



Ms. Sofie Miller
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
1000 Independence Avenue SW
Washington, DC 20585
Telephone: (202) 586-5000
E-mail: *Process.Rule@ee.doe.gov*.

Re: Proposed Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment

Docket ID No. EERE-2017-BT-STD-0062

Dear Ms. Miller,

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI); the Air Movement and Control Association (AMCA); the American Lighting Association (ALA); the Association of Home Appliance Manufacturers (AHAM); the Hearth, Patio & Barbecue Association (HPBA), Heating, Air-Conditioning, Refrigeration Distributors International (HARDI); and North American Food Equipment Manufacturers (NAFEM); the National Electrical Manufacturers Association (NEMA); and Plumbing Manufacturers International (PMI) (collectively “Joint Commenters”) are pleased to submit comments on the Proposed Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment (hereafter “The Proposed Process Rule” or “Proposal”) (84 *Fed. Reg.* 3910 (February 13, 2019)).

The Joint Commenters thank the Department of Energy (DOE or Department) for its substantial and productive efforts in promulgating the Proposed Process Rule. The original Process Improvement Rule provided a sound basis for DOE standards promulgation and was appropriate and useful for its time. As years have passed, however, the 1996 Process Improvement Rule is now misaligned with the amended Energy Policy and Conservation Act (EPCA). Importantly, in the past decade, DOE departed from the practices reflected in that rule. The Proposal represents a renewed commitment to sound procedural practices that will increase regulatory efficiency, provide all interested stakeholders with a common understanding regarding DOE regulatory process, and ensure appropriate and reasonable investment of resources into DOE’s important energy efficiency initiatives.

The Joint Commenters support the goal of EPCA’s appliance efficiency program: maximizing improvements in energy savings that are technologically feasible and economically justified. To succeed, DOE should act on a consistent and predictable procedural and analytical structure that accounts for practical and technological realities, while ensuring regulatory transparency, consistency, and rationality.

This Proposal incorporates logical and efficient regulatory strategies. Most evident is that the Department has proposed workable solutions for challenges that the Joint Commenters have experienced in participating in EPCA rulemakings. We believe that the Proposed Process Rule will provide greater certainty, transparency, and predictability in DOE’s promulgation of test procedures and amended rules. Our

comments reflect our support for the proposal with suggested improvements that DOE should consider based on the vast experience represented by the Joint Commenters.

I. The Process Rule Should Be Binding on the Department of Energy

Joint Commenters support the Department's proposal to bind the agency to established procedural rules. The compulsory nature of the proposed regulation provides certainty and transparency for stakeholders by establishing that these are the procedures DOE must and will use in all related regulatory initiatives. The 1996 Process Improvement Rule was drafted to respond to a lack of transparency and stakeholder engagement. DOE's unilateral 2010 shift to treat that rule as discretionary disregarded, without notice, those stakeholder-responsive procedures. Decreased opportunity for stakeholder engagement and a steady barrage of hastily conducted rulemakings undermined the regulated community's confidence in the process. A binding Process Rule will restore much of that confidence.

Other stakeholders assert that binding DOE to the Process Rule will result in excessive litigation disrupting the goals of certainty and expediency. We disagree. Regulated stakeholders have long held that DOE should be bound by the existing Process Rule. Most litigation stems from substantive defects caused by shortcutting the process. Moreover, the Proposed Process Rule incorporates basic, good government transparency and certainty. A binding process will reduce procedural litigation and result in better rules.

II. The Process Rule Should Apply to Both Consumer Products and Commercial Equipment

The Joint Commenters agree with DOE's proposed expansion of the Process Rule to commercial equipment. There are no cogent reasons for treating the rulemaking process for commercial equipment differently than for consumer products. The benefits of a well-defined, consistent process apply regardless of product or equipment type. The Joint Commenters note that ASHRAE 90.1 equipment holds unique status in EPCA, and therefore must be considered separately, as discussed below.

III. The Application of the Process Rule to ASHRAE Equipment

The Joint Commenters support the Department's proposed approach to rulemakings for ASHRAE 90.1 equipment. We agree with the proposition that the Process Rule will apply to commercial equipment covered by ASHRAE 90.1 standards only in the case where energy conservation standard rulemakings for ASHRAE products are prompted by a six-year review or where DOE proposes standard levels over-and-above those in ASHRAE 90.1. The Joint Commenters also strongly support the realistic expectation that DOE will adopt revised ASHRAE levels except in "very limited circumstances." Historically, when DOE has exceeded the ASHRAE proposed levels, it has imposed disproportionate harm to industry segments for inconsequential energy efficiency benefits.¹ The Proposed Process Rule also resolves the question of the application of the "clear and convincing evidence" threshold that DOE must demonstrate to exceed ASHRAE levels. We concur with the definition proposed by DOE with a minor edit:

"Given the specific circumstances, facts, and data that exist for a particular ASHRAE amendment, DOE determines that there is no substantial doubt that the more stringent standard would result in a significant additional conservation of energy, is technologically feasible and economically justified."

In seeking to justify higher-than-ASHRAE levels, DOE had frequently claimed that it met the elevated evidentiary threshold by relying on the balance of the cumulative evidence, without pointing to any specific

¹ Energy Conservation Program: Energy Conservation Standards for Single Package Vertical Air Conditioners and Single Package Vertical Heat Pumps; Final Rule, 80 *Fed. Reg.* 57438 at 57494 (September 23, 2015)

fact, data, or circumstance that represents cumulative evidence.² Given the depth and breadth of evidence supporting an energy conservation rulemaking, such generalities are unconvincing and opaque. We support an evidentiary standard that requires a transparent demonstration of specific facts and evidence supporting a higher standard or that an industry consensus test procedure is demonstrably unreasonable.

The Joint Commenters also support the Department's clarification that ASHRAE's revision of one equipment class performance standards or test method does not trigger DOE's statutory obligation to initiate a rulemaking on all related equipment classes. This clarification will avoid the artificial imperative to initiate a rulemaking on a product class that was not addressed by ASHRAE. The intent of the statute is to align the DOE's standards with the historically reliable standards composed by a consensus body of experts. DOE is correct to decline to initiate additional rulemakings on related products that were never considered by the consensus body.

