Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
Consumer Federation of America
Consumer Reports
National Consumer Law Center
Natural Resources Defense Council
Northwest Energy Efficiency Alliance

May 6, 2019

Sofie Miller
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
1000 Independence Avenue, SW
Washington, DC 20585

RE: Docket Number EERE–2017–BT–STD–0062/RIN 1904–AD38: Proposed Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment

Dear Ms. Miller:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), Consumer Federation of America (CFA), Consumer Reports (CR), National Consumer Law Center (NCLC), Natural Resources Defense Council (NRDC), and Northwest Energy Efficiency Alliance (NEEA) on the notice of proposed rulemaking (NOPR) for procedures for use in new or revised energy conservation standards and test procedures for consumer products and commercial/industrial equipment (the "Process Rule"). 84 Fed. Reg. 3910 (February 13, 2019). We appreciate the opportunity to provide input to the Department.

We have several high-level concerns with the proposed Process Rule. First, making the Process Rule binding would take away important flexibility that benefits all stakeholders and increase the potential for litigation. Second, we are concerned that DOE's proposals in the NOPR regarding rulemaking steps and timelines would unnecessarily delay rulemakings, making it more difficult for the Department to meet its statutory deadlines. Third, the proposals regarding both the ASHRAE products and "significant" energy savings could sacrifice very large potential savings for consumers and businesses. Fourth, putting undue emphasis on adopting industry test procedures could harm both consumers and manufacturers since industry test procedures may not be representative nor repeatable and reproducible. Finally, the proposals regarding direct final rules (DFRs) and negotiated rulemakings could take away important flexibility that can facilitate good outcomes for all stakeholders.

Below we provide our comments on specific issues raised in the NOPR. In summary:

- The Process Rule should not be binding. At a minimum, it should include a "good cause exception."
- We support applying the Process Rule to both consumer products and commercial and industrial equipment.

- DOE should not interpret "clear and convincing evidence" as part of the Process Rule. DOE's proposal to consider standards beyond the ASHRAE levels only in "extraordinary circumstances" could sacrifice very large future savings.
- Priority setting should not be included in the Process Rule. Existing statutory deadlines will largely determine the sequencing of DOE's work on standards and test procedures.
- The Process Rule should not require that a coverage determination be completed prior to initiating a rulemaking. Information learned during the rulemaking process for both test procedures and standards can inform the coverage determination.
- We support providing an opportunity for early stakeholder input prior to the publication of a NOPR, but we believe that DOE's proposed "early assessment" process could be significantly simplified.
- Any determination regarding whether to proceed with a rulemaking must be based on DOE's own analysis in addition to any information submitted by stakeholders.
- DOE should maintain the Department's existing interpretation of "significant" energy savings. DOE's proposed thresholds would potentially sacrifice billions of dollars in savings for consumers and businesses and do not appear to reflect the *Herrington* decision or Congress' intent.
- We urge DOE to retain flexibility to address test procedure issues. While we generally support test procedures being finalized in advance of standards NOPRs, it seems inevitable that situations will arise that will require deviating from this general practice.
- It would be inappropriate to put undue emphasis on adopting industry test procedures. While industry test procedures generally make sense as a starting point, modifications are often necessary to ensure that test procedures meet the statutory criteria.
- DOE's proposal regarding DFRs could take away important flexibility that benefits all stakeholders.
- A DFR should be available as a potential outcome of a negotiated rulemaking. Because DOE must always publish a NOPR in conjunction with a DFR, we see no conflict with the Negotiated Rulemaking Act.
- DOE should not change the "walk-down" process. We believe that the process used to date implements what the statute requires.

The Process Rule should not be binding. We support DOE striving to adhere to the procedures outlined in the Process Rule. However, since it is not possible to predict every situation that may arise, it would be problematic for the Process Rule to be binding for at least three reasons. First, there may be cases where adherence to the Process Rule creates a conflict with the statute. DOE compliance with the statute must take precedence over the Department's self-imposed restrictions. For example, DOE cannot use the Process Rule to create new bureaucratic hurdles for meeting or promptly catching up on missed statutory deadlines. Second, making the Process Rule binding would remove flexibility that is important to all stakeholders. For example, while in general we support DOE finalizing test procedures in advance of publishing a standards NOPR, inevitably situations will arise that will require deviating from this general practice. For example, manufacturers may identify necessary test procedure changes after the publication of a standards NOPR to, for example, improve repeatability and reproducibility. It does not seem reasonable in such a situation to require that the rulemaking process either proceed with a flawed test procedure, in order to meet statutory deadlines, or essentially be re-started, which could just result in duplicative rulemaking steps and unnecessarily prolonged rulemakings. Finally, making the Process Rule binding would increase the potential for litigation. If the Process Rule is binding, there could be an increase in litigation solely over the question of whether DOE has followed all the procedures in the Process Rule.

At a minimum, the Process Rule should include a "good cause exception" as was included in DOE's draft NOPR provided to OIRA.[1] However, any "good cause exception" should not be restricted. For example, the draft NOPR provided to OIRA proposed that DOE could not waive for good cause the proposed 180-day required period between the publication of a final test procedure and a standards NOPR. As described above, such a limitation could tie DOE's hands with respect to addressing test procedure issues that arise. Rather, any "good cause exception" should provide DOE with the necessary flexibility to address specific situations that arise, which should benefit all stakeholders.

We support applying the Process Rule to both consumer products and commercial and industrial equipment. The NOPR notes that while the current Process Rule is applicable only to consumer products, DOE has routinely followed the procedures in the Process Rule for commercial equipment.[2] While we have significant concerns with many of the specific proposals in the NOPR, we agree that it makes sense for the Process Rule to apply to both consumer products and commercial and industrial equipment.

