically feasible and economically justified. DOE must determine whether a standard is economically justified (whether its benefits exceed its burdens) by considering the following factors “to the greatest extent practicable”: economic impact on manufacturers and consumers; savings in operating costs compared to price increases; total projected energy savings; reduced product performance; impacts on competition; the need for

¹⁴ 85 Fed. Reg. at 8653-8654.

¹⁵ 85 Fed. Reg. at 8634.

¹⁶ See DOE, “Department of Energy Issues Final “Process Rule” Modernizing Procedures in the Consideration of Energy Conservation Standards” (January 15, 2020), available at <https://www.energy.gov/articles/department-energy-issues-final-process-rule-modernizing-procedures-consideration-energy>.

¹⁷ *Natural Resources Defense Council v. Herrington*, 768 F.2d 1355, 1370-73 (D.C. Cir. 1985).

¹⁸ Comments of Attorney General of California et al., Docket No. 2019-01854, Energy Conservation Program for Appliance Standards: Proposed Procedures (May 6, 2019), available at <https://oag.ca.gov/system/files/attachments/press-docs/doe-process-rule-state-ag-comments-may-6-2019-final-004.pdf>.

national energy conservation; and other relevant factors.¹⁹ Historically, DOE has interpreted this provision to require selection of the most stringent efficiency standard that satisfies technological and economic criteria. The Economic Justification Rule requires DOE instead to conduct a “comparative analysis” of standards against a) the baseline “no new standards” case, and b) all other potential standards, including assessment of “incremental changes in benefits and burdens” of standards relative to each other.²⁰ This approach, by requiring comparison of relative costs and benefits among all possible standards rather than selection of the most efficient standard that is economically justified, will hinder DOE’s capacity to set ambitious standards and diverges from the analysis mandated by EPCA.²¹

2. The GSL Rule and the GSIL Rule

In 2019, DOE issued two rules that eliminated lightbulb efficiency standards initiated under 2007 amendments to EPCA. Congress directed DOE to update efficiency standards for common lightbulbs, a process that would institute a nationwide requirement for LED lightbulbs (or others of equivalent energy efficiency) and phase out traditional incandescent bulbs in most applications. The 2019 DOE actions reversed prior rules which expanded the categories of regulated bulbs and declined to institute baseline standards required by law, leading to potential annual consumer costs of \$14 billion and greenhouse gas (GHG) emission increases of 38 million metric tons based on lost energy savings.²²

i. *The GSL Rule*

The 2007 EPCA amendments directed DOE to conduct a rulemaking process to consider whether to maintain existing energy efficiency standard exemptions for certain general service lamps (GSLs).²³ GSLs include most general-use incandescent, compact fluorescent, LED, and organic LED lamps. In January 2017, DOE issued two final rules that amended the definitions of GSL and general service incandescent lamp (GSIL, a subcategory of GSL) to broaden the range of bulbs subject to strengthened efficiency requirements. DOE updated the definition of GSL by eliminating exemptions for seven lamp types that DOE determined can function as ready substitutes for lamps subject to efficiency standards.²⁴ Eliminating these exemptions would maximize energy savings by minimizing substitution of non-regulated lamps for regulated lamps, bringing essentially all standard bulb types under regulation. The new definitions were set to become effective on January 1, 2020,

¹⁹ 42 U.S.C. §§ 6295(o)(2)(A), 6295(o)(2)(B)(i)(I)-(VII)

²⁰ 85 Fed. Reg. 50937, 50941 (August 19, 2020).

²¹ Comments of Pacific Gas & Electric Company et al., EERE-2017-BT-STD-0062-0162 (March 16, 2020), pp. 3-4, available at <https://www.regulations.gov/document?D=EERE-2017-BT-STD-0062-0173>

²² ACEEE, “DOE’s Light Bulb Standards Rollback Will Cost Americans \$14 Billion Each Year” (September 4, 2019), available at <https://www.aceee.org/press/2019/09/doe-s-light-bulb-standards-rollback>.

²³ 42 U.S.C. § 6295(i)(6)(A). For a brief overview of the light bulb standards in the 2007 EPCA amendments, see ASAP and ACEEE, “US Light Bulb Standards Save Billions for Consumers but Manufacturers Seek a Rollback: Appendix A” (July 2018), available at https://appliance-standards.org/sites/default/files/light_bulb_brief_appendices_0.pdf.

²⁴ 82 Fed. Reg. 7276, 7288-91 (January 19, 2017); 82 Fed. Reg. 7322 (January 19, 2017). The eliminated exemptions were for reflector lamps; rough service lamps; shatter-resistant lamps; 3-way incandescent lamps; vibration service lamps; smaller T-shape lamps; and smaller B, BA, CA, F, G16-1/2, G25, G30, S, M-14 lamps.

along with separately issued new efficiency standards that would have applied to the entire GSL category, including the lamps whose exemptions were eliminated (see below).