IV. Priority Setting

The Joint Commenters appreciate the Department's proposals to include stakeholders in its priority setting process. We understand that the stakeholder engagement proposal is to "point interested parties" to the DOE's previous Unified Regulatory Agenda in the spring and invite comments on the next year's agenda to be issued the following fall. The Joint Commenters request that the "pointing" to the previous agenda be formalized through its notice in the Federal Register. The Joint Commenters note that while the Unified Regulatory Agenda can be useful, it tends to be overly optimistic in predicting rulemaking schedules and, therefore, not a consistently reliable tool for planning purposes. We recognize the challenges of adhering to a strict agenda and appreciate the opportunity to comment on DOE's annual priorities. If the priorities are made more realistic then the gap between promise and fulfillment can be narrowed, enhancing program credibility and maximizing stakeholder engagement. We believe that stakeholder input will assist with DOE's calibration of its priorities to make them more achievable.

V. Coverage Determinations

EPCA authorizes DOE to identify new "covered products" by rule and imposes unique statutory constraints on the regulation of products so identified. 42 U.S.C. §§ 6292(b) and 6295(l)(1). DOE's Proposed Rule addresses the procedure for "coverage determinations" identifying new categories of covered products by rule, and the proposed provisions appropriately recognize the importance of ensuring that the scope of such a coverage determination must be clearly defined before consideration of test procedures or potential standards can begin. The Joint Commenters support DOE's proposal to require that coverage determinations be finalized before any labeling, standards, or test procedure rulemakings begin and appreciate that DOE proposes to do so six months prior to initiating a test procedure rulemaking. This approach is necessary because it is virtually impossible to address issues of substantive regulation until the products at issue have been clearly and specifically defined.

We also appreciate DOE's recognition that any proposed covered products/equipment should be narrowly defined with sufficient clarity so that the proposed coverage corresponds to that which is intended. At best,

² See *id.* At 57439, 57444, 57445, 57447, 57449, 57453 (DOE concludes on multiple bases to meet the "clear and convincing evidence" threshold without identifying any evidence); *Compare* Energy Conservation Program: Test Procedure for Commercial Packaged Boilers, 81 *Fed. Reg.* 79224 (November 10, 2016) with Energy Conservation Program: Test Procedure for Commercial Packaged Boilers, 81 *Fed. Reg.* 89276 (December 9, 2016) (two versions of the same final rule, the former contains no justification or reference to DOE's clear and convincing evidence requirement. That version was "withdrawn and reissued" less than thirty days later, now generally concluding that its findings met the high threshold. The re-issue appears to be a classic case of post-hoc rationalization that leaves stakeholders with the impression that DOE is willing to conjure clear and convincing evidence from nothing.)

a lack of clarity as to coverage produces unnecessary confusion and results in a waste of resources; at worst, it can lead to a failure to address critical issues relevant to “covered products” that are not clearly identified as such. Accordingly, we also fully support DOE’s proposal that if, during the substantive rulemaking proceeding DOE finds it necessary and appropriate to expand or reduce the scope of coverage, a new coverage determination process will be initiated at that point and finalized prior to moving forward with the test procedure or standards rulemaking. That process will ensure that stakeholders and DOE know what product or products are at issue in the substantive rulemakings and that the scope does not inappropriately change mid-rulemaking.

VI. Early Stakeholder Input

A. Early Assessment

The Joint Commenters enthusiastically support the proposed early assessment process; however, we would limit the early assessment process (as we understand it) to the *amendment* of existing energy conservation standards, and not to new standards, for reasons that we explain below.³ Early assessment improves and streamlines the Department’s approach to rulemaking by identifying early in the process how DOE should use its resources. We believe that the early assessment can be executed in multiple ways relative to the complexity and history of the covered product or equipment in question.

In particular, the notice of the Department’s consideration to initiate a rulemaking should include a Request for Information (RFI) and the notice should specifically invite public comment and data on whether a rulemaking will likely be able to conclude that an amended rule will be able to improve energy efficiency, reduce energy or water use, while meeting the statutory requirements that such a rule is economically justified, technologically feasible, and produces significant energy savings. In the case of a covered product that was the subject of a Final Rule, DOE should state it will consider the prior rulemaking record and any additional information that either its own research or information received from the public comments to make a determination required by 42 U.S.C. §6295(m)(1)(A) or issue an ANOPR or a notice under §6295(m)(1)(B). Stakeholders’ first opportunity to comment on the alternative outcomes contemplated by §6295(m)(1) should not be in response to a Notice of Proposed Rulemaking.

The primary goals of the early assessment exercise are: (1) give equal weight, at least at the earliest stage, to issuing a proposed determination of no new standard or an ANOPR or framework document;⁴ (2) take advantage of DOE’s accumulated knowledge base with respect to prior regulation of these covered products and equipment and the cumulative regulatory impact of multiple DOE or related regulations on the same companies or industries; and (3) pursue EPCA regulation to deploy DOE’s resources where it makes sense statutorily.

We envision a process, anchored in statutory authority under EPCA, as described on the next page:

³ “First time” or “new” rulemakings: (1) those that Congress has directed DOE to undertake where Congress has not legislated energy conservation standards, and (2) those that DOE initiates pursuant to 42 U.S.C. §6295(*l*) or §6313.

⁴ Both statutory outcomes are contemplated by 42 U.S.C. § 6295(m)(1) at the early stages of the rulemaking process.

Early Assessment

DOE publishes a Notice and Request for Information (RFI) in the Federal Register noting agency is contemplating an appliance efficiency rulemaking to determine whether to amend energy conservation standard(s) for a covered product.