DOE should not interpret "clear and convincing evidence" as part of the Process Rule. As DOE explains in the NOPR, the statute requires that if ASHRAE Standard 90.1 is amended, DOE must adopt amended standards equivalent to the levels in 90.1 unless "DOE determines by rule, and supported by clear and convincing evidence, that a more-stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified."[3] In the NOPR, DOE proposes that the Department will adopt standards more stringent than the ASHRAE levels "only if it can meet a very high bar to demonstrate the 'clear and convincing evidence' threshold." DOE further proposes that clear and convincing evidence would exist only when there is "no substantial doubt" that the more stringent standard would result in significant additional energy savings and is technologically feasible and economically justified.[4] The NOPR also states that only in "extraordinary circumstances" would DOE conduct a rulemaking to consider more-stringent standards than the ASHRAE levels.[5] We believe that DOE to date has appropriately interpreted the "clear and convincing evidence" threshold. DOE's proposal to instead consider levels beyond the ASHRAE levels only in "extraordinary circumstances" could sacrifice very large energy and economic savings, which we do not believe reflects the intent of Congress.

We note that in the past decade, DOE has in most cases adopted the ASHRAE levels. In a 2009 final rule, DOE adopted the ASHRAE levels for commercial packaged boilers and for water-cooled and evaporatively-cooled commercial package air conditioners and heat pumps with cooling capacity at or above 240,000 Btu/h and less than 760,000 Btu/h.[6] In a 2012 final rule, DOE adopted the ASHRAE levels for small, large, and very large water-cooled and evaporatively-cooled commercial package air conditioners; variable refrigerant flow water-source heat pumps; and computer room air conditioners.[7] In a 2015 final rule, DOE adopted the ASHRAE levels for small three-phase commercial air-cooled air

[1] https://www.energy.gov/sites/prod/files/2019/03/f60/Process%20Rule.OIRA%20Compare%20Document.pdf. pp. 140-41.
[2] 84 Fed. Reg. 3913.
[3] 84 Fed. Reg. 3914.
[4] 84 Fed. Reg. 3949.
[5] 84 Fed. Reg. 3915.
[6] 74 Fed. Reg. 36312 (July 22, 2009).
[7] 77 Fed. Reg. 28928 (May 16, 2012).

conditioners and heat pumps less than 65,000 Btu/h, water-source heat pumps, and commercial oil-fired storage water heaters.[8] In a second 2015 final rule, DOE adopted the ASHRAE levels for packaged terminal air conditioners.[9] Finally, in a third 2015 final rule, DOE adopted the ASHRAE levels for four of the six equipment classes for single package vertical air conditioners and heat pumps.[10] In each of these cases, DOE determined that clear and convincing evidence did not exist that would justify more-stringent standard levels. (If DOE commits to only going beyond ASHRAE levels in "extraordinary circumstances," the ASHRAE process may be less likely to produce levels that best serve EPCA's energy conservation purpose.)

DOE did adopt levels more stringent than the ASHRAE levels in three cases: for two equipment classes of single package vertical air conditioners and heat pumps; for small, large, and very large commercial package air conditioners and heat pumps; and for commercial warm air furnaces. These standards will all result in large savings for purchasers. For single package vertical units, the average life-cycle cost savings are $174 and $435 for air conditioners and heat pumps, respectively.[11] The standards for large and very large commercial package air conditioners will save purchasers more than $2,000 on average over the life of the equipment.[12] And the standards for commercial warm air furnaces will save purchasers $284 and $400 on average for gas-fired and oil-fired equipment, respectively.[13]

The ability for DOE to go beyond the ASHRAE levels when appropriate enabled the largest energy savings of any standard ever established by DOE: 14.8 quads over 30 years of sales from the standards for commercial package air conditioners and heat pumps. Those standards will save businesses between $15 billion and $50 billion in net present value savings.[14]

DOE explained in the direct final rule for commercial package air conditioners and heat pumps (CUACs/CUHPs) and commercial warm air furnaces (CWAFs) that "DOE views the considerable data and analysis in support of the standards being adopted as satisfying the clear and convincing threshold set out in EPCA for the adoption of energy conservation standards more stringent than the relevant ASHRAE levels."[15] DOE further explained that "the projected energy savings exceed the threshold for significant by a wide margin," the technological feasibility "is well-established," and "the economic impact of the standards on the consumers of CUACs/CUHPs and CWAFs is positive by a wide margin."[16]

We believe that Congress clearly intended for DOE to be able to adopt more-stringent standards than the ASHRAE levels in those cases where clear and convincing evidence would support such standards. We are concerned that in the Process Rule NOPR, it appears that DOE is attempting to severely restrict the Department's ability to consider standards higher than the ASHRAE levels. Considering standards beyond the ASHRAE levels only in "extraordinary circumstances" could potentially sacrifice very large energy and economic savings. For example, DOE's analysis for the direct final rule for CUACs/CUHPs and CWAFs found that the max-tech levels could save an additional 8.6 quads for CUACs/CUHPs and an

[8] 80 Fed. Reg. 42614 (July 17, 2015).
[9] 80 Fed. Reg. 43162 (July 21, 2015).
[10] 80 Fed. Reg. 57438 (September 23, 2015).
[11] 80 Fed. Reg. 57441.
[12] 81 Fed. Reg. 2423 (January 15, 2016). The standards for small commercial package air conditioners will save purchasers about $100 on average over the life of the equipment.
[13] 81 Fed. Reg. 2423.
[14] Ibid.
[15] 81 Fed. Reg. 2439.
[16] 81 Fed. Reg. 2443.

additional 2.2 quads for CWAFs above and beyond the very large savings achieved by the standards adopted in the DFR.[17] There may or may not be clear and convincing evidence at some point in the future to support the adoption of these levels (or other efficiency levels), but DOE should continue to be able to evaluate such levels in the future.