In September 2019, DOE issued the GSL Rule withdrawing the 2017 definition amendments.²⁵ DOE issued the rule as a “withdrawal” rather than a final rule, and claimed that EPCA’s “anti-backsliding” provision—which prohibits DOE from issuing new standards that decrease efficiency—did not apply, because the 2017 rules had an effective date of January 1, 2020, and thus DOE’s action did not constitute a change in a current standard.²⁶ DOE stated that it was reverting to the original statutory definitions of GSL and GSIL (which includes the seven exemptions eliminated by the 2017 rules) in advance of making a determination about issuing new efficiency standards, thus removing the exempted bulbs from potential future rules. DOE estimated industry cost savings of approximately \$50-\$200 million, based on avoidance of lost revenue from a prohibition on the sale of halogen and incandescent lamps.²⁷ However, efficiency and consumer advocates pointed out that the LED alternatives for these exempted bulb types are longer-lasting, consume a fraction of the power, and generate significant savings for consumers over the life span of the product.²⁸

ii. *The GSIL Rule*

The 2007 EPCA amendments also directed DOE to initiate a rulemaking process to develop new efficiency standards for GSLs, with a “backstop” provision requiring DOE to prohibit the sale of GSLs that do not meet a minimum efficiency standard of 45 lumens per watt (lm/w) beginning on January 1, 2020, if DOE had not completed an equally stringent rule by that date.²⁹ While DOE began the rulemaking process to amend GSL efficiency standards in 2013, in 2016 Congress blocked DOE from implementing GSL and GSIL efficiency standards, effectively halting the rulemaking process and leading DOE to promulgate only the GSL Rule to update definitions. In 2017, Congress lifted this restriction.³⁰

In December 2019, DOE issued the GSIL Rule, declining to issue new efficiency standards for GSILs.³¹ DOE based its decision on EPCA’s requirement that any new standard achieve “the maximum improvement in energy efficiency...[that] is technologically feasible and economically justified.”³² DOE stated that any new standard for GSILs would not be economically justified because bulbs that meet more stringent standards would have operating cost savings (from reduced energy use) insufficient to cover consumers’ upfront costs.³³ This determination conflicted with commenter estimates of savings up to \$180 per household per year.³⁴ DOE based its determination

²⁵ 84 Fed. Reg. 46661 (September 5, 2019).

²⁶ 84 Fed. Reg. at 46665.

²⁷ 84 Fed. Reg. at 46674.

²⁸ ASAP et al., Comment Letter to Docket No. EERE-2018-BT-STD-0010 (May 3, 2019), available at <https://www.regulations.gov/document?D=EERE-2018-BT-STD-0010-0331>.

²⁹ 42 U.S.C. §§ 6295(i)(6)(A)(iii)-(v).

³⁰ See 84 Fed. Reg. at 71629-71630, 82 Fed. Reg. at 7277.

³¹ 84 Fed. Reg. 71626 (December 27, 2019).

³² 42 U.S.C. § 6295(o)(2)(A).

³³ 84 Fed. Reg. at 71667-71668.

³⁴ 84 Fed. Reg. at 71634.

on assessment of only one of the seven factors it is directed to consider (but not to treat as dispositive) under EPCA.³⁵

DOE also declined to enforce EPCA's 45 lm/w backstop standard, interpreting the statute to impose the backstop only if DOE first determined that amended standards for GSILs were needed and then failed to issue those standards; since the GSIL Rule determined no amendments were needed, DOE claimed that the backstop did not apply.³⁶ This interpretation contravenes the statutory language, which imposes the backstop based on whether a sufficiently stringent rule is in place, rather than on DOE's assessment of need.³⁷ DOE further determined that since it had not issued a new standard, and since its decision not to do so rendered the backstop standard inapplicable, EPCA's anti-backsliding provision did not apply to the GSIL Rule.³⁸ Failing to adopt the 45 lm/w standard could sacrifice \$1.9 billion in annual climate benefits, based on 38 million tons of annual carbon emission reductions that the standard would have achieved and traditional DOE social cost of carbon measures.³⁹ By 2050, the standard was anticipated to provide \$343 billion in consumer savings and 866 million tons of carbon emissions avoided, benefits that could largely be lost due to the GSL and GSIL Rules.⁴⁰

3. The Dishwasher, Furnace, and Motor Rules

i. *The Dishwasher Rule*

DOE last updated dishwasher efficiency standards in 2012. In accordance with EPCA, the new standards were designed to achieve maximum improvement in energy efficiency that is technologically feasible and economically justified" and "result[s] in significant conservation of energy," with DOE estimating savings of 0.7 quads of cumulative energy (and 0.14 trillion gallons of water) by 2047, along with emission reductions of 4.06 million metric tons of carbon dioxide and 3,540 tons of nitrogen oxides.⁴¹

In 2018, DOE received a petition from the Competitive Enterprise Institute (CEI) asking for a new product class to be established specifically covering dishwashers with a cycle time of less than one hour from washing through drying.⁴² CEI argued that current cycle times have become too long

³⁵ 84 Fed. Reg. at 71632-71633. See 42 U.S.C. 6295(o)(2)(B)(i)(I)-(VII).

³⁶ 84 Fed. Reg. at 71635-71636.

³⁷ 42 U.S.C. § 6295(i)(6)(A)(v) ("If the Secretary fails to complete a rulemaking [determining whether GSL standards should be amended] or if the final rule does not produce savings that are greater than or equal to the savings from a minimum efficacy standard of 45 lumens per watt, effective beginning January 1, 2020, the Secretary shall prohibit the sale of any general service lamp that does not meet a minimum efficacy standard of 45 lumens per watt."). See Letter from Senator Edward J. Markey et al. to Energy Secretary Rick Perry (October 11, 2019), available at <https://www.markey.senate.gov/imo/media/doc/Letter%20to%20DOE%20on%20Light%20Bulb%20Standards.pdf>.

³⁸ 84 Fed. Reg. at 71636; 42 U.S.C. § 6295(o)(1) ("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.").