RFI solicits public comment and data on whether a rulemaking will or will not be likely be able to conclude that a [new or] amended rule will be able to improve energy efficiency, reduce energy or water use, while meeting the statutory requirements that such a rule is economically justified, technologically feasible, and produces significant energy savings. In the case of a covered product that was the subject of a Final Rule, DOE will consider the prior rulemaking record and any additional information that either its own research or information received from the public comments to make a determination required by 42 U.S.C. §6295(m)(1)(A) or issue and ANOPR or a notice under §6295(m)(1)(B).

Early Assessment indicates statutory requirements will likely not be met

Early Assessment indicates statutory requirements may be met

Based on the information obtained in connection with its early assessment, the Secretary preliminarily determines that standards for the product do not need to be amended and publishes proposed rule. 42 USC §6295(m)(1)(A) and (p)(1), and invites public comment. §6295(m)(2).

The Secretary publishes an Advanced Notice of Proposed Rulemaking (ANOPR) or similar document including Notice of Data Availability and proposed candidate standards based on criteria established under subsection 6295(o), and invites public comment.

A rule will not meet statutory requirements

Public comments indicate statutory requirements may be met

A rule will likely meet statutory requirements

Secretary determines not to amend and publishes final rule. 42 USC §6295(p)(3).

Secretary publishes Notice of Proposed Rule (NOPR) including proposed standard(s) for covered product based on criteria established under subsection 6295(o) and analysis of candidate standards. 42 USC §6295(m)(1)(B) and (p)(2).

A rule will not meet statutory requirements

Rule meets statutory requirements

Secretary publishes Final Rule adopting a [new or] amended standard(s) for covered product. 42 U.S.C. §6295(m)(3) and (p)(3).

B. Preliminary Rulemaking Notice

Following the completion of the early assessment, we support DOE's proposal to publish a preliminary rulemaking document concluding that the statutory requirements for amendment of a rule cannot be met or that those requirements may be met, and agree that the latter can take the form of either an ANOPR, or framework document containing available data with preliminary analysis that identifies candidate standards levels and other relevant information consistent with the Proposed Process Rule. In response to that preliminary document, stakeholders can comment on the DOE's preliminary analysis or further inform DOE that a rulemaking is or is not justified based on data, lack of change in the market or lack of advancements in efficiency technology. In response to public comment and further analysis, DOE can determine that standards for the covered product should not be amended or, alternatively, moved forward with a Notice of Proposed Rulemaking detailing trial standards levels considered by the DOE and further information about its proposal and the alternatives considered.

C. The Proposed Process Rule Memorializes a Procedural Prompt to Consider the Notices of Determination Contemplated by 42 U.S.C. §6295(m)(1)

Ultimately, a consistent procedure that requires the Department to consider notices of determination early in the process is important and assists DOE in meeting its rigorous statutory obligations. EPCA plainly grants DOE authority to issue determinations of no new amended standards after considering three simple factors: significant energy savings, technological feasibility, and cost effectiveness. 42 U.S.C. § 6295(m)(1)(A) & (n)(2). If any of these three factors cannot be satisfied, then DOE shall not amend standards. However, DOE has rarely issued such determinations and even less often DOE reaches its conclusion as expeditiously as is contemplated in 42 USC 6295(m)(1). This is despite the fact that rulemaking records for those products where DOE issued a determination of no amended standard indicate no or very limited room for amending an energy conservation standard under the statute. It is vital that the Process Rule make viable the option of saving time and resources through well-reasoned early determinations of no new standard. Likewise, it is imperative that the Process Rule permit DOE to issue the determination without the performance of a full-scale regulatory work-up. This early analysis is expressly permitted by EPCA, which does not contemplate multi-year rulemaking procedures for notices of determination of no new standard. 42 U.S.C. § 6295(m)(1)(A).

Critically, DOE has developed the experience to make an early reasoned assessment. During the 2018 public meeting in response to the DOE's Request for Information, it was noted that much has changed since 1996 when the Process Improvement Rule was first adopted, and DOE had relatively little experience with EPCA rulemakings. The statute has also changed. Now, more than 20 years after the Process Improvement Rule was first adopted and dozens of appliance efficiency rulemakings later, DOE has considerable experience not only with the regulatory analysis under EPCA but also with the application of that analysis to the myriad covered products that have gone through multiple rulemakings. For many of these products there is a trove of learning in the prior rulemaking on which DOE decided that a candidate standard could or could not be economically justified. In addition, Congress enacted continuing serial rulemaking into EPCA (42 U.S.C. §6295(m)) in 2007 that requires mandatory review every six years. This requires DOE to initiate an EPCA rulemaking process anew for a given covered product at a time when the ink is barely dry on the prior rulemaking, before the previous rule even takes effect, and while the prior rulemaking record still contains relevant facts and analysis. In those circumstances, it is legitimate to look back at the recent record and ask: what has materially changed since the last rulemaking just a couple of short years ago? DOE can update its prior research rather quickly and ask stakeholders what has changed in a few short years. DOE can easily build on an existing knowledge base and does not need to reinvent the wheel.

The Proposed Process Rule, if promulgated, would require the Department to address these questions. The responses inform DOE's consideration of the prospect of no new standard early in every rulemaking process and thus addresses DOE's historical hesitation to issue determinations. 42 U.S.C. §6295(m)(1). DOE should take deliberate steps toward reducing its unmanageable workload and exercise its authority to notice a determination, and an early assessment drives the needed deliberation.

DOE lacks the resources to handle a multitude of rulemakings simultaneously, nor is it justified or required under the law. A viable determination process will improve DOE's productivity to everyone's gain.

We reiterate our support for the DOE's early assessment and believe that it will permit the Department to meet its statutory deadlines and requirements.

VII. Significant Energy Savings Analysis

The Joint Commenters support the proposed Significant Energy Savings analysis as a reasonable and efficient means to ensure that DOE is meeting its statutory requirements by promulgating cost effective rules that generate significant energy savings. We note that the Significant Energy Savings analysis is a methodology rather than an independent notice in the Federal Register. We expect that DOE will provide the results of its Significant Energy Savings analysis in the preamble of either a Notice of Proposed Determination of No New Standard or Notice of Proposed Rulemaking.

