



August 31, 2020

Texas Comptroller of Public Accounts ("CPA")
ATTN: Joseph Madden, Contracts Attorney
contracts@cpa.texas.gov

RFI No. 225j – High Performance Building Evaluation System Using 2018 IgCC

Responding company name and address:

American Society of Heating, Refrigerating and
Air-Conditioning Engineers (ASHRAE)
1791 Tullie Circle, N.E.
Atlanta, GA 30329

Illuminating Engineering Society (IES)
120 Wall Street, 17th Floor
New York, NY 10005

International Code Council (ICC)
500 New Jersey Avenue, NW, 6th Floor
Washington, DC 20001

U.S. Green Building Council (USGBC)
2101 L St. NW, Suite 500
Washington, DC 20037

Points of contact:

Alice Yates
Director of Government
Affairs
ASHRAE
202.821.1730
ayates@ashrae.org

Mark Lien
Industry Relations
Manager
Illuminating Engineering
Society
864.704.9986
mlien@ies.org

Kelly Sadler
Government Relations
Manager, Texas
International Code
Council
512.827.6471
ksadler@iccsafe.org

Jennifer Gunby
State & Local Advocacy
Manager
U.S. Green Building
Council
913.488.9094
jgunby@usgbc.org

About the Submitters:

ASHRAE

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), founded in 1894, is a not-for-profit technical society advancing human well-being through sustainable technology for the built environment. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today. With over 55,000 members worldwide, including about 3,000 in Texas, ASHRAE is one of only six standards-development organizations in the



United States that can self-certify that its standards have followed American National Standards Institute's (ANSI) standards-development procedures.

ASHRAE's more than 200 standards and guidelines establish recommended design and operation practice, including ANSI/ASHRAE/IES Standard 90.1 ("Standard 90.1"), Energy Standard for Buildings Except Low-Rise Residential Buildings, which has been a benchmark for commercial energy codes in the United States and a key basis for codes and standards around the world for more than 40 years. Over a decade ago, ASHRAE developed, with co-sponsorship by the USGBC and IES, Standard 189.1, *Standard for the Design of High-Performance Green Buildings*, which is broader than 90.1 and sets the foundation for green buildings. In 2018, ASHRAE and ICC cooperatively developed the International Green Construction Code, Powered by Standard 189.1-2017, fully integrating a model code with an ASHRAE standard.

IES

Established in 1906, the Illuminating Engineering Society is the recognized technical and educational authority on illumination. The strength of the IES is its diversified membership including engineers, architects, designers, educators, students, contractors, distributors, utility personnel, manufacturers, and scientists in 64 countries all contributing to the mission of the Society: to improve the lighted environment by bringing together those with lighting knowledge and by translating that knowledge into actions that benefit the public. The IES is an accredited Standards Developing Organization (SDO) under American National Standards Institute (ANSI) approved procedures. The Society publishes nearly 100 standards including recommended practices, design guides, technical memoranda, and methods of measurement, most of which are American National Standards. The Society, in addition, works cooperatively with related organizations on the development of programs and jointly published documents and standards including the aforementioned Standards 90.1 and 189.1. The IES is a 501(c)(3) non-profit professional society.

ICC

The International Code Council (ICC) is a member-focused nonprofit association dedicated to helping the building community and the construction industry provide safe, resilient, and sustainable construction through the development and use of model codes (I-Codes) and standards used in the design, construction, and compliance processes. Most U.S. states and communities, federal agencies, and many global markets choose the I-Codes to set the standards for regulating construction, plumbing and sanitation, fire prevention, and energy conservation in the built environment.

USGBC

U.S. Green Building Council (USGBC) is a nonprofit organization dedicated to transforming the way buildings and communities are designed, built, and operated, enabling an environmentally and socially responsible, healthy, and prosperous world. Our flagship green building system, LEED (Leadership in Energy and Environmental Design), already has been embraced in Texas by property owners, developers, business owners, and building professionals. LEED takes a comprehensive approach to buildings, considering objectives such as energy and water efficiency and indoor environmental quality, as well as resource efficiency. LEED projects must meet a set of rigorous criteria in a flexible system of prerequisites and optional credits that, when combined, set building projects on the path to excellence in sustainability and support resilience.



LEED certification is administered by Green Business Certification, Inc. (GBCI), an independent body providing third-party verification services for certification and professional credentialing. GBCI's verification processes are also reviewed by a reputable and unbiased party to ensure strong accountability in the process. As a result, GBCI certification services deliver high quality, consistent and independent verification of building project performance.

Comments:

ASHRAE, ICC, IES and USGBC appreciate the opportunity to respond to your request seeking additional information in the "further development of a high-performance building evaluation system for state agencies and state funded institution of higher education" (*state building evaluation system*).

Capturing the expertise of our members and leveraging our influence in the building industry, ASHRAE, ICC, IES and USGBC jointly publish the International Green Construction Code (IgCC) powered by ASHRAE Standard 189.1. We commend SECO for taking steps to advance high-performance state buildings, and recognizing that the IgCC plays an important role. Below we have addressed your RFI questions and provided additional recommendations.