³⁹ 84 Fed. Reg. at 71634; comments of Institute for Policy Integrity, Docket No. EERE-BT-STD-0022 (November 4, 2019), p. 4, available at <https://www.regulations.gov/document?D=EERE-2019-BT-STD-0022-0096>.

⁴⁰ ASAP and ACEEE, "US Light Bulb Standards Save Billions," *supra*, p. 6.

⁴¹ 77 Fed. Reg. 31917, 31919-31920 (May 30, 2012); 42 U.S.C. §§ 6295(o)(2)(A), 6295(o)(3)(B).

⁴² 83 Fed. Reg. 17768 (April 24, 2018).

under existing standards, decreasing customer utility, and asserted that cycle time under one hour is a “performance-related feature” justifying establishment of a new product class with different efficiency standards under EPCA.⁴³ CEI argued that because these dishwashers would have their own product category, their decreased efficiency would not trigger the EPCA’s § 6295(o)(1) ban on backsliding through standards that increase allowable energy use.⁴⁴ DOE granted this petition and in September 2019 published a proposed rule creating a product class for dishwashers with a cycle time for the normal cycle of less than one hour.⁴⁵ DOE finalized the rule on October 30, 2020, stating its intent to issue standards for the product class in a separate rulemaking process at some future date.⁴⁶

Efficiency and consumer advocates have argued that the new product class serves little purpose, as most dishwasher models today offer short cycles (which are rarely used) and have reduced energy and water use by 50% over the last three decades.⁴⁷ A group of states further noted that the new product class constitutes an improper carve-out under EPCA, since DOE cannot retroactively identify a distinguishing performance-related feature, and the reduced cycle time does not provide the functional and utility differences necessary to constitute a distinct feature.⁴⁸ The states also noted that the product class will be subject to no standards until DOE issues a new rule, which could be years off, almost certainly increasing energy use and carbon emissions.⁴⁹

ii. *The Furnace Rule*

Two main types of residential water heaters and furnaces are currently on the market. Newer condensing technology extracts additional heat from exhaust gases, making the units more efficient (90% versus 80% to 83%) than non-condensing technology, reducing fuel consumption, lowering exhaust gas temperatures, and simplifying installation in new construction. However, they require more maintenance, have higher upfront costs, and can be complex to install in retrofits.⁵⁰ In 2015, DOE issued a notice of proposed rulemaking for energy conservation standards for residential furnaces, proposing to address condensing and non-condensing furnaces in the same product category and subject them to the same efficiency requirements—potentially removing the less efficient technology from the market—because the utility of both is to provide heat to the customer, and differences in operation did not constitute a product “feature” that would justify separate classification.⁵¹ DOE projected that changes in technology would eventually lead to significantly

⁴³ 42 U.S.C. § 6295(q).

⁴⁴ 83 Fed. Reg. at 17769.

⁴⁵ 84 Fed. Reg. 33869 (July 16, 2019).

⁴⁶ 85 Fed. Reg. 68723 (October 30, 2020).

⁴⁷ ASAP, “Energy Department’s Dishwasher Rule Finds Nothing to Fix” (October 23, 2020), available at <https://appliance-standards.org/document/energy-departments-dishwasher-rule-finds-nothing-fix>.

⁴⁸ Comments of Attorneys General of California et al., EERE-2018-BT-STD-0005 Energy Conservation Program for Appliance Standards: Energy Conservation Standards for Dishwashers, Grant of Petition for Rulemaking (October 16, 2019), available at

<https://oag.ca.gov/system/files/attachments/press-docs/FINAL%20DOE%20Dishwasher%20State%20AGs%20Comment%20Oct%2016%2019.pdf>

⁴⁹ Id. at pp. 13-14.

⁵⁰ Kevin Dunn, DOE, “Condensing vs. Non-Condensing Appliances” (presentation) (October 2014), available at <https://www.energy.gov/sites/prod/files/2014/10/f18/October%2014%20Workshop%20Presentation%20-%20Kevin%20Dunn.pdf>

⁵¹ 80 Fed. Reg. 13120, 13137-13138 (March 12, 2020); see 42 USC § 6295(o)(4).

reduced costs of installing both a condensing water heater and furnace.⁵² DOE estimated the proposed rule would have positive average life-cycle cost savings for consumers, based in part on a payback period well below the average furnace lifetime. DOE also estimated total consumer cost savings to be between \$3.1 billion to \$16.1 billion and a cumulative reduction in carbon emission of 137 million metric tons.⁵³

In 2018, DOE received a petition from gas industry members requesting that DOE withdraw its proposed energy conservation standards for residential furnaces and commercial water heaters, based on the suggestion that these standards would result in the unavailability of certain “performance characteristics” of non-condensing technology.⁵⁴ The gas industry petitioners claimed that the proposed DOE energy conservation standards could only be met by condensing combustion technology, effectively excluding inefficient non-condensing combustion technology products and equipment.⁵⁵

In response to these comments, in July 2019, DOE published a proposed interpretive rule that would classify condensing and non-condensing technology as separate product classes under EPCA, based on its determination that regulating them together could result in the unavailability of a “performance-related feature”—the venting mechanism of non-condensing technology—that cannot be eliminated through adoption of an energy conservation standard.⁵⁶ In September 2020, DOE published a notice of supplemental proposed interpretive rule that would create a new class structure based on venting compatibility, but did not withdraw the 2015 proposed rule, instead suggesting it would develop supplemental notices of proposed rulemaking.⁵⁷ DOE has yet to respond to comments related to either notice. Efficiency and consumer advocates are concerned the creation of a new class would prevent DOE from being able to consider condensing technology in the future for efficiency standards improvements. By one estimate, if the 2015 standards were implemented and regularly updated, they would save \$24 billion on residential utility bills and avoid emission of 84.5 million metric tons of carbon dioxide by 2050, demonstrating the potential impact of a carve-out for less efficient non-condensing technology.⁵⁸

iii. *The Motor Rules*

In addition to requiring DOE to set appliance efficiency standards, EPCA requires DOE to regularly set and evaluate the test procedures used to determine whether efficiency standards are technologically feasible and economically justified and would result in significant energy savings.⁵⁹ In

⁵² 80 Fed. Reg. at 13137-13138.