A. Significant Energy Savings Definition

The Joint Commenters support the Department's proposal to define "significant energy savings." DOE has the authority to interpret the statute and its proposed interpretation is reasonable.

The Joint Commenters believe that the proposed definition of significant energy savings is reasonable, although our analysis of 21 rulemakings demonstrates that 1.0 quad over 30 years could be a more appropriate threshold.⁵ Importantly, the incorporation of the significant energy savings analysis step will further aid DOE's prioritization of time and resources by determining whether a rulemaking has the potential to result in significant energy savings prior to conducting a multi-year analysis. We concur that a ten-percent increase in efficiency for products that do not meet the gross .5-quad threshold is appropriate.

A bright-line rule provides certainty and predictability. It permits stakeholders to engage and provide relevant comments to inform the Department on this point. The proposal clearly outlines DOE's methods for assessing whether amended standards will result in significant energy savings. The max-tech assessment followed by assessments at each trial standard level appears reasonable and orderly. We appreciate the Department's transparency and support the suggested methodology.

VIII. Test Procedures

The Joint Commenters also support the concept of early opportunity for engagement for test procedure rulemakings. Today, the Department frequently issues RFIs to collect data and information on a test

⁵ NEMA submitted comments in a rulemaking that graphically demonstrated anticipated energy savings from several rules together with the projected impact on manufacturers as represented by a decline in industry net present value (INPV). There were a number of rulemakings that would yield less than 0.5 quads energy savings over thirty years (and some under 1 quad) and yet had a very significant negative impact on manufacturers as represented by the reduction of industry net present value due to new regulation. These were not "cost free" standards. See NEMA Comments dated June 30, 2014 at pages 2-5, DOE Dkt. EERE-2011-BT-STD-0006.

procedure. For example, DOE recently released an RFI for automatic commercial icemakers, and last summer AHRI responded to RFIs on test procedures for water source heat pumps and single package vertical units. We believe that the RFI provides enough notice that DOE is considering a test procedure rulemaking and provides ample opportunity to comment if changes are not warranted. The description of the early stakeholder engagement in the proposal is ambiguous as to whether an RFI would suffice as that initial announcement of consideration of a rulemaking, or whether an additional announcement and opportunity for comment will occur prior to the RFI. We believe that one preliminary notice and opportunity to comment is sufficient, and additional notices may be deployed where necessary, but are not mandated.

The step-by-step proposal for early engagement could be clarified in greater detail. The Joint Comments suggest that the final rule provide more information and context. We understand the proposal starts with notice announcing DOE's initiation of the test procedure rulemaking, followed by a comment period. In response to comments, the Department must decide either that amendments are not justified and issue a notice of that decision, or that amendments are justified and move directly to a Notice of Proposed Rulemaking. If this understanding is not correct, we would appreciate a more detailed description of the approach in the final rule. If it is correct, we support it and urge DOE to finalize it.

A. Expedited Procedure for Quick Fixes

Test Procedures frequently involve complex equations and actions that must be executed by regulated stakeholders to arrive at the ultimate energy measure. The Joint Commenters have identified occasional errors in test procedure equations and calculations or discrete practical challenges that had not been anticipated during the rulemaking phase. For example, AHRI has identified a potential error in the calculation for recovery efficiency for water heaters as well as a calculation error in the central air conditioning test procedure at Appendix M1. As another example, DOE's quick action to adopt alternative dishware for the dishwasher test procedure when availability of the existing dishware became difficult allowed companies to continue testing. Delays in such decisions would cause delays in testing and, thus, in getting products to market.

We recommend that the Department consider including an opportunity for DOE to adjust and address test procedure amendments on an expedited basis, such as a petition from stakeholders. An expedited process would not be intended to address sweeping changes to the method of test, but could fix errors or address burdensome practical challenges in execution of the test that had not been anticipated during the rulemaking stage.⁶ From time to time, mistakes or challenges are not discovered until the test procedure is effective, and DOE should have some backstop mechanism to fix equations or make adjustments in an expedited fashion, preferably upon petition from interested stakeholders.

B. The Joint Commenters Support Test Procedure and Standards Rulemaking Sequencing

The Joint Commenters strongly support the proposal to finalize a test procedure six months prior to a Notice of Proposed Rulemaking on an applicable energy conservation standard. As DOE is aware, the Joint Commenters have requested formal codification of such sequencing since the DOE abandoned this practice in 2010. As we have previously commented, the appropriate sequencing allows predictability, transparency, and the opportunity for stakeholders to understand the ramifications of the DOE's rulemaking proposals. Only after real-world testing can manufacturers, and indirectly DOE and the public, be comfortable that the implications for the test procedure's application to a revised standard are fully understood. We applaud the Department's proposal and agree that six months or more is an appropriate sequencing timeframe.

⁶ The Error Correction Rule, adopted in response to the Walk-in Cooler Freezer litigation, is not a model for this suggestion. That rule was promulgated to identify errors before an energy conservation standard is finalized, but test procedures are not inhibited by the anti-backsliding provision.

One additional consideration is the challenge of the ripple effect caused by energy measure changes.⁷ If the Department makes test procedure changes that impact a product's measure of energy, the certification templates, literature, websites, utility programs, and occasionally statutory incentive programs must all adjust accordingly. EPCA stipulates that test procedure amendments are effective six months to a year after finalization. That short time frame is valuable in many cases, such as when DOE is addressing an error or where there is no change to measured energy. However, when DOE test procedure amendments significantly impact measured energy, an appropriate model for implementing effective dates is the CAC/HP Appendix M and M1 amendments. In that case, DOE implemented test procedure amendments in stages. DOE adopted modest changes effective in the short term but prescribed more significant changes to take effect simultaneously with the change in energy conservation standard. This allows industry time to prepare for new energy measures and aligns that shift with new energy conservation standards, rather than in disjointed steps. Where possible, the implementation of new energy conservation standards, methods of test, representations, and certification reports should all occur simultaneously.