In sum, we believe that DOE to date has appropriately applied the clear and convincing evidence threshold. While DOE has adopted the ASHRAE levels in most cases over the past decade, the ability for the Department to consider standards beyond the ASHRAE levels has enabled enormous energy and economic savings. DOE's proposal in the NOPR, which would appear to severely restrict the Department's ability to consider standards beyond the ASHRAE levels, could sacrifice very large future savings, which we do not believe reflects the intent of Congress. We urge DOE not to interpret "clear and convincing evidence" as part of the Process Rule.

Priority setting should not be included in the Process Rule. In the NOPR, DOE proposes that the Department will issue a request for comment on prioritization of rulemakings each spring as DOE prepares its Regulatory Agenda.[18] Since the adoption of the current Process Rule in 1996, Congress established the 6-year and 7-year review provisions for standards and test procedures, respectively. The vast majority of rulemakings going forward will have statutory deadlines, and these statutory deadlines will largely determine the sequencing of DOE's work on standards and test procedures. Therefore, we believe that requesting stakeholder input on prioritization may be a waste of time and resources since DOE must meet its statutory deadlines regardless of the outcome of a prioritization exercise. Further, requesting input on prioritization would seem to be duplicative of the "early assessment" for each product since stakeholders will have the opportunity to provide input at the beginning of each rulemaking regarding whether DOE should proceed.

The Process Rule should not require that a coverage determination be completed prior to initiating a rulemaking. The NOPR proposes that DOE would be required to publish a final coverage determination prior to the initiation of any rulemaking for test procedures or standards. The NOPR further proposes that if DOE finds it necessary to expand or reduce the scope of coverage during the rulemaking, "a new coverage determination process will be initiated and finalized prior to moving forward with the test procedure or standards rulemaking."[19] During rulemakings for test procedures and standards, many things are learned through both stakeholder input and DOE's own investigation that can inform the coverage determination. Therefore, DOE should not require that a coverage determination be completed prior to initiating a rulemaking.

In the case of miscellaneous refrigeration products, DOE published a proposed determination of coverage for non-compressor residential refrigeration products in November 2011.[20] DOE subsequently published a framework document in February 2012.[21] In an October 2013 supplemental proposed determination of coverage, DOE noted that since the publication of the framework document, the Department determined that coverage should include not only non-compressor refrigeration products, but also vapor compression wine chillers, hybrid refrigeration products, and residential ice makers. The

[17] 81 Fed. Reg. 2508.
[18] 84 Fed. Reg. 3916.
[19] 84 Fed. Reg. 3945-46.
[20] 76 Fed. Reg. 69147 (November 8, 2011).
[21] https://www.regulations.gov/document?D=EERE-2011-BT-STD-0043-0003.

notice noted that "DOE reached this determination after evaluating the various information it had been able to collect and the comments submitted by interested parties in response to the earlier notices."[22] After DOE published preliminary analysis and a proposed test procedure in 2014, ASRAC formed a working group in 2015 to negotiate standards and test procedures for miscellaneous refrigeration products. As part of the successful negotiations, the working group agreed on a scope of coverage and definitions. Specifically, the working group recommended that coverage be applied to coolers (both vapor compression and non-compressor) and combination cooler refrigeration products. The working group also recommended excluding from coverage residential ice makers. After the conclusion of the working group, DOE published a second supplemental proposed determination of coverage in March 2016,[23] which proposed a scope of coverage and definitions consistent with the working group recommendations. DOE then finalized the coverage determination in July 2016[24] before issuing a direct final rule for standards in October 2016.[25]

The coverage process for miscellaneous refrigeration products illustrates how information that is learned during the rulemaking process for test procedures and standards through both stakeholder input and DOE's own research can ultimately inform the determination of coverage. In the case of miscellaneous refrigeration products, DOE revised the proposed scope of coverage twice in parallel to the test procedures and standards rulemakings in response to stakeholder comments, work by the ASRAC working group, and DOE's own research. If DOE instead had had to suspend work on the test procedures and standards to initiate and finalize new coverage determinations as new information was learned, this would have served only to add steps to the process and unnecessarily delay the rulemaking. Delaying the rulemaking would have ultimately harmed both consumers and manufacturers. For consumers, the lifecycle cost savings from the standards adopted—$265 for the most common type of products[26]—would have been put on hold. For manufacturers, delaying the rulemaking would have delayed a process which established the first national standards for these products. Previously, manufacturers were faced with state standards.

In sum, DOE's proposal regarding coverage determinations does not reflect that information learned during the rulemaking process for both test procedures and standards can, and should, inform the coverage determination. DOE's proposal would result in potentially adding steps to the process and unnecessarily delaying rulemakings. For these reasons, the Process Rule should not require that a coverage determination be completed prior to initiating a rulemaking.

We support providing an opportunity for early stakeholder input prior to the publication of a NOPR, but we believe that DOE's proposed "early assessment" process could be significantly simplified. We understand the desire of industry stakeholders for DOE to be able to conduct a "quick look" at the beginning of each rulemaking, and we agree that it makes sense for the Process Rule to specify that DOE will provide an opportunity for stakeholder input prior to the publication of a NOPR. However, we are concerned that the "early assessment" process as proposed in the NOPR would add steps and time to each rulemaking that may increase burdens for both DOE and stakeholders and make it more difficult for the Department to meet its statutory deadlines. We believe that DOE can fulfill the intended goals of

[22] 78 Fed. Reg. 65224 (October 31, 2013).
[23] 81 Fed. Reg. 11454 (March 4, 2016).
[24] 81 Fed. Reg. 46768 (July 18, 2016).
[25] 81 Fed. Reg. 75194 (October 28, 2016).
[26] 81 Fed. Reg. 75196. The most common type of product is "freestanding compact coolers," which represent the vast majority of shipments.

the "early assessment" simply by specifying in the Process Rule that for both standards and test procedures, DOE will provide an opportunity for stakeholder input prior to the publication of a NOPR.

