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Docket No. EERE–2013–BT–BC–0036

DOE Activities and Methodology for
Assessing Compliance With Building
Energy Codes

**COMMENTS OF:
THE INTERNATIONAL CODE COUNCIL (ICC)
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The International Code Council (ICC) offers the following comments on the Request for Information, Docket No. EERE–2013–BT–BC–0036, published on August 6, 2013.

The International Code Council (ICC) is a membership association dedicated to building safety, fire prevention, and energy efficiency. The International Codes, or I-Codes, published by ICC, provide minimum safeguards for people at home, at school and in the workplace. Building codes benefit public safety and support the industry's need for one set of codes without regional limitations. Among the codes published by ICC is the International Energy Conservation Code (IECC), which is referenced in the Energy Conservation and Production Act (ECPA, Public Law 102-486), and the Energy Independence and Security Act (EISA) of 2007, and is a national requirement in the American Recovery and Reinvestment Act of 2009. ICC also publishes the International Green Construction Code (IgCC), which contains energy efficiency, water efficiency, air quality, siting and location considerations and sustainability provisions.

Fifty states and the District of Columbia have adopted the I-Codes at the state or jurisdictional level. Federal agencies including the Architect of the Capitol, General Services Administration, National Park Service, Department of State, U.S. Forest Service and the Veterans Administration also enforce the I-

Codes for the facilities that they own or manage. The Department of Defense references the International Building Code for constructing military facilities, including those that house U.S. troops, domestically and abroad.

ICC was established in 1994 as a non-profit organization dedicated to developing a single set of comprehensive and coordinated national model construction codes. The founders of the ICC are Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO), and Southern Building Code Congress International, Inc. (SBCCI). Since the early part of the last century, these non-profit organizations developed three separate sets of model codes used throughout the United States. Although regional code development was effective and responsive to our country's needs, the time came for a single set of codes. The nation's three model code groups responded by creating the International Code Council and by developing codes without regional limitations; the International Codes.

Background

We begin by noting that DOE has worked closely with ICC and the energy efficiency community over the past four years to help raise awareness of the importance of building energy codes, and the need to adopt and enforce current building energy codes at the state and local level. At the same time, DOE has also focused some effort on measuring the degree to which energy codes are complied with, through a program of pilot programs, which are discussed in the Request for Information.

As the organization that represents the majority of local code officials, who are charged by law with assuring compliance with all adopted building codes within the jurisdictions they serve, we look at this issue with a unique perspective, and hope that our comments will assist the Department in successfully achieving its objectives.

At the end of the day, we start with the assumption that while this Request for Information specifically deals with DOE "activities and methodologies for assessing compliance with building energy codes", the ultimate goal of DOE is not just to assess compliance, but to actually increase compliance to a level of at least the 90% compliance specified in the American Recovery and Reinvestment Act of 2009 (ARRA), and eventually to a 100% compliance level.

In the world of building codes, most building code officials believe that the answer to a question about building code compliance, such as "Does the building comply with the 2009 IECC?" can be answered in a binary form- either yes or no. The nature of code inspection allows for little discretion in allowing a building that is non-compliant to be approved for occupancy. If the building meets the requirements of the code, it is approved, and issued a certificate of occupancy in most jurisdictions. If it does not, the builder or owner is notified of the deficiencies in code compliance and requests a re-inspection when those issues have been addressed.

In its background statement in the RFI, DOE outlines some of the difficulties encountered in the pilot programs for measuring code compliance, that were encountered by those contracted to perform the pilot studies.

It should be noted that all of the pilot programs were conducted by organizations separate from code officials. Code officials are uniquely situated to conduct building energy code inspections, since they have the legal right to enter buildings, and conduct code inspections for the purpose of determining code compliance with the adopted codes of the authority having jurisdiction. Likewise, code officials are expected to know the code provisions, and how to inspect buildings to determine compliance with those provisions. As such, it is not surprising that some of the concerns raised by the pilot studies were that

too many site visits were required, too many individual code items had to be checked, too many buildings had to be examined to create a valid sample and that the process for determining which buildings to examine to create a valid sample were all raised as issues.

All of these issues arise because the basic methodology of the pilot studies was to have a third party check on the compliance rate of buildings which, presumably, have already been inspected (or are in the process of being inspected) by a code official for code compliance- for the purpose of determining whether that inspection correctly determined that the building complied with the building energy code.

Rather than address the numerous questions listed by DOE in the RFI, we will address the most fundamental questions in the list: “What are the barriers to achieving compliance”, and “How can those barriers to achieving compliance be overcome.”

Responses to Specific Questions:

Who should evaluate compliance with building energy codes?

At the outset, we believe unequivocally that the answer to the question of “who should evaluate compliance” is the local building code department or other authority having jurisdiction and its trained staff, for a variety of compelling reasons.

What are the most significant barriers to energy code compliance, and how can they be overcome?

The barriers to achieving compliance are similar barriers to achieving compliance with any legal requirement: lack of understanding and motivation to comply by the regulated community, and a lack of training, understanding of resources and tools for compliance determination by the regulators and inspectors.

