



Shaping Tomorrow's  
Built Environment Today

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September 13, 2021

Ms. Kelly Speakes-Backman  
Assistant Secretary (Acting)  
U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy  
1000 Independence Avenue SW  
Washington, DC 20585

Sent via E-mail to: [processrule2021STD0003@ee.doe.gov](mailto:processrule2021STD0003@ee.doe.gov)

**Re: 2<sup>nd</sup> 2021 Process Rule NOPR**  
**Docket Number EERE-2021-BT-STD-0003**  
**Regulatory Information Number (RIN) 1904-AF13**

Dear Assistant Secretary Speakes-Backman:

ASHRAE appreciates the opportunity to submit comments to the U.S. Department of Energy on its Notice of proposed rulemaking entitled, *Energy Conservation Program for Appliance Standards: Proposed Procedures, Interpretations, and Policies for Consideration in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment* (the “Proposed Process Rule”). These comments specifically focus on DOE’s proposed changes to the EPCA rulemaking process for ASHRAE equipment.

ASHRAE, founded in 1894, is a technical society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 individual members worldwide focus on building systems, energy efficiency, indoor environmental quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today.

We appreciate DOE's efforts to develop energy conservation standards and test procedures for more than 60 categories of residential, commercial, and industrial products and equipment. DOE's work over the past several decades has resulted in tremendous energy savings as well as operational cost savings. ASHRAE recognizes that DOE needs to meet its statutory obligations under the Energy Policy and Conservation Act, and some revisions to the process by which it develops these standards and test procedures may be warranted. Efficiency in regulatory development can result in energy efficiency standards being developed more quickly, as well as using departmental resources more effectively. However, ASHRAE is concerned that some of the proposed changes intended to provide for increased DOE flexibility with respect to ASHRAE equipment could actually slow the process and would also consume additional departmental resources unnecessarily by not deferring to the ASHRAE standard.

### **ASHRAE's Standards Development Process is Rigorous, Robust, Open and ANSI-Accredited**

It is instructive to understand how ASHRAE's standards are developed through a robust, open and rigorous process of continuous improvement. ASHRAE writes voluntary consensus-based standards in its fields of expertise to guide industry in the delivery of goods and services to the public. ASHRAE standards include recommended practices in designing and installing equipment, describe uniform methods of testing for rating purposes, and provide other information to guide the industry. ASHRAE has 111 active standards and guideline project committees, addressing such broad areas as indoor air quality, thermal comfort, energy conservation in buildings, zero energy, zero carbon, risk management for building water systems, and the designation and safety classification of refrigerants, including those that are low global warming potential refrigerants. ASHRAE's standards development process is rigorous, and it is one of only six standards-developing organizations in the U.S. that can self-certify that its standards have followed procedures established by the American National Standards Institute (ANSI).

ASHRAE's consensus standards are developed through the participation of any and all interested and affected stakeholders; importantly these participants do not need to be ASHRAE members. ASHRAE is proud of its consensus-based standards setting process, which is transparent, balanced, robust, and accredited by ANSI.

### **ASHRAE Standard 90.1 is the Benchmark Energy Conservation Standard for Buildings**

ANSI/ASHRAE/IES Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings ("ASHRAE Standard 90.1") is the benchmark for commercial building energy codes in the United States and has been a key basis for codes and standards around the world for more than 45 years. ASHRAE's most recently published Standard 90.1-2019 reflects a process by which ASHRAE received 563 comments from 203 distinct commenters over the course of a three-year period. All proposed changes to ASHRAE Standard 90.1 are open for public review, which allows interested parties to provide input into development of the standard and reach consensus, ensuring publication of a document that has been rigorously and openly examined, questioned and defended.

ASHRAE’s consensus process ensures broad buy-in and reflects input from energy advocates, building owners, design professionals, utilities, manufacturers, representatives from DOE, and other materially affected and interested parties. Compared to a building built using ASHRAE Standard 90-1980, a building built to ASHRAE Standard 90.1-2019 will use less than half the energy. More recently, compared to the standard about a decade ago, Standard 90.1 can now generate a 30% reduction in energy use.<sup>1</sup> The committee that oversees the development of this standard, Standing Standard Project Committee 90.1, has done an amazing job of receiving broad input and developing consensus standards of increased stringency for over 45 years.

