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February 21, 2023

U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Office, EE-5B
1000 Independence Avenue SW
Washington, DC 20585-0121

Via Regulations.gov

Re: Comments of the International Code Council on the Department of Energy's Supplemental Notice of Proposed Rulemaking: Clean Energy for New Federal Buildings and Major Renovations of Federal Buildings; EERE-2010-BT-STD-0031

The International Code Council (ICC) is a nonprofit organization of roughly 600 employees, driven by the engagement of its more than 63,000 members, that is dedicated to helping communities and the building industry provide safe, resilient, and sustainable construction through the development and use of model codes (I-Codes) and standards used in design, construction, and compliance processes. Most U.S. states and communities, federal agencies, and many global markets choose the International Codes (I-Codes) to set the standards for regulating construction and major renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment.

The U.S. Department of Energy (DOE) has acknowledged the significant role of modern energy codes in achieving climate and decarbonization goals by unlocking over \$1B in energy code funding through the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). We applaud the Federal Government's efforts to address the impacts of the buildings it constructs and leases. The Code Council is dedicated to providing the building industry with the tools necessary to realize safety, sustainability, and resilience goals. This includes achieving decarbonization goals through the effective use of energy efficiency and greenhouse gas (GHG) reduction solutions captured in building energy codes such as the International Energy Conservation Code (IECC).

In March 2021, the Code Council Board of Directors released a new framework, [Leading the Way to Energy Efficiency: A Path Forward on Energy and Sustainability to Confront Climate Change](#), leveraging the success of the IECC and International Green Construction Code (IgCC), plus additional resources to help all levels of government advance their climate goals. The framework establishes a new scope and intent for future editions of the IECC that commits to continued improvement and the inclusion of zero energy pathways today and by 2030. The 2021 IECC provides cost-effective reduction of energy use over previous editions and includes net-zero appendices for both residential and commercial buildings to provide options for jurisdictions with ambitious climate goals. The 2021 and future editions of the IECC is therefore positioned to support the achievement of the Biden-Harris Administration's [goal](#) to achieve net-zero emissions economywide by 2050.

Recognizing the need for a coordinated and deliberate approach to decarbonization, in September 2022, the Code Council Board of Directors approved [Decarbonization of The Built Environment: Solutions from the International Code Council](#), which recognizes the significant impact of buildings on the environment



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and the need for a coordinated set of solutions to support the achievement of energy and GHG reduction goals set by governments. The report also calls for expanded activities that support a coordinated approach across the I-Codes, standards and other solutions. This highlights the Code Council's ongoing commitment to deliver the tools that the federal, state and local governments need to realize their climate-related goals.

We appreciate the opportunity to provide comment on DOE's supplemental notice of proposed rulemaking to establish revised energy performance standards for the construction of new Federal buildings and major renovations per the Energy Conservation and Production Act (ECPA) as amended by the Energy Independence and Security Act (EISA) of 2007.

As stated in previous comments, the International Code Council urges the Federal Government to require modern building and energy codes for all new Federal buildings and major renovation projects to ensure energy and climate goals are achieved. ICC believes that DOE should apply its energy efficiency standards rules consistently for all Federal buildings and renovations. To do otherwise would exempt specific buildings and building types from meeting the energy performance standards requirements and achieving the public policy goals established by this proposed program. Doing so will maximize the impact of emissions reduction of the Federal building stock and set the precedent for state and local governments to follow the Federal Governments' leadership. The International Code Council also encourages the Department to include all emissions beyond just Scope 1 emissions, including both on- and off-site generation and consumption, in the scope of their definition for "fossil-fuel generated consumption" to maximize the impact of their decision-making and emissions reduction activities throughout the Federal building stock and beyond.

The International Code Council applauds the Department for recognizing the role model codes serve in achieving national priorities. This includes incorporating the 2021 IECC by reference as a requirement for new low-rise residential Federal buildings and major renovations under this SNOPR. The model codes are designed to support consistency in policy and reflect knowledge and practice from across the building industry. At the same time, they allow for flexibility during adoption to reflect specific building types or technologies.

The IECC has made significant progress in advancing efficiency. Implementation of the 2021 IECC is foundational to achieving energy savings and GHG emissions reductions across the Federal building stock, both residential and commercial. The 2021 IECC represents a roughly 40% improvement in energy efficiency for buildings compared to the 2006 edition, along with corresponding improvements in building, mechanical, and material science and technology. The Pacific Northwest National Laboratory's (PNNL) final determination on the 2021 IECC found a 9.4% site energy savings improvement and an 8.7% reduction in carbon emissions for residential buildings relative to the 2018 version.

The commercial provisions of the 2021 IECC (which includes multifamily buildings) provide a 12.1 percent improvement in site energy use and a 10.2 percent improvement in GHG emissions over the 2018 edition. The determination concluded that, on a national weighted average basis, the 2021 IECC-Commercial is 6.5% more efficient for site energy use and 3.3% more efficient for energy costs than Standard 90.1-2019. To the extent DOE is seeking mechanisms to achieve energy savings beyond those



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contained in the baseline code requirements for commercial buildings, the Department could consider the 2021 IECC as a compliance pathway. The International Code Council encourages DOE to perform similar determination analysis for each iteration of the IgCC and ASHRAE 189.1 to provide additional flexibility while also providing information to state and local jurisdictions on the potential role of the IgCC to deliver further progress.

Adoption of current model energy codes is the first step to tapping into cost-effective energy savings. Adoption should be followed by training and full implementation of the adopted code. The gap that exists between the efficiency levels required in codes and the efficiency levels achieved in the field is influenced by the extent of Architecture, Engineering and Construction (AEC) professionals' training on the energy code. Compliance verification ensures that the performance requirements are met. The Federal government is encouraged to support building and energy code training, as well as broader energy efficiency and sustainability workforce development, for the AEC community to support compliance across the Federal building stock. Enhancing the overall energy efficiency workforce and further supporting energy code compliance training will also benefit overall compliance, energy and cost savings, and emissions reduction for the entire national building stock moving forwards.

As DOE works to establish revised energy the construction of new Federal buildings, the International Code Council encourages the Department to continue to leverage the energy efficiency and emissions reductions provisions of the most recent version of the IECC. Ensuring the requirements for Federal buildings and major renovations are based on the provisions of the 2021 IECC, including the net-zero appendices for residential and commercial buildings, will ensure the Federal Government can meet their climate and energy goals while also leading by example and charting a path forward for jurisdictions across the nation.

The Code Council strongly encourages DOE to consider these outlined solutions and considerations as mechanisms to support the rulemaking process for the energy performance standards of new federal buildings and major renovations of federal buildings pursuant with the ECPA as amended by the EISA of 2007. We look forward to continued work with DOE to improve the efficiency and performance of the federal building stock.

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Thank you for the opportunity to provide comments. If you have any questions concerning these recommendations, please do not hesitate to contact us.

Sincerely,

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