ICC fundamentally believes that it is not entirely productive to attempt to construct a compliance measurement methodology that duplicates, or further complicates the already complex and time-sensitive process of inspecting buildings for code compliance during the course of the construction process. Adding a second layer of inspectors, of whatever type, to attempt to measure the compliance with code provisions that are already required to be inspected by the local jurisdiction’s authorized inspector, can only lead to delays and costs for the builder or contractor, distrust of the “compliance evaluators” by code officials, and an additional burden of expense, that either the taxpayers, or the building owner, will be expected to bear.

Are there approaches to energy code compliance that have the potential to be financially self-sustaining?

ICC believes that a better approach would be for the Department of Energy to utilize existing programs and systems, that are available and proven to work, which educate and certify code officials to perform effective inspections. Incentivizing building code departments to raise their standards of performance assures that inspections within the jurisdiction provide accurate and complete compliance with building energy code provisions.

The private sector, for its own reasons is already engaged in these activities. The support of DOE for its purposes, would allow DOE to leverage its resources to achieve far higher rates of compliance than it could achieve by attempting to target its own limited resources on only building energy code compliance. At the end of the day, resources spent ONLY on measuring compliance do not increase compliance rates, and in fact may be counterproductive to higher compliance, by creating an atmosphere of distrust by code officials and inspectors of the measuring system, and further complicating the construction and code inspection process.

We encourage DOE to partner in two relatively new programs, that are already achieving high rates of

code compliance and higher quality inspections, across all types of building codes. These programs have the added advantage that they are already accepted and embraced by local building code officials and their departments. Further, because both programs have significant advantages to the building departments that utilize them, and the cities, counties and other jurisdictions that operate these departments, the benefits of the programs are ongoing, and participation in the program has a favorable cost-benefit profile for the communities involved. For these reasons, after initial program development and a period of offering early-adoption incentives, both programs are expected to be self-sustaining.

The first program is one called “Get Everyone Certified Challenge.” This program is co-sponsored by ICC and the Target Corporation and rewards building departments that get all of their staff certified in at least one category of certification available from ICC for plans examiners, inspectors, special inspectors, permit technician or code official. DOE could participate by adding an incentive for certifying to one of the available energy code certifications, such as residential energy code plans examiner and inspector, or commercial energy inspector. The purpose and goal of this program is to raise the professionalism of all code departments, by making sure every employee is educated and tested to a high level of knowledge of the currently adopted code provisions. This program is expected to lead to better community insurance ratings, in the same way that adoption of current codes is also a factor in community insurance ratings. In addition, communities who have qualified with “Everyone Certified” will be more attractive to land developers and large corporations, an important factor for almost every community’s economic development department.

After less than five months from the launch of this program, a total of 655 individuals have achieved at least one code permitting or inspection certification, with 140 jurisdictions across 33 states achieving 100% certification of their building code department staff. Because the program rewards jurisdictions achieving this status with credits for more training, the program will inevitably raise understanding and skills related to effective building code administration across all disciplines.

DOE could augment this program with its own incentives to achieve energy code related certifications, and take advantage of the momentum and ongoing program awareness of this well-received incentive program.

The second program is consistent with, and in fact is partially enabled by the first: Building Department Accreditation. The Building Department Accreditation is based on an international standard for organizations conducting inspections and is awarded to departments that comply with International Accreditation Service (IAS) Accreditation Criteria for Building Departments/Code Enforcement Agencies (AC251). Sections of the criteria relate to permitting, plan review, inspection, and construction codes:

<http://www.iasonline.org/PDF/AC/AC251.pdf>

AC251 is under the purview of a Technical Advisory Council consisting primarily of representatives drawn from accredited building departments. This TAC is responsible for advising IAS staff on the technical content of the AC251. Any changes to AC251 are approved by the IAS Accreditation Committee. IAS is the only accreditation body that provides an open forum for the public to participate in development of accreditation criteria. IAS Accreditation Committee members are also predominantly government officials who enforce codes in their local jurisdictions.

IAS accreditation is based on review of policies and records and observation of the department conducting inspections. The goal is to determine whether these activities are conducted consistently, and accurately assess compliance with adopted codes. It is for this reason that the Federal Emergency Management Agency (FEMA) awards points for code enforcement to communities with building departments accredited by IAS to the AC251 criteria.

If it was desired to have this program focus on Building Energy Codes, during accreditation of Building Departments, IAS would determine which version of the energy code is in effect and if the building department conducts energy inspections or accepts third-party reports. If the department conducts such inspections, the qualifications and procedures used by staff would be reviewed. If third-party inspection reports are accepted, IAS would review the qualifications the department requires of these third-parties, the method for collecting and reviewing reports, and ensure the department is field-monitoring the third-parties periodically.

If DOE desires to work with ICC to enhance the Building Department Accreditation criteria to specifically address Building Energy Code compliance, IAS, the ICC subsidiary tasked with accreditation, could enhance its section on inspections to specifically address building energy code compliance.

ICC continues to stand ready to work with the Department of Energy, in developing a cost-effective, self-sustaining program that will dramatically increase energy code compliance, and leads to high confidence in reported compliance rates.