### **Clarifying Scope, Triggering, and Applicable Statutory Criteria for ASHRAE Equipment**

ASHRAE appreciates that DOE is making clear the triggering event for covered equipment. The proposal clarifies that ASHRAE’s publication of an updated version of ASHRAE Standard 90.1 is the triggering event, and not when an addendum to ASHRAE Standard 90.1 is released or approved. This provides for a regular three-year cadence of reviews and provides clarity. Further, ASHRAE agrees that the triggering event for a new or amended test procedure should be when an updated version of ASHRAE Standard 90.1 is published, and not at the time that an addendum to ASHRAE Standard 90.1 is released or approved. The three-year publishing cycle is in-line with model codes updates, is well understood, and provides the building industry with clear paths to reduce energy intensity and environmental emissions.

### **DOE’s Rejection of Limiting its Revisions to the ASHRAE Standard Runs Counter to Statute and Creates Inefficiencies**

DOE’s proposal would remove the statement in the current Process Rule that “DOE will adopt the revised ASHRAE levels or industry test procedure, except in very limited circumstances.” While indeed the circumstances under which DOE can adopt a more stringent standard than the ASHRAE standard is laid out in the statute, retaining this statement in the Process Rule makes clear that DOE will defer to the ASHRAE standard unless it determines “by clear and convincing evidence, that the more stringent standard would result in significant additional conservation of energy and is technologically feasible and economically justified.” In fact, considering the clear language of EPCA, we have been disappointed that DOE in the past has proposed rules more stringent than ASHRAE Standard 90.1 without providing the clear and convincing evidence required by statute; these regulatory proposals circumvented the ASHRAE process where evidence and scientific data are considered during the rigorous standard development process

The requirement in the February 2020 Final Rule of a “high bar” to overrule an ASHRAE standard did not add any additional time or impediments to DOE’s rulemaking. On the contrary, requirements found in the February 2020 Final Rule were a reasonable interpretation of the statute. The DOE has in the past, overruled ASHRAE standards if the ASHRAE standard was not exactly the same as DOE would have determined on its own, which runs contrary to EPCA’s requirement of deference to ASHRAE standards.

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<sup>1</sup> Pacific Northwest National Laboratory, “Impacts of Model Building Energy Codes – Interim Update,” Prepared for the U.S. Department of Energy, July 2021.

DOE states that the reason for proposed deletion of the language in the February 2020 Final Rule is that the interpretation of statute has already been addressed by the courts through case law.<sup>2</sup> ASHRAE asserts that the elaboration and guidance in the February 2020 Final Rule on how to make this determination is important as case law has not provided the necessary clarity. In fact, the removal of the language from the February 2020 Final Rule concerning clear and convincing evidence may result in more litigation to address the issue. Retaining the interpretation in the February 2020 Final Rule provides clear interpretation without litigation.

Indeed, DOE is proposing much more detail in Section 6 of the Code of Federal Regulations (CFR), “Process for Developing Energy Conservation Standards,” for the very reason of providing clarity. It is contradictory for DOE then to say that Section 9 of the CFR, “ASHRAE Equipment” needs less specificity.

With regard to the specific proposed revisions to the CFR in Section 9(a), ASHRAE is concerned that by considering equipment in isolation from the building as a system, DOE may not realize the full building and site energy conservation benefits of Standard 90.1. While stated equipment efficiencies may not change within a revision of Standard 90.1, energy savings are realized from other requirements within Standard 90.1 that are equally as important to saving energy. These include but are not limited to improvements in building envelope, lighting, HVAC system design and controls, and clarified compliance. ASHRAE works with stakeholders for the revisions of this equipment and is consistently weighing the cost efficiency of any proposed revisions. Most importantly, the efficiencies are approved by the consensus body.

Each version of ASHRAE Standard 90.1 has resulted in energy savings and ASHRAE commits to advancing this process with all due speed. Realizing the benefits of these updates to Standard 90.1 depends in part upon DOE also acting with speed and adopting the ASHRAE standard for it to be a requirement by regulation. Faster adoption by DOE of the amended energy conservation standards in ASHRAE 90.1 will help realize these energy conservation benefits, which are urgently needed as the impacts of climate change are experienced.