DOE already has the ability to quickly make a determination not to proceed with a rulemaking as evidenced by the Department's consideration of amended standards for direct heating equipment and pool heaters in 2015-16. As the first step in that process, DOE published an RFI, which requested information "to help DOE determine whether national standards more stringent than those that are currently in place would result in a significant amount of additional energy savings and whether such amended national standards would be technologically feasible and economically justified."[27] In the RFI, DOE also solicited comment on items such as technology options, max-tech efficiency levels, and expected future shipment trends. After considering comments on the RFI and conducting their own analysis, DOE decided to propose a determination of no change for direct heating equipment (which the Department subsequently finalized) while proceeding with a rulemaking for pool heaters (which is pending).

As the process for direct heating equipment and pool heaters demonstrated, an early step such as an RFI can serve the dual purpose of providing a "quick look" that may lead to a proposed determination of no change to a standard while also providing DOE with information to inform the Department's analyses should DOE decide to proceed with a full rulemaking to consider amended standards. The Process Rule NOPR instead proposes that DOE will first publish a notice requesting comment on whether DOE should proceed with a rulemaking, which would precede the preliminary stages of a potential rulemaking.[28] We do not believe that such a step is necessary, and it would likely increase the time required to complete rulemakings while potentially being duplicative. Much of the same information needed to make a quick decision to leave a standard unchanged (e.g. shipment levels, technology options for improving efficiency, market efficiency trends) is the same as that typically sought in early rulemaking stages. Asking for that information twice either increases the time stakeholders need to spend on DOE rulemakings or creates a perverse incentive to withhold information until it is asked for the second time.

The NOPR also proposes that if DOE determines to proceed with a rulemaking, the preliminary stages would consist of either a Framework Document and Preliminary Analysis, or an Advanced Notice of Proposed Rulemaking (ANOPR).[29] The specific preliminary steps that are appropriate will likely vary by rulemaking. For example, DOE indicated at the public meeting on April 11 that an early assessment would not be necessary in the case of a newly-covered product.[30] However, the language in the NOPR would appear to require an early assessment in all cases. There may also be cases, for example, where an RFI and Preliminary Analysis may make more sense than a Framework Document and Preliminary Analysis. Therefore, we believe that it is important for DOE to retain flexibility in determining the specific early steps that are appropriate in each individual rulemaking.

For test procedures, DOE is proposing that the Department will first publish a notice requesting comment on whether an amended test procedure would be justified.[31] If DOE determines that it is appropriate to proceed with a test procedure rulemaking, DOE would then provide additional opportunities for early input. As with standards rulemakings, we believe that an early step such as an RFI

[27] 80 Fed. Reg. 15922 (March 26, 2015).
[28] 84 Fed. Reg. 3946.
[29] Ibid.
[30] April 11, 2019 Public Meeting Transcript. p. 198.
[31] 84 Fed. Reg. 3948-49.

for test procedures can provide DOE with the ability to quickly determine that an amended test procedure is not justified while also providing DOE with information to inform potential test procedure changes should the Department decide to proceed with a rulemaking. A separate step in many cases would likely just be duplicative (of an RFI, for example). While in some cases it may make sense to provide additional opportunities for input prior to a NOPR (e.g. through a NODA), requiring more than one step prior to a NOPR in many cases will only unnecessarily delay test procedure rulemakings. In addition, at the public meeting on April 11, DOE indicated that in instances such as when a technical modification is needed or the Department receives a consensus recommendation, the process for modifying a test procedure could deviate from the normally-required rulemaking steps.[32] However, the NOPR would appear to prevent any deviation regardless of the situation.

In sum, we believe that DOE can ensure that stakeholders have the opportunity to provide early input to the Department and allow DOE in appropriate circumstances to quickly determine not to proceed with a rulemaking through a much simpler process than that proposed in the NOPR. Specifically, we recommend that DOE simply specify in the Process Rule that for both standards and test procedures, DOE will provide an opportunity for stakeholder input prior to the publication of a NOPR.

Any determination regarding whether to proceed with a rulemaking must be based on DOE's own analysis in addition to any information submitted by stakeholders. At the public meeting on March 21, DOE stated that the Department would conduct its own analysis to inform the decision about whether to proceed with a rulemaking.[33] However, the NOPR does not reflect this. The proposed CFR language regarding the "early assessment" states that DOE will request comment on whether the Department should proceed with a rulemaking. It further states that "If DOE receives sufficient information suggesting that it could justify a determination that no new or amended standard would meet the applicable statutory criteria, DOE would engage in notice and comment rulemaking to make that determination. If DOE receives sufficient information suggesting it could justify a new or amended standard or the information received is inconclusive with regard to the statutory criteria, DOE would undertake the preliminary stages of a rulemaking to issue or amend an energy conservation standard."[34] Similarly, for test procedures, the proposed CFR language states that DOE will request comment on whether an amended test procedure would be justified and will "review comments submitted and, subject to statutory obligations, determine whether it agrees with the submitted information."[35]

DOE cannot shift the burden to stakeholders in conducting reviews of standards and test procedures. Rather, DOE must conduct its own analysis, incorporating input from stakeholders as appropriate. Furthermore, it is essential that the Department begin conducting preliminary analysis and sharing information with stakeholders as it becomes available from the very beginning. We are concerned that with DOE's proposed approach for the "early assessment," stakeholders may be asked to provide input on whether a test procedure or standard should be amended without having the benefit of DOE's preliminary evaluation. For standards, it could be very difficult for stakeholders who are not manufacturers to provide input at the beginning of a standards rulemaking without access to DOE's preliminary evaluation of the current state of the market and technology options, for example. Similarly, for test procedures, stakeholders should have the benefit of being able to review DOE's initial evaluation of potential test procedure issues to inform input provided to the Department. We believe that recent

[32] April 11, 2019 Public Meeting Transcript. pp. 50-51.
[33] March 21, 2019 Public Meeting Transcript. pp. 206-209.
[34] 84 Fed. Reg. 3946.
[35] 84 Fed. Reg. 3959.

