

**ASHRAE Comments
to the
Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC)**

**Delivered by Mr. Michael CA Schwedler, P.E., Fellow ASHRAE, LEED AP
ASHRAE President**

June 9, 2022

My name is Mick Schwedler and I am the President of ASHRAE for the 2021-2022 Society Year. I want to thank the Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) for the opportunity to share ASHRAE's comments on the prioritization of topic areas for which ASRAC can assist DOE's Appliance and Equipment Standards Program.

ASHRAE is a technical society and standards development organization with more than 51,000 individual members worldwide who focus on building systems, energy efficiency, indoor environmental quality, refrigeration and sustainability. ASHRAE has 111 active standards and guideline project committees, addressing indoor air quality, energy conservation in buildings, zero energy, zero carbon, risk management for building water systems, and the designation and safety classification of 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 expertise makes us a qualified candidate for inclusion in any potential working groups on energy efficiency.

Of most relevance to this meeting is ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Building*, which has been a benchmark for commercial building energy codes in the United States and 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 90.1 are open for public review, which allows interested parties to give input into development of the standard and reach consensus, ensuring publication of a document that has been rigorously 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.¹ In developing the upcoming 2022 edition of the standard, the 90.1 Standard Project Committee has targeted a 45-50% increase in energy performance compared to 2004. 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.

As we have commented previously, ASHRAE urges DOE to defer to ASHRAE Standard 90.1 in promulgating energy efficiency standards for relevant “ASHRAE equipment.” This approach will help DOE meet its deadlines and statutory obligations. More importantly, faster adoption by DOE of the amended equipment energy efficiency standards in ASHRAE 90.1 will help realize the energy conservation benefits of the updated 90.1, which are urgently needed as the impacts of climate change are experienced.

Further, if DOE does not defer to the ASHRAE standard unless there is clear and convincing evidence that would justify otherwise, DOE would be 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. The Office of Management and Budget (OMB) Circular A-119 also directs the federal government to participate in the development and use of voluntary consensus standards and in conformity assessment activities by leveraging the expertise of non-governmental entities.

Given ASHRAE’s demonstrated expertise, ASRAC and DOE should reach out to ASHRAE for its technical expertise in any negotiated rulemaking involving “ASHRAE equipment.” In such negotiated rulemaking, DOE is supposed to engage all interested parties, and ASHRAE is certainly one of those parties, and one with leading and objective technical expertise. This is especially important as DOE should use real-world parameters rather than hypothetical situations that would never take place in actual equipment/building operation; having the technical expert at the table will provide significant background to assess these parameters and other technical matters. Finally, it is important that ASHRAE be included on any ASRAC Working Group for “ASHRAE equipment.”

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

Separately, as ASHRAE works to support DOE's implementation of the cost-effective codes for efficiency and resilience per the Bipartisan Infrastructure Law in effort to update building codes, it is important to have consistency with ASHRAE Standard 90.1 as this will help support building code updates.

Thank you for your consideration of ASHRAE's comments, and please do not hesitate to contact me if I can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Michael CA Schwedler". The signature is written in a cursive, flowing style with a long horizontal flourish at the end.

Michael CA (Mick) Schwedler, P.E., Fellow ASHRAE, LEED AP
2021-2022 ASHRAE President