⁵³ 80 Fed. Reg. at 13123.

⁵⁴ 83 Fed. Reg. 54883, 54885 (November 1, 2018); see 42 USC § 6295(o)(4).

⁵⁵ 83 Fed. Reg. at 54885.

⁵⁶ 84 Fed. Reg. 33011, 33020 (July 11, 2019). 42 U.S.C. § 6295(o)(4).

⁵⁷ 85 Fed. Reg. 60090 (September 24, 2020).

⁵⁸ Appliance Standards Awareness Project (ASAP) et al., Comment Letter to Energy Conservation Standards for Residential Furnaces and Commercial Water Heaters; Docket No. EERE-2018-BT-STD-0018 (Sept. 9, 2019), available at https://appliance-standards.org/sites/default/files/Comments_gas_industry_interpetive_rule.pdf; Andrew deLaski et al., *Next Generation Standards: How the National Energy Efficiency Standards Program Can Continue to Drive Energy, Economic, and Environmental Benefits*, ASAP and American Council for an Energy-Efficient Economy (August 2016), p. 14, available at <https://www.aceee.org/sites/default/files/publications/researchreports/a1604.pdf>

⁵⁹ 42 U.S.C. §§ 6314(a)(1), 6317(b)(1).

2009, DOE adopted test procedures for small electric motors (used in many commercial and industrial appliances) that allowed DOE to establish energy conservation standards in 2010.⁶⁰ DOE estimated that the standards would save approximately 2.2 quads of energy by 2045 (about 2.2% of total annual US energy consumption), reduce emissions of carbon dioxide by 112 million metric tons, and nitrogen oxides by 81,000 tons.⁶¹ While the standards would cost over \$200 million per year in manufacturing and installation costs, the national benefits in reduced operating costs and emission reductions would exceed \$900 million per year. In 2017, DOE issued a request for information stating it would consider expanding the scope of applicability of the motor test procedure to include additional motors categories and horsepower levels, potentially subjecting a broader range of motors to new efficiency standards.⁶²

In April 2019, DOE issued a NOPR that declined to expand the scope of the motor test procedures, which, efficiency and consumer advocates and electric utilities explained would leave a significant portion of the market unregulated and sacrifice energy savings.⁶³ In addition, the NOPR would make six different changes to the test procedures, mostly to further align the procedures with existing industry procedures. DOE claimed that the proposed amendments would not alter the measured efficiency of small electric motors, and the proposed test procedures would reduce testing burdens on manufacturers.

Following the test procedure proposal, in April 2020 DOE also issued a proposed rule declining to issue more stringent small motor efficiency standards, based on its assessment that none of the more efficient standards considered would generate net consumer savings over the average life of the product.⁶⁴ Efficiency and consumer advocates had estimated that more stringent conservation standards for motors could save consumers \$43.7 billion in utility bills and reduce carbon emissions by 216.5 million metric tons by 2050, demonstrating the impact of the proposal.⁶⁵

4. Litigation status

In April 2020, a group of states and cities and a group of environmental petitioners each filed a petition for review of the Process Rule.⁶⁶ In October 2020, a group of environmental petitioners filed a petition for review of the Economic Justification Rule, and in November 2020, the Ninth

⁶⁰ 74 Fed. Reg. 32059 (July 7, 2019); 75 Fed. Reg. 10874 (March 3, 2010).

⁶¹ 75 Fed. Reg. at 10876.

⁶² 82 Fed. Reg. 35468 (July 31, 2017).

⁶³ 84 Fed. Reg. 17004 (April 23, 2019); ASAP et al., Comment Letter to Docket Number EERE-2017-BT-TP-0047: Notice of Proposed Rulemaking for Test Procedures for Small Electric Motors and Electric Motors (June 24, 2019), available at https://appliance-standards.org/sites/default/files/Motors_Test_Procedures_NOPR_Comments.pdf; Pacific Gas & Electric et al., Comment Letter to Docket Number EERE-2019-BT-STD-0008 (June 7, 2019), available at <https://www.regulations.gov/document?D=EERE-2019-BT-STD-0008-0010>.

⁶⁴ 85 Fed. Reg. 24146, 24166 (April 30, 2020).

⁶⁵ Andrew deLaski et al., *Next Generation Standards*, supra, p. 15.

⁶⁶ Petition for Review, *California v. U.S. Dep't of Energy*, No. 20-71068 (9th Cir. Apr. 14, 2020) and Petition for Review, *Natural Resources Defense Council v. Brouillette*, No. 20-71071 (9th Cir. Apr. 14, 2020), available at <http://climatecasechart.com/case/california-v-us-department-of-energy/>.