C. Adoption of Consensus and Proven Test Procedures Already Used by Industry

The Joint Commenters support DOE's proposal to recognize as a starting point and presumptively adopt consensus and proven test procedures already in use by industry and others as methods of test for all applicable products and equipment. For some commercial and industrial products, EPCA requires DOE to adopt consensus test procedures and amend those procedures to align with changes in those consensus standards already adopted by industry. *See e.g.*, 42 U.S.C. § 6314(a)(4), (5), (6), (7). DOE has not consistently adhered to this statutory mandate, and we favor a Process Rule that reinforces this statutory requirement in those cases. As discussed above, DOE's clarification of the "clear and convincing" threshold aids this process. The benefit of this policy is that it enables more rapid compliance and confidence in the adoption of energy conservation standards by regulated parties. Such procedures are consistent with EPCA's mandate and likely are "not unduly burdensome to conduct." 42 U.S.C. §6293(b)(3).⁸

DOE acknowledges in the Proposal that modifications to consensus test procedures used by industry creates an often unjustified burden on industry. Skeptics assert that government reliance on these consensus standards creates potential conflicts. These assertions are unfounded. In fact, every executive administration since 1998 has issued and re-issued Office of Management and Budget (OMB) Circular A-119, which mandates that administrative agencies rely on consensus standards in rulemakings except where impracticable or inconsistent with the law. Congress similarly values industry consensus standards, as

⁷ 42 U.S.C. § 6293(e) specifies that if a test procedure amendment changes the measure of energy, DOE must do a crosswalk in the same rulemaking as the test procedure amendment. EPCA likely anticipated that a simple degradation factor or default value would suffice as a crosswalk, but the complexity of energy measurements has outstripped those expectations. Crosswalks are challenging for the Department to promulgate and burdensome for manufacturers to execute. In recent years, DOE has avoided this challenge by improperly claiming that changes to energy measures are "*de minimis*." Joint Commenters prefer for DOE to strongly consider the implications of its test procedure "tweaks" and modifications to ensure that it is not changing the measure of energy without appropriately addressing that change as required by statute.

⁸ 42 U.S.C. § 6293 cites several standards containing test procedures widely used by industry developed by outside standards bodies accredited by ANSI: Illumination Engineering Society (IES), American Society of Mechanical Engineers (ASME), American Society for Testing and Materials (ASTM), American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE), ANSI Accredited Standards Committees, as well as the Environmental Protection Agency's Energy Star Program. *See* 42 U.S.C. § 6293(b)(5)-(18). *See also* 42 U.S.C. § 6293(f)(2)(test requirements for vending machines shall be "based on existing test procedures used in industry" to the maximum extent practicable).

reflected in the National Technology Transfer and Advancement Act of 1996 (NTTA). The NTTA directs federal agencies to adopt voluntary industry consensus standards unless inconsistent with the law or impracticable. The Proposed Process Rule aligns with decades-old executive and Congressional policy goals.⁹ These consensus standards are developed in technical committees populated by persons with considerable subject-matter expertise where industry is but one stakeholder in a larger group. Importantly, DOE is always welcome to participate in the consensus standard development process.

Notably, OMB A-119 and the NTTA both require that federal agencies adopt only those standards promulgated by consensus bodies. Many of the Joint Commenters are accredited standards development organizations. The American National Standards Institute (ANSI) sets robust protocols and rules of engagement for standards-writing organizations. AHAM, AHRI, ASHRAE, NEMA, and other accredited standards developers all adhere to the ANSI procedures designed to maximize equity, participation, and balance. For example, pursuant to these procedures, DOE and other interested stakeholders actively participate in the development of AHRI standards. HVACR industry experts have been developing standards for more than sixty years. In that time, the consensus standards writing bodies have served as the primary forum for test procedure development.

Importantly, the technical experts best informed to draft test procedures are the industry engineers who design the equipment. Their jobs rely on their ability to execute the test, potentially hundreds of times. Standards are so named because they set a level playing field for all competitors—an axiom that drives the technical experts to draft a test procedure that is repeatable, reproducible, meaningful, fair, but not overly burdensome.¹⁰

One consideration that the Process Rule should address is how it interacts with DOE's test procedure waiver procedures. If a test procedure does not adequately address a covered product, the manufacturer may apply for a waiver, and DOE is thereby prompted to amend its test procedure to bring that unique product into scope. If DOE is relying on consensus standards—those standards are not subject to the same regulatory prompt. DOE should consider a means of including “waived” products into newly promulgated test procedures if the consensus standard body does not act to affirmatively expand its scope to include those products. Occasionally, the standards-writing body lacks expertise and resources to cover all potentially regulated products. DOE can and should expand upon the scope of a consensus standard without changing the test methods for other products.

IX. Direct Final Rules

The Joint Commenters request that DOE revisit its proposal on Direct Final Rules (DFRs). With one exception, DFRs have been a successful tool for promulgating rules, particularly those negotiated among groups of stakeholders. DOE proposes to permanently separate DFRs from the formal negotiated rulemaking process administered under the Appliance Standards Federal Rulemaking Advisory Committee (ASRAC). The Joint Commenters strongly disagree with that approach.

⁹ One important policy goal is competition in the global marketplace. Manufacturers compete in a global marketplace—if test procedures for products made and sold in the U.S. are needlessly more burdensome than their offshore competitors, then U.S. products are disadvantaged in the global marketplace.

¹⁰ That said, from time to time errors will occur in a calculation or equation. Occasionally, the industry experts will underestimate a procedural impact or misjudge a step in the test method. As discussed above, the Joint Commenters reiterate their request for an avenue wherein DOE can expedite minor error corrections or modifications to test procedures, upon petition, to address unexpected challenges in execution that may arise.