RFIs[36] serve as good examples of how DOE can request early input on a rulemaking while also sharing the Department's initial evaluation of potential issues for which they seek stakeholder input, and we urge DOE to continue this practice.

DOE should maintain the Department's existing interpretation of "significant" energy savings. To date, DOE has interpreted *NRDC v. Herrington* to mean that significant energy savings are savings that are not "genuinely trivial." Rather than maintaining that precedent, DOE is now proposing to establish arbitrary thresholds for defining significant savings. Specifically, DOE is proposing that a standard would need to save at least 0.5 quads of energy over 30 years or yield an energy savings improvement of at least 10%.[37] The proposed thresholds could result in large lost savings for consumers and businesses and prohibit the adoption of consensus agreements. Further, we do not believe that DOE's proposal is consistent with *Herrington* or Congress' intent.

Energy savings of 0.5 quads are equivalent to electricity bill savings of about $7 billion.[38] DOE's proposal would thus sacrifice billions of dollars in potential savings for consumers and businesses. DOE's proposed thresholds could also result in prohibiting the adoption of consensus agreements. For example, in 2010, AHAM and efficiency advocates negotiated a package of new standards for five home appliances. If the thresholds DOE is now proposing had been in effect at that time, it is likely that DOE would not have been able to adopt the recommended standards for three of the five products—clothes dryers, dishwashers, and room air conditioners—which would have jeopardized a successful negotiation that provided benefits for all stakeholders.

DOE justifies the proposed 0.5 quads threshold based on the observation that the total savings from rules post-*Herrington* with savings less than 0.5 quads are about 4% of the total savings from all rules.[39] However, this comparison neglects to recognize the huge success of the appliance standards program in saving energy. The total energy savings that DOE calculated from all rules post-*Herrington* (109 quads) are greater than the amount of energy used by the entire U.S. economy in a year. The 4.24 quads of savings from rules with savings less than 0.5 quads each are equivalent to more than 10% of all the energy used by residential and commercial buildings in a year.[40] The fact that a subset of rules makes up a relatively small portion of total savings does not mean that the savings from those rules are not significant. Furthermore, as cited in *Herrington*, Representative Dingell explained that "conservation must be approached on a nickel and dime basis" and that "the cumulative impact of a series of conservation initiatives, which in themselves might appear insignificant, could be enormous."

We do not believe that the proposed thresholds reflect the intent of Congress as outlined in *Herrington*. *Herrington* explains that the annual energy use threshold of 4.2 billion kWh established by Congress for prescribing standards for a newly-covered product means that "Congress plainly thought that saving some part of the energy consumed by an appliance operating at those levels would be significant." As DOE notes in the NOPR, 4.2 billion kWh per year corresponds to 1.45 quads of source energy over 30

[36] For example, the RFIs for test procedures and standards for direct heating equipment and the RFI for test procedures for automatic commercial ice makers. 84 Fed Reg. 6088 (February 26, 2019); 84 Fed. Reg. 6095 (February 26, 2019); 84 Fed. Reg. 9979 (March 19, 2019).
[37] 84 Fed. Reg. 3923-24.
[38] Assuming a heat rate of 9,000 Btu/h and an electricity price of $0.13/kWh.
[39] 84 Fed. Reg. 3923.
[40] Total residential and commercial energy use in 2018 was 40 quads. https://www.eia.gov/totalenergy/data/monthly/pdf/sec2_3.pdf.

years.[41] Therefore, for a product that consumes 1.45 quads over 30 years, achieving 0.5 quads of savings would require a reduction in energy use of about 33%. However, as DOE appears to recognize in proposing a 10% savings threshold, it is not reasonable to assume that Congress intended that a 33% reduction in energy use for a product consuming 4.2 billion kWh would be necessary in order for the savings in quads to be considered "significant." Furthermore, as *Herrington* explains, "Congress knew that standards for some covered products would produce quite modest incremental gains in efficiency and consequently in energy conserved." For example, *Herrington* notes that the Senate report on the National Energy Conservation Policy Act (NECPA) estimated that for electric clothes dryers, efficiency would improve by 5% without standards and 8% with standards. Or in other words, standards would improve efficiency by about 3% compared to the base case. Neither a 0.5 quads threshold nor a 10% savings threshold thus appear to reflect the intent of Congress.

Importantly, DOE's proposed thresholds would likely result in foregoing "cost-free" energy savings that are clearly not "genuinely trivial." DOE argues that the Department's proposed approach "gives effect to the *Herrington* court's reference to not forego energy savings that are 'cost-free.'"[42] But DOE's proposed approach for defining "significant" energy savings would not in fact give deference to the court's opinion regarding "cost-free" energy savings. The savings thresholds proposed in the NOPR would not allow DOE to pursue a standard that did not meet the thresholds even if such a standard would impose no costs. DOE further argues that the proposed approach would "limit the first-cost impacts to consumers to those instances where a given rulemaking is expected to generate significant energy savings and other substantial benefits."[43] But again, DOE's proposed approach would not allow DOE to pursue a standard that did not meet the thresholds even if there would be no first-cost impact.

There have been a number of instances where DOE analyses have identified efficiency improvements that have no first-cost impact. For example, in the 2014 final rule for commercial clothes washers, for both equipment classes there was no incremental cost associated with Efficiency Level (EL) 1.[44] In the 2016 final rule for commercial prerinse spray valves, for all three equipment classes there was no incremental cost associated with any of the efficiency levels.[45] In the 2016 final rule for dehumidifiers, for portable dehumidifiers with capacities less than or equal to 50 pints/day, there was no incremental cost associated with EL 1.[46] Finally, in the 2017 final rule for ceiling fans, for all five product classes there was no incremental cost associated with EL 1. For standard and hugger fans, there was also no incremental cost at EL 2.[47] It is likely that DOE's proposed thresholds would have prohibited the Department from adopting standards for three of these products (commercial clothes washers, commercial prerinse spray valves, and dehumidifiers) even at efficiency levels for which there would be no first-cost impact.