Circuit consolidated the two challenges and set a briefing schedule for January 4 through March 5, 2021.⁶⁷

In November 2019, a group of states and cities and a group of environmental petitioners each filed a petition for review of the GSL rule.⁶⁸ In February 2020, state and environmental petitioners filed petitions for review of the GSIL rule.⁶⁹

IV. Recommended Actions

Given the substantial energy savings, GHG emission reduction, consumer utility bill reduction benefits of the EPCA energy efficiency standards program, and the lost savings that will result from the actions covered in this memorandum, DOE should take the following actions to return to the statutory purpose of achieving maximum energy efficiency that is technologically feasible and economically justified.

1. Issue Interim Guidance

DOE should immediately issue an interim guidance document outlining the agency's updated approach to the energy conservation program, including a return to traditional rulemaking processes and cost-benefit assessment, new efficiency standards for light bulbs and dishwashers, and halting problematic proposals for furnaces and motors. This guidance would serve as a roadmap for anticipated agency action, which could be of particular benefit to notify industry parties and limit any reliance on the current status quo for litigation and regulatory purposes. This guidance document should describe plans to:

- Petition the Ninth Circuit for abeyance of the Process Rule litigation and the Second Circuit for abeyance of the GSL and GSIL Rules, and consider petitioning both courts for voluntary remand of the rules.
- Initiate a rulemaking process to consider revisions to DOE's decision-making process and cost-benefit assessment requirements for new efficiency standards.
- Initiate a rulemaking process to develop efficiency standards for GSLs as required by the 2007 EPCA amendments, including prohibition of the sale of GSLs that do not meet the 45 lm/w backstop requirement.
- Initiate a rulemaking process to reconsider the Dishwasher Rule's carve-out for short-cycle units.

⁶⁷ Petition for Review, *Natural Resources Defense Council v. Brouillette*, No. 20-73091 (9th Cir. Oct. 16, 2020), available at <http://climatecasechart.com/case/california-v-us-department-of-energy/>; Order Consolidating Cases, *California v. U.S. Dep't of Energy*, No. 20-71068 (9th Cir. Nov. 3, 2020), available at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20201103_docket-20-71068_order.pdf.

⁶⁸ Petition for Review, *New York v. U.S. Dep't of Energy*, No. 19-3652 (2d Cir. Nov. 4, 2019), available at <http://climatecasechart.com/case/new-york-v-us-department-of-energy-2/>; Petition for Review, *Natural Resources Defense Council v. U.S. Dep't of Energy*, No. 19-3658 (2d Cir. Nov. 4 2019), available at <http://climatecasechart.com/case/natural-resources-defense-council-v-us-department-of-energy/>.

⁶⁹ Petition for Review, *New York v. U.S. Dep't of Energy*, No. 20-743 (2d Cir. Feb. 28, 2020), available at <http://climatecasechart.com/case/new-york-v-us-department-of-energy-3/>; *Natural Resources Defense Council v. U.S. Dep't of Energy*, No. 20-699 (2d Cir. Feb. 25, 2020), available at <http://climatecasechart.com/case/natural-resources-defense-council-v-us-department-of-energy-2/>.

- Withdraw the Furnace Rule and reorient the Motor Rule processes.
- Initiate rulemaking processes to update dozens of efficiency standards and test procedures delayed by DOE during the Trump Administration.

2. Petition for Abeyance in Current Litigation and Consider Voluntary Remand

While DOE initiates rulemaking actions to reconsider the Process and Economic Justification Rules and the GSL and GSIL Rules following the issuance of the interim guidance, the agency should petition the Second Circuit and the Ninth Circuit to suspend the current litigation.⁷⁰ DOE, having stated its intention to review and potentially replace the existing rule, can petition the court to suspend the litigation via an abeyance while the agency reconsiders.⁷¹ The abeyance serves multiple purposes: saving judicial resources from involvement in a potentially moot matter; protecting the Justice Department from having to change litigation positions prior to issuance of a new rule; and protecting the agency’s new rule against potential decisions in favor of the prior rule. **It is especially important that a petition for abeyance be made prior to receipt of all briefs in order to satisfy the purpose of preserving judicial resources. In the Process and Economic Justification Rule challenge, the briefing schedule calls for petitioners’ opening briefs on January 4, 2021, and intervenors’ and respondents’ briefs on February 3 and March 5, 2021—meaning an abeyance petition filed as soon as possible after January 20 could potentially save significant judicial resources.**⁷² This immediate timing could be particularly vital given the potential for industry litigants to challenge abeyance petitions and delay the process beyond the briefing deadlines.

Following the petitions for abeyance, and while DOE initiates the new rulemaking processes described below, DOE could petition the courts for voluntary remands of the rules, which would return them to the agency in advance of any decision on the merits.⁷³ Voluntary remand will allow the agency to proceed in its review processes without risk of an adverse determination and waste of resources on potentially moot litigation. The GSL and GSIL Rules both became effective in 2019, and the Process and Economic Justification Rules became effective in April and October 2020, meaning DOE cannot suspend their implementation together with remand. However, remand would solidify the suspension of litigation achieved by an abeyance, affording DOE valuable time to

⁷⁰ California v. U.S. Dep’t of Energy, No. 20-71068 (9th Cir.) (Process and Economic Justification Rules); New York v. U.S. Dep’t of Energy, No. 19-3652 (2d Cir.) and Natural Resources Defense Council v. U.S. Dep’t of Energy, No. 19-3658 (2d Cir.) (GSL Rule); New York v. U.S. Dep’t of Energy, No. 20-743 (2d Cir.) and Natural Resources Defense Council v. U.S. Dep’t of Energy, No. 20-699 (2d Cir.) (GSIL Rule).