Further, the proposal explains that DOE will also assess energy savings from more-stringent standards as compared to the ASHRAE Standard 90.1 levels, and may review all metrics for the equipment category and assess equivalent stringency between metrics. These additional analyses increase the amount of time to promulgate revised standards, running counter to DOE’s stated desire to meet its statutory deadlines. Further, by not deferring to the ASHRAE standard unless there is clear and convincing evidence that would justify otherwise, DOE is straying from the National Technology Transfer and Advancement Act, which directs federal agencies to adopt voluntary industry consensus standards unless inconsistent with the law or impracticable. EPCA and the February 2020 Process Rule are consistent with these directives, which have well served the public.

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<sup>2</sup> Energy Conservation Program for Appliance Standards: Procedures, Interpretations, and Policies for Consideration in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment, 86 Fed. Reg. 35676 (July 7, 2021).

### **DOE should be assiduous in setting standards beyond those in Standard 90.1**

ASHRAE cautions DOE from going beyond the efficiency standards in Standard 90.1 by overly depending upon factors not explicitly named in the so-called “7 Factor Test.”<sup>3</sup> Almost any higher efficiency standard could be “economically justified” by using non-energy or non-economic factors such as monetizing avoided carbon dioxide emissions and other air pollutants. While ASHRAE certainly supports greenhouse gas reductions and building decarbonization, because these and other environmental factors are not explicitly named in EPCA, they could be used, as monetized, in a manner that goes beyond the clearly stated requirements of EPCA. While it is reasonable for the DOE to update its priorities, it is imperative that in doing so it does not go beyond the clear language of the statute. In summary, monetizing the value of avoided carbon emissions should be one of the statistics to be produced as part of its rulemakings but it should not be overly relied upon in its determination of whether a standard is economically justified.

### **ASHRAE generally supports the addition of the New Sections 12, 13, 14, 15, 16, and 17**

ASHRAE generally supports the addition of several sections in the CFR: Section 12, *Principles for the Conduct of the Engineering Analysis*, Section 13, *Principles for the Analysis of Impacts on Manufacturers*, Section 14, *Principles for the Analysis of Impacts on Consumers*, Section 15, *Consideration of Non-Regulatory Approaches*, Section 16, *Cross-Cutting Analytical Assumptions*, and Section 17, *Emissions Analysis*. ASHRAE recognizes the benefits of making the cost-benefit analysis clear to the consumer, along with discussion of multiple performance metrics. ASHRAE agrees that providing this information will also help DOE in its analysis of the Standard 90.1 in making a determination.

### **DOE should not change the Process Rule from one that is Binding to one that is Nonbinding Guidance**

Having a clear and consistent process is one that ASHRAE supports. Without a binding process, the public, industry, and other concerned stakeholders experience uncertainty and confusion as to how DOE is moving forward with rulemakings or setting priorities. The effect may delay implementation of energy-saving requirements that also reduce environmental emissions. DOE argues in its proposal that by moving away from a mandatory process it will be better able to meet its rulemaking deadlines. To the contrary, retaining a clear and consistent process which follows EPCA’s statutory requirement to review the energy conservation standards every 6 years better enables DOE to meet its deadlines. If there are specific provisions in the Process Rule that require more flexibility, the rule could explicitly state those flexibilities. ASHRAE offers to assist DOE with any revisions pertaining to ASHRAE equipment that would also accelerate the rulemaking process.

In closing, we thank DOE for its hard work to develop energy conservation standards that provide multiple benefits to society. The result has been decades of extremely significant reduction in energy intensity and environmental emissions. By using ASHRAE Standard 90.1 to develop conservation standards for ASHRAE equipment, these proven successes

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<sup>3</sup> 42 U.S.C. 6313(a)(6)(B)(ii)

will continue, allowing DOE to realize energy conservation benefits sooner and meet its statutory requirements within a faster timeframe. ASHRAE looks forward to continued engagement in this rulemaking, and we welcome any follow-up questions about ASHRAE's standards development process, ASHRAE Standard 90.1, or other technical matters. Please feel free to contact me directly or have your staff contact ASHRAE's government affairs staff at [GovAffairs@ASHRAE.org](mailto:GovAffairs@ASHRAE.org) if any additional information or clarification is needed. Thank you again for your consideration of our comments.

Sincerely,

A handwritten signature in black ink, reading "Michael C. A. Schwedler". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Michael C. A. Schwedler, P.E., Fellow ASHRAE, LEED AP  
2021-2022 ASHRAE President