Furthermore, DOE has not clearly explained how energy savings for purposes of the proposed threshold for significance would be calculated. Based on the information provided to date, DOE has not specified the energy units the Department intends to use. DOE was unable to explain at the public meeting on March 21 whether the "quads" the Department intends to use will be based on site energy, primary

[41] 84 Fed. Reg. 3923.
[42] 84 Fed. Reg. 3922.
[43] Ibid.
[44] 79 Fed. Reg. 74522-23 (December 15, 2014).
[45] 81 Fed. Reg. 4780-81 (January 27, 2016).
[46] 81 Fed. Reg. 38356 (June 13, 2016).
[47] 82 Fed. Reg. 6864-66 (January 19, 2017).

energy, or full-fuel-cycle energy.[48] DOE has also not clearly specified the analysis period. In some prior rulemakings, DOE has estimated energy savings attained within a 30-year period. More recently, DOE has estimated the lifetime savings attained by products sold within a 30-year period. DOE mixed estimates using both analysis periods together for its analysis in the NOPR.[49] Since some products have very long lifetimes, the difference between these two analysis periods, both of which DOE has used in the past, can be very large. Each of these factors will have a meaningful effect on the reach of DOE's proposed policy, yet the Department has not explained how it proposes to address them.

We note that a determination that a new or amended standard would constitute "significant" energy savings is not a determination that such a standard is economically justified. As *Herrington* noted, "a finding that a proposed standard results in significant conservation is far from a prologue to inevitable promulgation of a mandatory standard; instead, that finding simply triggers a much more thorough review in which the amount of energy a standard would save is assessed in light of any other benefits and countervailing burdens of the standard." However, DOE's proposal in the NOPR to establish thresholds for determining significant savings would eliminate DOE's ability to even consider whether a standard that would not meet the thresholds would be economically justified.

In sum, DOE's proposed thresholds for defining "significant" energy savings would potentially sacrifice billions of dollars in savings for consumers and businesses and do not appear to reflect the *Herrington* decision or Congress' intent. The thresholds would prohibit DOE from pursuing a potential standard that did not meet the thresholds even if the standard would impose no costs. In addition, as proposed, the full reach of the potential policy cannot be understood. We urge DOE to maintain the Department's existing interpretation of "significant" energy savings.

We urge DOE to retain flexibility to address test procedure issues. DOE proposes in the NOPR to require that test procedures be finalized at least 180 days before the publication of a standards NOPR.[50] We generally support test procedures being finalized in advance of standards NOPRs, and we believe that DOE should always strive to do so. However, it seems inevitable that situations will arise that will require deviating from this general practice. We believe that it benefits all stakeholders for DOE to have the necessary flexibility to address test procedure issues. Further, DOE must meet its statutory deadlines for standards rulemakings, regardless of whether test procedure work has been completed.

As described above, one of our concerns with DOE's proposal to make the Process Rule binding is that it would take away flexibility for DOE to address test procedure issues that may arise after the publication of a standards NOPR. For example, manufacturers may identify necessary test procedure changes after the publication of a standards NOPR to, for example, improve repeatability and reproducibility. In such a situation, DOE's proposal in the NOPR would seem to result in either prohibiting the Department from making the test procedure changes that have been identified or requiring the rulemaking process to effectively be re-started.

There also may be cases in which the test procedures and standards rulemakings inform one another. For example, during the 2015 ASRAC negotiation for walk-in coolers and freezers, the working group developed solutions to challenging issues such as how to address hot gas defrost and on-cycle variable speed evaporator fan control. These solutions impacted both the test procedures and the standards,

[48] March 21 Public Meeting Transcript. pp. 235, 284.
[49] 84 Fed. Reg. 3923.
[50] 84 Fed. Reg. 3949.

and it was therefore necessary to consider both in parallel. Prohibiting such a process would have made a successful outcome to the negotiation more difficult to achieve.

We also believe that requiring 180 days between the finalization of a test procedure and the publication of a standards NOPR could result in unnecessarily delaying rulemakings. We believe that the language in the current Process Rule, which states that "final, modified test procedures will be issued prior to the NOPR on proposed standards," is sufficient. An alternative could be to specify 180 days between the finalization of a test procedure and the end of the comment period on the standards NOPR, which we believe would give manufacturers enough time to evaluate the impact of any test procedure changes on the performance of their products.

It would be inappropriate to put undue emphasis on adopting industry test procedures. As DOE notes in the NOPR, DOE routinely adopts industry standards as DOE test procedures. DOE also notes that in many cases, certain aspects of these industry standards are modified when incorporated into DOE test procedures.[51] We believe that this approach is appropriate and consistent with the statute. While it makes sense to start with existing test procedures (whether they are "industry" test procedures or not), DOE test procedures must be "reasonably designed to produce test results which reflect energy efficiency, energy use, and estimated operating costs" (i.e. be "representative") and not be "unduly burdensome to conduct."[52] Satisfying these statutory criteria are important to protect both consumers and manufacturers. Representative test procedures are necessary for ensuring that product efficiency ratings provide good information to consumers for making purchasing decisions. For manufacturers, test procedures that are repeatable and reproducible ensure that ratings produced by a manufacturer will be consistent with testing conducted by DOE or a third party. In the NOPR, DOE appears to be attempting to make adopting industry test procedures "without modification" the Department's default position.[53] As described below, in many cases, adopting industry test procedures "without modification" would harm both consumers and manufacturers.