DOE's statutory authority to publish a DFR is premised on a negotiation of balanced group of stakeholders resulting in a term sheet. ASRAC-negotiated rulemakings are exactly that—a compromise of a diverse group of stakeholders resulting in a term sheet recommendation to the DOE. There is no legal reason to bar the use of DFRs for negotiated rulemaking purposes. DOE's concern that the Federal Advisory Committees Act (FACA) requires it to issue a Notice of Proposed Rulemaking is satisfied by the requirement in 42 U.S.C. 6295(p)(4)(A)(i) that the Department issue a final rule concurrently with a Notice of Proposed Rulemaking. The legal policies and language of the FACA and ECPA align to grant DOE ample authority to use the DFR avenue at the close of an ASRAC negotiation.

The Joint Commenters have participated in multiple successful negotiated rulemakings that have resulted in good rules published as DFRs. Negotiated rulemakings require compromise and give-and-take. The prospect of a DFR in lieu of a Notice of Proposed Rulemaking facilitates compromise by giving interested stakeholders a sense of relative certainty about the outcome of the agreement. We strongly recommend that DOE reverse its position on the availability of DFRs for ASRAC-negotiated rulemakings. That procedure works; it is open and transparent to all stakeholders, whether or not they participate in the negotiating working group, throughout the negotiation process.

The Joint Commenters reiterate our comments on the RFI with regard to the definitions of “fair representative points of view.” Namely, we encourage the Department to be flexible and to avoid an interpretation where every possible point of view must be represented for a DFR to proceed. Such an approach is overbroad, impracticable, and would artificially and unfairly foreclose the DFR avenue. Likewise, DOE should maintain flexibility in determining the quantity and quality of comments considered “adverse.” DOE should fairly evaluate the substance and quality of the adverse comments before exercising its discretion to convert the DFR into a Notice of Proposed Rulemaking and potentially wasting hundreds of cumulative hours of effort.

X. Negotiated Rulemakings

The Joint Commenters support the negotiated rulemaking process in use today. We support DOE incorporating negotiated rulemakings into the Process Rule for the first time.

We agree that not all rules should be negotiated, and we reiterate our support for the five criteria supporting a negotiation:

1. Stakeholders' comments in favor of negotiated rulemaking in response to initial rulemaking notice;
2. The complexity of the technologies and questions presented by the underlying rulemaking;
3. The rulemaking includes standards that have already been amended one or more times;
4. Stakeholders from differing points of view are willing to participate; and
5. It is reasonable to believe that the parties may be able to reach an agreement.

We also agree with DOE's suggestion that test procedure rulemakings that contemplate the adoption of consensus standards are not generally best suited for negotiation. The Joint Commenters support the use of an experienced convener to guide the rulemaking process, but caution that the Department must be deliberate in its choice of convener to select individuals who will fairly facilitate the conversation.

In summary, the Joint Commenters support the continued success of negotiated rulemakings, and with the important exception of seeking the continued availability of DFRs, we agree with the concepts outlined in the proposal.

XI. Other Revisions and Issues

DOE also requests comments on three other issues:

1. DOE's Analytical Methodologies Generally,
2. Cumulative Regulatory Burden and
3. Should DOE conduct retrospective reviews of energy savings and costs of energy conservation standards?

The Joint Commenters believe that these are three serious issues that deserve full consideration by DOE. In addition, DOE has raised the issue of the timing of the consideration of its analytical models and the related peer review process.

A. Timing of the Analytical Review Process

In its public meetings on the Proposed Process Rule, DOE has stated that it may defer the peer review panel and other related matters until a future time. The Joint Commenters strongly urge DOE not to delay its review of the analytical methodologies through peer review. The argument, stated by some commenters in the second public meeting, is that DOE needs to devote all its resources to meeting its regulatory schedule and that considering its analytical methods is an unacceptable diversion of DOE's resources.

This argument is misguided at its core. As the Joint Commenters, and many others, have pointed out for years, the current DOE methodologies are seriously flawed. Proceeding to produce standards using flawed methodologies is a foolish approach. It may result in standards, but many of those standards will be at incorrect levels, needlessly increasing costs to consumers and causing manufacturers and others to misallocate resources. A completed set of bad standards is worse than a delayed set of good ones.

Secondly, this argument is largely factually incorrect. A sound peer review analysis should be conducted by a third-party panel, not by DOE. It should not involve a significant use of DOE staff time. If it does require significant DOE staff time, it is almost certain to be done incorrectly and not through an independent review. Such a review may require time by DOE contractors, manufacturers, and other parties with views on the analytical process. The Joint Commenters believe that this time requirement will be the same whenever the review is done, so there is no advantage from delay. The Joint Commenters are prepared to devote the time necessary for a solid, substantive review.

B. DOE's Analytical Methodologies Generally

As the Joint Commenters pointed out in their comments of July 14, 2017, for Regulatory Burden Reduction RFI and on March 2, 2018, for the Process Rule RFI, DOE must take a comprehensive review of all of its tools and methodologies for setting energy conservation standards. In this NOPR, DOE is proposing to conduct reviews of twelve potential focus areas for "Analytical Overview" and 2-3 Rule Case studies. The Joint Commenters strongly support the concept of these reviews. The Joint Commenters have several additional suggestions dealing with both the approach and content of these reviews.

Approach

DOE is proposing to conduct a peer review of its analytical approaches and models. The Joint Commenters support this proposal. There have been disputes about many of the models and assumptions for decades, making an independent review warranted and necessary. Some commenters at the April 14 public meeting suggested that DOE conduct more frequent or continuous reviews. In principle, this makes sense and DOE

should reconsider how frequently and in what venues it reviews its approaches. That said, DOE needs a first step to clear out the backlog of comments and critiques.