⁷¹ Bethany Davis Noll and Richard L. Revesz, “Regulation in Transition,” 104 Minn. L. Rev. 1 (2019), pp. 24-28; Cole Jermyn and Laura Bloomer, “How to Undo the Trump-Era Regulatory Rollbacks to Redo Environmental Protection,” Harvard Law School Environmental & Energy Law Program (April 23, 2020), p. 5, available at <http://eelp.law.harvard.edu/wp-content/uploads/How-to-Undo-the-Trump-Era-Regulatory-Rollbacks-to-Redo-Environmental-Protection-FINAL.pdf>.

⁷² Id. at p. 27; Bethany Davis Noll and Natalie Jaciewicz, “A Roadmap to Regulatory Strategy in an Era of Hyper-Partisanship,” Institute for Policy Integrity (August 2020), p. 7, available at https://policyintegrity.org/files/publications/A_Roadmap_to_Regulatory_Strategy_in_an_Era_of_Hyper-Partisanship.pdf.

⁷³ Cole Jermyn and Laura Bloomer, “How to Undo the Trump-Era Regulatory Rollbacks to Redo Environmental Protection,” *supra*, at p. 5.

complete new regulations and other actions. The Process and Economic Justification Rules will generate minimal reliance interests that would need to be considered in crafting new regulations, since the two rules deal exclusively with DOE decision-making processes and analytical methods for new standards. The GSL and GSIL Rules could be considered to have generated some legitimate reliance interests, since they have extended manufacturers' ability to produce inefficient GSILs that do not meet the 45 lm/w standard as well as the seven bulb types that DOE declined to include in the GSL definition and thus from regulation. However, manufacturers should have little ground on which to claim legitimate reliance on the GSIL Rule, given the clarity of EPCA's mandate that DOE implement the 45 lm/w standard, the weakness of the GSIL Rule's legal reasoning for failing to do so, and the fact that manufacturers will have begun to comply with California and Nevada implementations of the 45 lm/w requirement (despite DOE's claim in the GSIL Rule that EPCA preempted state standards).⁷⁴

In each of these petitions, interface with the Justice Department to ensure coordination of litigation positions will be essential.

3. Initiate New Rulemaking Processes

i. *Process and Economic Justification Rules*

DOE should initiate a rulemaking process to reconsider the Process and Economic Justification Rules and issue new rules that follow EPCA's text and purpose by promoting maximum feasible efficiency standards. The Process and Economic Justification Rules significantly limit DOE's ability to issue new efficiency standards that achieve maximum energy performance gains through incremental improvement, sacrificing significant consumer and environmental benefits and contravening EPCA's purpose. In particular, the Process Rule's creation of a minimum 0.3 quad/10% energy savings threshold for any new rule threatens to severely inhibit future rulemaking in the future and could block up to 40% of all standards. It also conflicts with federal court precedent in *NRDC v. Herrington* barring DOE from setting across-the-board minimum savings requirements. As state attorneys general have noted, this requirement contravenes EPCA's purpose in general, is vulnerable to gaming when combined with other product class divisions, and will block DOE from achieving incremental, cumulative progress in energy savings.⁷⁵ The Economic Justification Rule further frustrates DOE's ability to set effective standards—and EPCA's purpose—by shifting the focus of the agency's cost-benefit assessments away from identifying the most efficient standard whose benefits exceed its costs, and toward the lowest-cost alternative

⁷⁴ 84 Fed. Reg. at 71628; Order Denying Temporary Restraining Order, *National Electrical Manufacturers Association v. California Energy Commission*, No. 2:19-cv-02504-KJM-DB (E.D. Cal. 2019) (rejecting industry petition to block California state standards taking effect January 1, 2020), available at <https://www.nrdc.org/sites/default/files/cec-lawsuit-tro-denial-20191231.pdf>; Noah Horowitz, "Jackpot: NV Light Bulb Efficiency Standards Save \$85 Million," NRDC (August 24, 2020) (Nevada standards taking effect January 1, 2021), available at <https://www.nrdc.org/experts/noah-horowitz/jackpot-nv-light-bulb-efficiency-standards-save-85-million>.

⁷⁵ Comments of Attorney General of California et al., Docket No. 2019-01854, *supra*, at pp. 9-12; Comments of Pacific Gas & Electric Company et al., Docket No. EERE-2017-BT-STD-0062-0162, *supra*, at pp. 2-3; Comments of Institute for Policy Integrity, Docket No. EERE-2019-BT-ST-0062 (May 6, 2019), pp. 2-3, available at <https://www.regulations.gov/document?D=EERE-2017-BT-STD-0062-0170>.

available.⁷⁶ In reviewing the Process and Economic Justification Rules and considering alternative approaches, DOE could focus on reverting to prior agency practice by:

- Eliminating the Process Rule’s minimum energy savings threshold, which is both legally dubious and constrains future rule-making capacity, and reinstating a case-by-case analysis that comports with EPCA and with *NRDC v. Herrington*.
- Eliminating the Economic Justification Rule’s comparative analysis requirement for determining economic justification and reinstating a “walk-down” approach that identifies the most efficient standard that is economically justified, as required by EPCA.
- Eliminating the Process Rule’s requirement that the new procedures are binding on all EPCA rulemakings, which hampers DOE’s flexibility and increases risk of litigation and delay.⁷⁷