RFI Question #1

Does the 2018 edition of the International Green Construction Code ("IgCC-2018") published by the International Code Council ("ICC") meet the requirements in Section 447.004 of the Texas Government Code for a high-performance building evaluation system?

As stated explicitly in the RFI, SECO has determined that the IgCC-2018 meets the requirements of Section 447.004(b-1) of the Texas Government Code and is a candidate to serve as the "high performance design evaluation system" referenced therein.

The IgCC is a national, consensus-based code that provides a whole systems approach including provisions covering energy use, natural resources use, site sustainability, water use efficiency, and indoor environmental quality.

As part of ICC's suite of model codes (I-Codes), the IgCC is coordinated with other I-Codes including the International Energy Conservation Code (IECC) and International Plumbing Code (IPC). The IgCC is also coordinated with Standard 90.1 which is included as a compliance path in the IECC. ICC and ASHRAE also provide education resources and other tools that support implementation of the IgCC.

As a model code, the IgCC is designed to be enforced by the adopting authority having jurisdiction (AHJ) or using a third-party enforcement scheme approved by the AHJ. As the AHJ for state high-performance building requirements, SECO can specify the enforcement mechanism based on current practice or by leveraging the infrastructure supporting verification of green building rating systems as outlined below.

It is our understanding that SECO's adoption of the IgCC for state buildings would include requirements for independent third-party verification to meet the statute.



We recommend SECO provide a clear description of the verification process in its implementing documents and, for leadership projects, which are discussed below, how green building rating systems and verification mechanisms, like that used in LEED, can be used to demonstrate compliance.

RFI Question #2

How can the IgCC-2018 be used in conjunction with existing energy efficiency and water conservation minimum code standards to achieve higher levels of performance?

As stated above, the IgCC is coordinated with the IECC, IPC and Standard 90.1. It is our understanding that SECO's energy and water efficiency requirements already largely rely on provisions of the IgCC, IECC and Standard 90.1. IgCC is best used by adopting IgCC provisions as a code-type requirement in conjunction with existing code requirements and enforcement infrastructure.

Under our recommended approach, projects would meet the IgCC-2018 in its entirety, as verified by an independent third party. The I-Codes are updated every three years through a consensus-based process involving private and public sector stakeholders that integrates the industry's experienced-based recommendations for standards that can be broadly implemented by most buildings, and addresses changes in technology and the market. Adopting the IgCC in its entirety, without exclusions, is an essential component.

In order to assure that SECO's requirements capture the latest processes, practices and technology, SECO's current adoption should incorporate automatic updates of future editions. To incorporate the most current recommendations and provide the greatest benefit to Texans, we recommend SECO review and adopt the most current edition available by including provisions to update to the adopted code every three years.

LEED for State Leadership Projects

With IgCC as a minimum, SECO should also include a pathway for leadership projects that want to go beyond these minimum requirements to achieve LEED certification at Gold and Platinum levels. As identified above, IgCC-2018 was designed to align with LEED with the concept of a green code, and a beyond-code system, working together.

By recognizing LEED, SECO would help support high levels of sustainability achievement, backed by LEED's third-party certification process and infrastructure. In particular, Texas institutions of higher education may desire to achieve LEED certification as part of their sustainability commitments and leadership and create opportunities for increased recognition and celebration as well as a draw for students and faculty. SECO would enable project teams to benefit from the many resources available from USGBC and the USGBC community on LEED. This includes tips, guides, calculators, references, and education, as well as over 11,000 LEED credential holders in Texas.

Advisory Committee

While not specifically included in the RFI's questions, the RFI notes that SECO may appoint an advisory committee to advise the office in selecting a 'high performance building evaluation system'. As the Texas Government Code Section 447.004(b-2) states, "The state energy conservation office shall appoint an



advisory committee to advise the office in selecting one or more high-performance building design evaluation systems to approve.”

We ask SECO to follow through on engaging an advisory committee per the law. This advisory committee can help address additional technical questions that arise as SECO implements the *high performance building evaluation system* while providing input from the impacted Texans (building occupants and managers). We would be pleased to identify representatives from each of our organizations that can help SECO meet the intent of the high performance building evaluation system.

Conclusion:

Thank you for the opportunity to provide our comments and recommendations on RFI No. 225j - High Performance Building Evaluation System Using 2018 IgCC. We applaud your interest in IgCC and in implementing the *state building evaluation system* required by 2011 HB 51. IgCC-2018’s inclusion in the state building codes would benefit all Texans, as would enabling state buildings and state-supported institutions of higher education’s building to achieve certification of a whole systems approach to the design, construction and operation of buildings.

We stand ready to assist the Texas State Energy Conservation Office in exploring methods to improve energy and water conservation design standards and in implementing the *state building evaluation system*. If you have any questions, please contact any of the signatories below, or the key contacts provided on page one.

Sincerely,

Charles E. Gullledge III, P.E., FASHRAE, HBDP,
LEED AP
2020-2021 ASHRAE President

Antonio Garza
President
Illuminating Engineering Society

Sara Yerkes
Senior Vice President, Government Relations
International Code Council

Taryn M. Holowka
Senior Vice President
U.S. Green Building Council