Industry test procedures are often not adequately representative of energy use in the field. For example, the industry test procedure for residential dehumidifiers (ANSI/AHAM DH-1-2008) specifies an ambient temperature of 80°F for testing. However, most portable dehumidifiers are used in basements, where temperatures are typically significantly lower than 80°F, and ambient temperature has a significant effect on dehumidifier performance. DOE analysis found that 65°F would be the most representative temperature for testing, which reflects the average ambient temperature when dehumidifiers are most likely to be used.[54] DOE investigative testing found that for portable dehumidifiers, measured efficiency was up to 61% lower at 65°F compared to efficiency at 80°F.[55] Therefore, the efficiency ratings based on testing at 80°F, which were overestimating typical efficiencies in the field, were not providing good information to consumers to make purchasing decisions. In the 2015 test procedures final rule, DOE adopted 65°F as the ambient temperature for testing portable dehumidifiers, which was supported by both AHAM and efficiency advocates.[56]

[51] 84 Fed. Reg. 3926.
[52] 42 U.S.C. 6314(a)(2).
[53] 84 Fed. Reg. 3927.
[54] 79 Fed. Reg. 29277-78 (May 21, 2014).
[55] 79 Fed. Reg. 29280.
[56] 80 Fed. Reg. 45807-09 (July 31, 2015).

As another example, the industry test procedure for central air conditioners and heat pumps (AHRI Standard 210/240) specifies a minimum external static pressure for testing of between 0.1 and 0.2 in. wc. depending on capacity. However, field studies have found that typical external static pressures are significantly higher—about 0.5 in. wc. on average.[57] The external static pressure, which reflects the resistance to airflow in a duct system, significantly affects the fan energy use of a central air conditioner or heat pump. Therefore, by specifying external static pressure values that were significantly lower than those typically seen in the field, the industry test procedure was significantly underestimating fan energy consumption, and in turn, overrepresenting the efficiency of central air conditioners and heat pumps. In recognition of this problem, the ASRAC working group for central air conditioners and heat pumps recommended that DOE adopt a minimum external static pressure value of 0.5 in. wc.,[58] which DOE adopted in the 2017 test procedures final rule.[59]

Because industry test procedures are generally not designed for regulatory purposes, they may also lack sufficient specificity to be repeatable and reproducible. For example, in the case of commercial and industrial pumps, while DOE largely based the test procedure on the industry test procedure (ANSI/HI 40.6-2014), DOE explained in the final rule that a few minor modifications were necessary to ensure repeatable and reproducible test results.[60] For example, DOE incorporated additional specifications regarding items such as stabilization requirements, pump speed normalization, and power supply characteristics. In the case of portable air conditioners, DOE found that the industry test procedure (AHAM PAC-1-2014) lacked sufficient specificity regarding items such as condensate collection, control settings, test unit placement, and test voltage, which can all affect measured efficiency.[61] In the test procedures final rule, DOE addressed each of these items in order to improve repeatability and reproducibility.

In sum, while many existing DOE test procedures are largely based on industry test procedures and industry test procedures generally make sense as a starting point, modifications are often necessary to ensure that DOE test procedures meet the statutory criteria. Test procedures that are not representative harm consumers, while test procedures that are not sufficiently repeatable and reproducible put manufacturers' efficiency ratings at risk. Therefore, we believe that it would be inappropriate for the Process Rule to put undue emphasis on adopting industry test procedures. Any reference in the Process Rule to the criteria that DOE will use in adopting test procedures should simply refer to the statutory criteria.

DOE's proposal regarding DFRs could take away important flexibility that benefits all stakeholders. In recent years, DOE has used DFRs to implement successful negotiated rulemakings for products including central air conditioners and heat pumps, commercial package air conditioners and heat pumps, dedicated-purpose pool pumps, and miscellaneous refrigeration products. These new standards will provide very large economic savings for consumers and energy savings and related benefits for the nation. For example, the standards for dedicated-purpose pool pumps will save owners of most in-ground pools more than $2,000 on average over the lifetime of a pump.[62] The standards for commercial

[57] 80 Fed. Reg. 69317-38 (November 9, 2015).
[58] https://www.regulations.gov/document?D=EERE-2014-BT-STD-0048-0076.
[59] 82 Fed. Reg. 1426 (January 5, 2017).
[60] 81 Fed. Reg. 4110 (January 25, 2016).
[61] 80 Fed. Reg. 10228-30 (February 25, 2015).
[62] 82 Fed. Reg. 5652 (January 18, 2017).

package air conditioners and heat pumps will save almost 15 quads of energy[63]—more than any other standard ever issued by DOE.

Many of the successful negotiated agreements that were implemented through DFRs were made possible by the flexibility provided to DOE in their direct final rule authority. For example, in the case of commercial package air conditioners and heat pumps, the 2016 DFR adopted a two-tiered standard: a modest improvement in efficiency which took effect on January 1, 2018, and a much more significant efficiency improvement which will take effect on January 1, 2023. The statute otherwise specifies a 3-year compliance date for this equipment. This flexibility in compliance dates enabled the enormous savings from the standard while providing manufacturers with additional time to make equipment upgrades. The 2023 compliance date for the second tier will also allow manufacturers to prepare for both the 2023 standards and likely refrigerant changes in a single design cycle, reducing conversion costs. DOE explained in the DFR that "DOE has the authority under section 325(p)(4) to accept recommendations for compliance dates contained in a joint submission recommending amended standards." DOE further explained that "Applying the direct final rule provision in this manner meets Congress's goal to promote consensus agreements that reflect broad input from interested parties who can fashion agreements that best promote the aims of the statute."[64]