In addition to these focal points, given the centrality of the EPCA efficiency standard program to the nation’s efforts to reduce greenhouse gas emissions, DOE should ensure that any new procedures for standard selection and cost-benefit assessment include the best available estimates of the social cost of carbon, including appropriate consideration of international impacts.⁷⁸

ii. *GSL and GSIL Rules*

DOE should initiate a rulemaking process to reconsider the GSL and GSIL Rules, proposing to issue new efficiency standards for GSLs (and/or implement the 45 lm/w minimum standard) and consider definition amendments to include substitute bulb types in the product category. The GSL and GSIL Rules, by narrowing the category of bulbs regulated as GSLs and refusing to apply the minimum standard required by law, could result in 38 million tons of additional carbon emissions (plus significant emissions of harmful air pollutants) and \$14 billion in additional consumer utility bill costs per year. They also relied on faulty legal bases. The 2007 EPCA amendments’ backstop provision required DOE to ban the sale of GSLs that do not meet a 45 lm/w minimum efficiency standard if DOE failed to issue a final rule producing at least equivalent energy savings.⁷⁹ DOE’s determination in the GSIL Rule that the backstop was not triggered at all—because DOE had completed a rulemaking process and determined no new standard was justified—contravenes the clear language of the statute (and the meaning of the word “backstop”) which directs DOE to achieve 45 lm/w standards via rulemaking or prohibition. And DOE’s determination that the GSL Rule did not violate EPCA’s anti-backsliding provision—since enhanced standards for GSLs would not take effect until January 1, 2020, a change prior to that date could not constitute an amended standard that decreases efficiency—runs afoul of Second Circuit precedent clearly stating that the publication date, and not the effective date, of a standard is the relevant marker for anti-backsliding purposes.⁸⁰

⁷⁶ Comments of Pacific Gas & Electric Company et al., Docket No. EERE-2017-BT-STD-0062-0162, *supra*, at pp. 3-4.

⁷⁷ Comments of Attorney General of California et al., Docket No. 2019-01854, *supra*, at pp. 6-7.

⁷⁸ Comments of Institute for Policy Integrity, Docket No. EERE-2019-BT-ST-0062, *supra*, at pp. 4-6.

⁷⁹ 42 USC § 6295(i)(6)(A)(v).

⁸⁰ *NRDC v. Abraham*, 355 F.2d 179 (2d. Cir. 2004); see Comment of the Emmett Institute on Climate Change and the Environment, Docket No. EERE-2018-BT-STD-0010 (May 3, 2019), pp. 4-5, available at <https://www.regulations.gov/document?D=EERE-2018-BT-STD-0010-0341>.

Given the significant emission and consumer savings costs of the GSL and GSIL Rules, and the basic problems with their legal justifications, DOE should reconsider these rules and the options available to a) eliminate the exclusions for seven bulb types from the GSL category, and b) implement the 45 lm/w standard established by EPCA. With respect to the GSIL Rule, DOE could consider a rule that simply follows EPCA’s command—“effective beginning January 1, 2020, the Secretary shall prohibit the sale of any general service lamp that does not meet a minimum efficacy standard of 45 lumens per watt”—by issuing the prohibition, dated effective January 1, 2020, without promulgating other new standards. With respect to the GSL Rule, DOE should identify the total impact of the seven bulb type exclusions—for which DOE estimated sales exceed over 150 million units annually—on the efficacy of the 45 lm/w standard, and eliminate the exclusions if, as anticipated, the exclusions will greatly reduce its substantial environmental and consumer benefits.⁸¹

iii. *Dishwasher Rule*

DOE should initiate a rulemaking process to reconsider the Dishwasher Rule’s creation of a separate product class for short-cycle dishwashers. The creation of a separate class for short-cycle dishwashers both violated EPCA’s anti-backsliding provision by eliminating a group of products from regulatory coverage altogether, increasing maximum allowable energy use; and improperly deemed a standard product setting to constitute a performance-related feature, creating potentially dangerous precedent for future regulation.⁸² The rule threatens to reduce the effectiveness of a standard anticipated to reduce carbon emissions by four million tons in the coming decades, based on an improper interpretation of EPCA, and in order to offer special regulatory protection to a product type that consumers are not demanding. DOE should reconsider this new product class—reevaluating the prior conclusions that the new class would offer consumer utility, and returning to traditional interpretations of the anti-backsliding provision under *NRDC v. Abraham*—and eliminate the class if it finds the class provides little to no consumer utility and will reduce energy performance.

(In 2020, DOE also issued an NOPR proposing separate product classes for short-cycle clothes washers and dryers.⁸³ While this memorandum does not cover this proposal in detail, the justification for a new product class based on cycle time is likely similarly questionable, and any DOE should review and reconsider any proposed rule that results from this NOPR based on the same considerations identified above.)

4. Withdraw Furnace Rule and Reorient Motor Rules

⁸¹ 82 Fed. Reg. at 7291.

⁸² Comments of Sierra Club et al., Docket No. EERE-2018-BT-STD-0005 (October 16, 2019), pp. 1-8, available at <https://www.regulations.gov/document?D=EERE-2018-BT-STD-0005-3145>.

⁸³ 85 Fed. Reg. 49297 (August 13, 2020).