The review process should be conducted in the most professional and public way possible. This means that:

1. The composition of the peer review panels must include people who are technically competent to review economic, cost, energy, and other matters. The composition of the panels should be determined in a public process with advice and comment from the public on the panels' composition. One possibility would be for ASRAC to review and approve the composition of the panels.
2. DOE has referenced OMB's Information Quality Bulletin for Peer Review. The members of the peer review panels should conform to the standards for "Highly Influential Scientific Assessments."
3. The peer review panels should not be constrained to the twelve topics currently identified by DOE. These should be viewed as a *minimum* scope. Rather, the peer review panels should look at DOE's analytical processes with a clean slate. For example, the Joint Commenters suggested a fundamental reconsideration of the approach to Consumer Analysis in their comments of March 2, 2018 (pp. 26-28). There may be many other alternatives. The peer review panels should not be constrained within the current structures. In this regard, the Joint Commenters note that NEEA, NEEP, PG&E and National Grid have recently submitted a report "Investigation of Installation Barriers and Costs for Condensing Gas Appliances" in response to DOE's request for comment on a request for a two-class furnace rule (EERE-2018-BT-STD-0018-0062). The Joint Commenters do not agree with all the findings of this report, which contradict findings in previous surveys of contractors by AHRI, ACCA and PHCC. Nevertheless, this study represents a serious attempt to provide data and insight on a critical issue outside of the current analytical modeling approaches undertaken by DOE. More work like the NEEA, NEEP, PG&E and National Grid study and the AHRI, ACCA and PHCC surveys should be considered by the peer review panels as alternatives or guideposts to analytical models.
4. The peer review panels should hold hearings, not presentations by DOE or its contractors, prior to beginning the peer review process. These hearings should be designed to help guide the peer review panels in determining which topics they should pursue and what alternatives they should consider.
5. The peer review panels should then present their tentative findings for public review and comment prior to finalizing their reports.

Potential Focus Areas

DOE has proposed twelve potential focus areas for the "Analytical Overview:"

- Analytical time horizon,
- Baseline efficiency estimates,
- Consumer choice model.
- Emissions analysis,
- Fuel switching analysis,
- Indirect employment effects,
- Marginal manufacturer markup,
- Product price forecasts,
- Product performance,
- Subgroup analysis,

- Use of proprietary data, and
- Welfare analysis and deadweight loss

The Joint Commenters have no objections to these items and propose that they serve as the *minimum* list of topics. The peer review panels should solicit suggestions from interested parties on which topics to review and on what issues are involved.

In addition, the Joint Commenters propose that the peer review process should add consumer discount rates and the use of learning or experience curves in projecting future product prices.

One topic is of specific concern to the Joint Commenters: “Marginal manufacturer markup” is an incomplete category. The Joint Commenters and others have long pointed out that the marginal markup concept at the distributor, retailer, and contractor levels is incorrect. So focusing on marginal markups only at the manufacturer would be a step backwards. Any review of markups should be comprehensive and across the total chain from factory to consumer. That said, the Joint Commenters can say nothing about their members’ markups and what they may or may not be following efficiency standards.

The Joint Commenters also propose that the peer review process consider the definition of “Maximum Technically Feasible” product configuration. At the current time, DOE can set this level based on technologies that are not proven in the marketplace or are not proven in combination with each other. Research and development laboratories are littered with good ideas that have never made it into the market. The only thing that is certain about laboratory developments is that they will cost more, do less, and take longer to come to market than projected in the laboratory studies. In addition, not all technical developments can be combined with each other successfully. Therefore, DOE should only consider technology options that are actively produced and available in the marketplace.

DOE has also asked for comment on the use of the “walk-down” approach for assessing different potential standards versus comparing any potential standard level to the range of available choices. The Joint Commenters support a full consideration of the consumer choice frameworks used by DOE, including both “walk-down” and alternatives, as well as the random assignment of base case efficiencies currently used in the life-cycle costing analysis. The Joint Commenters do not take a position on the “walk-down” approach and alternatives until all possible approaches have been reviewed in the context of how they would affect particular analyses. In this context, a clear example of the “walk-down” approach is essential. The complexity and subtlety of translating theoretical approaches to practical situations are high and fraught with unintended consequences. Questions such as how to handle consumer choice reinforce the need for a rigorous, open peer review process carried forth by people with expertise in economics, consumer choice, engineering, financial analysis, and modeling.

C. Cumulative Regulatory Burden

DOE currently addresses cumulative regulatory burden on manufacturers as one discussion aspect of its assessment on impacts on manufacturers. The Joint Commenters propose that DOE incorporate the financial results of the current Cumulative Regulatory Burden analysis directly into the Manufacturer Impact Analysis. This can be done by adding the combined costs of complying with multiple regulations into the Product Conversion Costs in the Government Regulatory Impact Analysis (GRIM) model. An appropriate approach would be to include the costs to manufacturers of responding to and monitoring regulations. AHRI has submitted to DOE unit costs for regulatory monitoring and compliance (Costs of Federal Regulations for Residential Heating and Air Conditioning Equipment Manufacturers – May 2013), this analysis or a similar one would provide the additional information needed by DOE to augment its current analysis to cover the cumulative impact of responding to multiple regulations. This is a minimum level of consideration as it ignores the considerable costs of capital conversion expenses.

In addition, the current Manufacturer Impact Analysis does not accurately reflect the costs of complying with multiple regulations on the same product. Again, as shown in the *Costs of Federal Regulations for Residential Heating and Air Conditioning Equipment Manufacturers* study, the cost to manufacturers of redesigning products on a cycle shorter than the statutory minimum period between standards (such as complying with both furnace and furnace fan standards or efficiency and refrigerant standards) can be hundreds of millions of dollars. At the moment, including those costs as stranded assets has the effect of changing the depreciation tax shield, a minimal recovery. More appropriately, the Manufacturer Impact Analysis should merge the GRIM analyses for both regulations to assure that the cash flow analysis includes all costs.

D. Retrospective Reviews

The Joint Commenters reiterate their comments from the original RFI: “we do not support a separate process to do a retrospective review of current standards. Such a review will essentially be another rulemaking and will significantly draw out the regulatory process.”

Determining what actually happened following the implementation of standards is an incredibly complicated process of determining both what actual changes took place and what would have happened in the absence of standards. There is no public data to support such an analysis and the cost to manufacturers of developing this data is very high. The necessary data is not produced in the normal course of business and is, thus, not readily available to manufacturers. Further, it involves highly proprietary and confidential information.