Similarly, in the case of central air conditioners and heat pumps, the 2017 DFR included a compliance date of January 1, 2023, which was longer than the 5-year period between final rule publication and compliance date specified in the statute. This longer period between final rule publication and compliance will also allow manufacturers to prepare for both the new standards and likely refrigerant changes in a single design cycle. DOE explained in the DFR that "EPCA provides some measure of discretion when adopting recommended standards submitted as part of a consensus agreement, provided that DOE determines that the recommended standards are otherwise in accordance with the required provisions."[65]

DOE also cited its DFR authority in adopting two metrics (SEER and EER) for central air conditioners for the hot-dry region in the 2011 DFR. In that rule, DOE noted that while EPCA specifies that the "efficiency descriptor" for central air conditioners shall be SEER, "DOE believes that the language at 42 U.S.C 6295(p)(4) provides DOE some measure of discretion when considering recommended standards in a consensus agreement, if the Secretary determines that the recommended standards are in accordance with 42 U.S.C. 6295(o)."[66]

In the NOPR, DOE is proposing to re-interpret its DFR authority in a manner that could take away the important flexibility that DOE has used in the past to implement consensus agreements. As a specific example, DOE suggests in the NOPR that if DOE were to issue a DFR for metal halide lamp fixtures, for which the statute requires a final rule by January 1, 2019 and a compliance date of January 1, 2022,[67] the compliance date in the DFR would need to be consistent with the compliance date specified in the statute. We are concerned that by taking away flexibility in DFRs, DOE's proposal will both discourage negotiations and make any future negotiations less likely to succeed. We urge DOE to maintain its

[63] 81 Fed. Reg. 2423 (January 15, 2016).
[64] 81 Fed. Reg. 2438.
[65] 82 Fed. Reg. 1798 (January 6, 2017).
[66] 76 Fed. Reg. 37423 (June 27, 2011).
[67] We note that while the statute required DOE to publish a final rule for metal halide lamp fixtures no later than January 1, 2019, as of May 6, 2019 DOE had not yet published a NOPR.

existing interpretation of its DFR authority to allow for flexibility in adopting consensus recommendations.

A DFR should be available as a potential outcome of a negotiated rulemaking. As described above, in recent years, DOE has used DFRs to implement successful negotiated rulemakings for products including central air conditioners and heat pumps, commercial package air conditioners and heat pumps, dedicated-purpose pool pumps, and miscellaneous refrigeration products. In the NOPR, DOE proposes to specify that a negotiated rulemaking under ASRAC "will not result in the issuance of a DFR."[68] DOE justifies this proposal by stating that the Negotiated Rulemaking Act "clearly contemplates that the outcome of the negotiation process will be a proposed rule."[69] EPCA specifies that if DOE issues a DFR, the Department must also simultaneously publish a NOPR proposing standards identical to those in the DFR.[70] Therefore, because DOE must always publish a NOPR in conjunction with a DFR, we see no conflict with the Negotiated Rulemaking Act. While a DFR may not be the appropriate outcome for all negotiated rulemakings, DOE should maintain the ability to use DFRs to implement successful negotiated rulemakings.

DOE should not change the "walk-down" process. In the NOPR, DOE proposes that the Department will determine whether a particular efficiency level is economically justified "when compared to the set of other feasible trial standard levels," in part by considering "whether an economically rational consumer would choose a product meeting the candidate/trial standard level over products meeting the other feasible trial standard levels."[71] The NOPR states that the proposed approach "recognizes that the 'economic justification' of any particular option depends on a broader comparison of economic attributes relative to other available options, rather than relative to just one baseline" and that a consumer "is likely to be focused on the set of actually available products at the time of purchase rather than some hypothetical baseline representing the set of products that would have been available in the absence of the standard."[72]

We note that DOE's long-standing practice has been to analyze potential standard levels by comparing the distribution of product efficiencies in each standards case to the distribution of efficiencies in the base case—not by making a comparison to "one baseline" efficiency level. Further, the base case distribution is not "some hypothetical baseline," but rather the estimated distribution of efficiencies in the absence of a new standard based on the best available data. DOE's approach for considering potential standard levels is appropriate as it evaluates the impact of a potential standard level relative to the market absent a new standard.

The statute requires that any new or amended efficiency standard "achieve the maximum improvement in energy efficiency . . . which the Secretary determines is technologically feasible and economically justified."[73] To date, DOE has used the "walk-down" process to determine which standard level to adopt. DOE implements this process by first starting at the "max-tech" level and evaluating whether that level is economically justified. If DOE concludes that that level is not economically justified, they proceed to the next-highest level and make the same evaluation until reaching a level (if any) that the

[68] 84 Fed. Reg. 3950.
[69] 84 Fed. Reg. 3927.
[70] 42 U.S.C. 6295(p)(4)(A)(i).
[71] 84 Fed. Reg. 3948.
[72] 84 Fed. Reg. 3938.
[73] 42 U.S.C. 6295(o)(2)(A).

Department determines is economically justified. We believe that the process used to date implements what the statute requires. Specifically, by starting at the "max-tech" level and working its way down, the Department ensures that it does in fact adopt the maximum level that is technologically feasible and economically justified.

DOE's proposed approach would instead hinge on whether an "economically rational consumer" would choose a product meeting a certain efficiency level. We are concerned that defining who a "rational consumer" is and what choice such a consumer would make is fraught with problems, and the NOPR provides no information about how DOE would make such a determination. It is also unclear how DOE's proposed approach would fit with the statutory requirement to consider the seven factors in determining whether a standard is "economically justified." We urge DOE not to change the "walk-down" process.

Thank you for considering these comments.

Sincerely,

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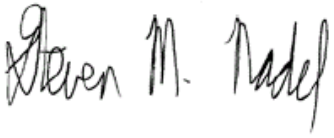

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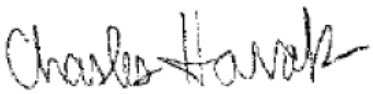

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