As of the date of this memorandum, neither the Furnace Rule nor the Motor Rules have been published as a final rule in the *Federal Register*.⁸⁴ **Thus, DOE should issue a notice of withdrawal for the Furnace Rule and reorient the Motor Rules to restart prior rulemaking processes.**

i. Furnace Rule

As described above, the Furnace Rule, by creating a separate product class for non-condensing technology, would substantially diminish the benefits of more stringent efficiency requirements for condensing technology, which were estimated at around 130 million tons of carbon emissions avoided and up to \$16 billion in customer savings by 2050.⁸⁵ This separate product class designation also rests on questionable legal footing under EPCA, as it bases the class distinction on a secondary product design element (venting methods) rather than on customer utility and function—when it is the latter that allows for the actual promotion of energy efficiency improvements and is clearly intended by EPCA’s “performance-related feature” terminology.⁸⁶ As DOE noted when it proposed to treat both technology types as a single product class, this new interpretation would effectively prevent future advancements in energy efficiency by requiring separate product classes and standards for each less-efficient variant of a product.⁸⁷ **DOE should issue a notice of withdrawal of the Furnace Rule proposal, halting the improper product class bifurcation, and an NOPR proposing a new rulemaking process to re-start the 2015 proposal.** This would restart the rulemaking process with the proper combined product class for condensing and non-condensing equipment, facilitating future gains in efficiency.

ii. Motor Rules

DOE should issue a supplemental NOPR reversing the 2019 NOPR’s proposal not to expand the motor category and proposing a new rulemaking process to re-start the 2017 proposal. DOE should also withdraw the 2020 proposed rule which declined to issue more stringent efficiency standards and initiate a new rulemaking to consider heightened standards. The Motor Rules, by declining to expand the range of motors subject to efficiency standards and declining to increase the stringency of the current standards, could sacrifice tens of billions of dollars in consumer savings and hundreds of millions of tons of carbon emissions by 2050. The 2017 proposal to expand the scope of covered motors could be the greatest opportunity to achieve energy savings within the category by initiating the EPCA regulation process for a number of currently unregulated motors.⁸⁸ In addition, while DOE stated in the 2020 proposed rule that heightened efficiency standards for small motors would not be cost-effective, this conclusion does not comport with advocate estimates of billions of dollars of potential savings by 2050 and could be the result of an overly narrow product category that no longer adequately represents the

⁸⁴ See 83 Fed. Reg. 54883 (Furnace Rule proposed rule); 84 Fed. Reg. 17004 (Motor Rules test procedures NOPR), 85 Fed. Reg. 24146 (Motor Rules conservation standard proposed rule).

⁸⁵ 80 Fed. Reg. at 13123.

⁸⁶ 42 USC § 6295(q)(1)(B).

⁸⁷ 80 Fed. Reg. at 13138.

⁸⁸ ASAP et al., Comment Letter to Request for Information for Energy Conservation Standards for Small Electric Motors; EERE-2019-BT-STD-0008 (June 7, 2019), p. 2, available at <https://www.regulations.gov/document?D=EERE-2019-BT-STD-0008-0016>.

market.⁸⁹ Advocates also commented that higher levels of efficiency may be available and technologically feasible than are currently at market, demonstrating the need for further analysis by DOE.⁹⁰ Thus, in the new motor test procedure and standards rulemakings, DOE should reconsider expanding the motor category to cover motors between .125 and 15 horsepower, as well as advanced, air-over, and submersible motors, to ensure complete coverage and identify the full range of consumer savings available from more stringent standards.⁹¹

5. Initiate Rulemakings to Update Delayed Standards

Since 2016, DOE has failed to initiate or complete rulemaking processes to update efficiency standards and/or test procedures for dozens of other product types, including air conditioners, microwaves, pool heaters, a range of commercial and industrial equipment, and a number of appliance component parts. According to one analysis, updating these standards could save hundreds of millions of tons of cumulative carbon emissions and generate annual household savings of nearly \$350—with particularly high savings coming from residential air conditioners, clothes dryers, and refrigerators and freezers; and commercial and industrial fans, refrigeration equipment, and distribution transformers.⁹² (The lamp, furnace, and motor rules described above also rank particularly high in this regard). **DOE should develop a schedule to initiate or re-start rulemakings to review and update all delayed standards, prioritized based on the potential carbon emission reductions estimated by the Appliance Standards Awareness Project and the American Council for an Energy-Efficient Economy.**⁹³

⁸⁹ Pacific Gas & Electric Co. et al., Comment Letter to Docket No. EERE-2019-BT-STD-0008 (June 29, 2020), available at <https://beta.regulations.gov/comment/EERE-2019-BT-STD-0008-0024>.

⁹⁰ ASAP et al., Comment Letter to Request for Information for Energy Conservation Standards for Small Electric Motors; EERE-2019-BT-STD-0008, at pp. 3-4.

⁹¹ ASAP et al., Comment Letter to Docket No. EERE-2017-BT-TP-0047: Notice of Proposed Rulemaking for Test Procedures for Small Electric Motors and Electric Motors, *supra*, at pp. 1-2; Comment Letter to Energy Conservation Standards for Electric Motors; Request for Information (Docket number EERE-2020-BT-STD-0007), pp. 3-5, available at <https://beta.regulations.gov/document/EERE-2020-BT-STD-0007-0009>.

⁹² Mauer and deLaski, *A Powerful Priority*, *supra*, at pp. 8-9, 11-12, 14-17.

⁹³ *Id.* at pp. 14-18 (list of highest-priority updates); ASAP, “Missed Deadlines for Appliance Standards,” *supra* (list of all delayed standards).