Doing a bad or incomplete job would result in misleading conclusions. In general, the Joint Commenters wish to leave to the peer review panels consideration of specific topics. However, the Joint Commenters do wish to take issue with one statement made at the April 14 public meeting. An attendee stated that DOE has consistently overstated the future cost of regulated products. The implication, if not the actual statement, is that DOE has overstated the cost of complying with standards. As AHAM and AHRI have commented in the past, these statements about prices/costs are based on statistical analyses of price trends over time. The studies in no way demonstrate any form of causality (i.e., that standards drive down costs) nor do they demonstrate that DOE has incorrectly forecast the cost of compliance. Among other flaws, all of these studies are flawed by the absence of a base case – what would have happened in the absence of standards – effectively making these studies worthless. The context of the broad literature and the complexity of the arguments on both sides of this issue further underscore the need for peer review panel members deeply qualified in economics and regulatory analysis.

The Joint Commenters also reiterate their support for a review of what has changed in the cost or energy savings projections for the design options considered in previous standards. If nothing, or very little, has changed, then the presumption should be that the existing standards are appropriate, and DOE should not make a change. DOE has, in the previous rulemaking, concluded that no more stringent standard met its own criteria. That should be determinative.

XII. Conclusion

AHRI represents more than 300 manufacturers of air conditioning, heating, and commercial refrigeration equipment. It is an internationally recognized advocate for the HVACR industry and certifies the performance of many of the products manufactured by its members. In North America, the annual economic activity of the HVACR industry is more than \$286 billion. In the United States alone, our industry, including manufacturers, distributors, contractors, and technicians, employs approximately 1.3 million people.

AMCA International is a not-for-profit trade association with more than 380 member companies worldwide representing more than \$3 billion in annual revenue. Member companies are manufacturers of fans, dampers, louvers, air curtains, and other air-system products for commercial HVAC; industrial process; and power-generation applications. AMCA's mission is to advance the health, growth, and integrity of the air-movement-and-control industry with programs such as certified ratings, laboratory accreditation, verification of compliance, and development of international standards.

ALA represents over 3,000 members in the residential lighting, ceiling fan and controls industries in the United States, Canada and the Caribbean. Member companies are manufacturers, manufacturers' representatives, retail showrooms and lighting designers that have the expertise to educate and serve their customers.

AHAM represents manufacturers of major, portable, and floor care home appliances, and suppliers to the industry. AHAM's more than 150 members employ tens of thousands of people in the U.S. and produce more than 95% of the household appliances shipped for sale within the U.S. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

HPBA is the principal trade association representing the hearth products and barbecue industries in North America. HPBA's members include manufacturers, retailers, distributors, manufacturers' representatives, service installation firms, and other companies and individuals who have business interests related to the hearth, patio, and barbecue industries. HPBA's core purpose is to promote the welfare of the industries it serves, and one of its critical roles is to serve as an advocate representing the interests of these industries and of its individual members in matters involving the development or implementation of laws or regulations that affect them.

HARDI is a trade association comprised of nearly 1,000 member companies, nearly 500 of which are U.S.-based wholesale distribution companies. More than 80 percent of HARDI's distributor members are classified as small businesses that collectively employ over 40,000 U.S. workers, representing more than \$16 billion in annual sales and an estimated 85 percent of the U.S. wholesale distribution market of heating, ventilation, air-conditioning and refrigeration (HVACR) equipment, supplies, and controls.

NAFEM is a trade association of more than 550 commercial foodservice equipment and supplies (E&S) manufacturers – a \$13 billion industry. These businesses, their employees and the products they manufacture, support the food away from home market – which includes more than one million locations in the U.S. and countless more around the world.

NEMA represents 350 electrical equipment and medical imaging manufacturers at the forefront of electrical safety, reliability, resilience, efficiency, and energy security. Included in NEMA membership are manufacturers of universal power supplies, electric motors and drives, lighting products, distribution transformers, wire and cable, and a wide variety of other electrical products. Our combined industries account for more than 400,000 American jobs and more than 7,000 facilities across the United States. Domestic production exceeds \$114 billion per year and exports top \$50 billion.

Plumbing Manufacturers International (PMI) is the nation's leading trade association for plumbing product manufacturers. Its members produce 90 percent of the plumbing products sold in the United States and

employ thousands of workers in over 70 locations in 25 states. Our member companies' plumbing products are found in the majority of homes, commercial buildings, schools, restaurants, manufacturing facilities, hospitals, and hotels across the nation. Examples of these products include, but are not limited to kitchen and bathroom faucets, toilets, showerheads, urinals, fixture fittings, sinks, whirlpools/tubs, water fountains, and waste disposal systems. PMI member companies continue to raise the bar in developing the most advanced water-efficient plumbing products.

The Joint Commenters appreciate the opportunity to provide these comments to the Department. DOE's time and effort is evident in the Proposed Process Rule, and we look forward to a finalized rule, preferably in the very near term, that will provide the basis for valuable test procedure and energy conservation rulemakings in the future.

Respectfully submitted,



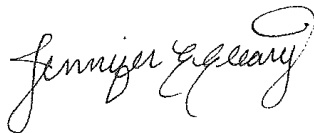
Caroline Davidson-Hood
General Counsel
Air-Conditioning, Heating and Refrigeration Institute



Michael Ivanovich
Senior Director, Industry Relations
AMCA International



Eric Jacobson, CAE
President/CEO
American Lighting Association



Jennifer Cleary
Senior Director, Regulatory Affairs
Association of Home Appliance Manufacturers



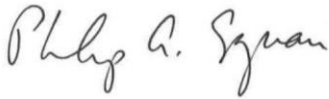
Palmer Schoening
Vice President, Government Affairs
Heating, Air-conditioning, & Refrigeration Distributors International



Ryan Carroll
Vice President—Government Affairs
Hearth, Patio & Barbecue Association



Charlie Souhrada, CFSP
Vice President, Regulatory & Technical Affairs
National Association of Food Equipment Manufacturers



Philip Squair
Vice President, Government Relations
National Electrical Manufacturers Association



Matt Sigler
Technical Director
Plumbing Manufacturers International