



# 2024 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) COMMERCIAL & RESIDENTIAL COMMITTEE FINAL BALLOTS – APPEALS

## Staff Analysis Memo to ICC Appeals Board Appeals Based on Scope and Intent Provisions

February 2024

Four appeals – submitted by the American Gas Association (AGA), the American Public Gas Association (APGA), National Multifamily Housing Council (NMHC) and Building Owners and Managers (BOMA) jointly, and the Region VI Chapter of ICC (Region VI) – relate to certain final actions taken by the 2024 International Energy Conservation Code (IECC) Commercial and Residential Committees based on the inclusion of greenhouse gas reduction resources in the main text of the codes rather than in non-mandatory appendices. Three appeals – NMHC/BOMA’s appeal related to Demand Responsive Controls, NMHC/BOMA’s appeal related to EV Charging Infrastructure, and Region VI relate to provisions in the codes that the appellants claim do not relate to “buildings” and are therefore outside the scope of these codes. More details regarding the allegations in the appeals, as well as ICC staff’s response, are set forth below.

## RELEVANT POLICIES

### I. Relevant Policies

For purposes of the appeals at issue, two sections of CP-01 are of particular relevance:

- Section 6.3.7 provides: Review by the Appeals Board shall be limited to matters of process and procedure. The Board of Appeals shall not render decisions on the relative merits of technical matters.
- Section 6.3.8 provides: In order to sustain the appeal, or any part thereof, the Appeals Board must find that there was a material and significant irregularity of process or procedure.

The IECC Committee Procedures set forth the procedures for the development of the 2024 IECC, Chapter 11 of the International Residential Code (IRC), and future editions. For purposes of the appeals at issue, the following section of the IECC Committee Procedures is particularly relevant:

#### **Development Process**

The process shall be an open, transparent and deliberative process in accordance with Section 8 of the ICC Consensus Procedures.

## **ICC Consensus Procedures**

These procedures are designed to meet the requirements for due process and development of consensus for approval of standards developed under the ICC Consensus Procedures and for approval as an American National Standard in accordance with the ANSI Essential Requirements.

### **Leading the Way to Energy Efficiency, pg. 3**

“The Code Council Board of Directors under Council Policy 28 and the Consensus Procedures has sole authority to establish and revise the title, scope and intent of codes and standards developed by the Code Council.”

## **II. Text of Relevant Code Sections**

### **COMMERCIAL ENERGY PROVISIONS**

#### **C.101.2 Scope**

This code applies to the design and construction of commercial buildings.

#### **C101.3 Intent**

The International Energy Conservation Code-Commercial provides market-driven, enforceable requirements for the design and construction of commercial buildings, providing minimum efficiency requirements for buildings that result in the maximum level of energy efficiency that is safe, technologically feasible, and life cycle cost effective, considering economic feasibility, including potential costs and savings for consumers and building owners, and return on investment. Additionally, the code provides jurisdictions with supplemental requirements, including ASHRAE 90.1, and optional requirements that lead to achievement of zero energy buildings, presently, and through glidepaths that achieve zero energy buildings by 2030 and on additional timelines sought by governments, and achievement of additional policy goals as identified by the Energy and Carbon Advisory Council and approved by the Board of Directors. Requirements contained in the code will include, but not be limited to, prescriptive- and performance-based pathways. The code may include non-mandatory appendices incorporating additional energy efficiency and greenhouse gas reduction resources developed by the Code Council and others. The code will aim to simplify code requirements to facilitate the code’s use and compliance rate. The code is updated on a three-year cycle with each subsequent edition providing increased energy savings over the prior edition. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this intent. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

Definition of “building”: any structure used or intended for supporting or sheltering any use or occupancy, including any mechanical systems, service-water heating systems and electric power and lighting systems located on the building site and supporting the building.

### **RESIDENTIAL ENERGY PROVISIONS**

#### **R101.2 Scope**

This code applies to the design and construction of residential buildings.

#### **R101.3 Intent**

The International Energy Conservation Code-Residential provides market-driven, enforceable requirements for the design and construction of residential buildings, providing minimum efficiency requirements for buildings that result in the maximum level of energy efficiency

that is safe, technologically feasible, and life cycle cost effective, considering economic feasibility, including potential costs and savings for consumers and building owners, and return on investment. Additionally, the code provides jurisdictions with optional supplemental requirements, including requirements that lead to achievement of zero energy buildings, presently, and, through glidepaths that achieve zero energy buildings by 2030 and on additional timelines sought by governments, and achievement of additional policy goals as identified by the Energy and Carbon Advisory Council and approved by the Board of Directors. The code may include non-mandatory appendices incorporating additional energy efficiency and greenhouse gas reduction resources developed by the Code Council and others. Requirements contained in the code will include, but not be limited to, prescriptive- and performance-based pathways. The code will aim to simplify code requirements to facilitate the code's use and compliance rate. The code is updated on a three-year cycle with each subsequent edition providing increased energy savings over the prior edition. The IECC residential provisions shall include an update to Chapter 11 of the International Residential Code. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this intent. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

Definition of "building": any structure used or intended for supporting or sheltering any use or occupancy, including any mechanical systems, service-water heating systems and electric power and lighting systems located on the building site and supporting the building.

### III. Relevant Section of Feb. 22, 2022 ICC Staff Memo

In the new framework approved by the Board in March 2021, a new scope and intent were developed for the IECC and Chapter 11 of the IRC. While this new scope and intent is considerably more detailed than the prior scope and intent, there is some confusion within the Committees on what topics can be addressed within the body of the IECC or IRC Chapter 11 as minimum requirements as opposed to an IECC or IRC appendix.

The scope and intent of ICC codes and standards are set by the Board of Directors in accordance with Council Policy 28. The Board has not previously provided updates or clarification to the scope or intent of codes or standards during an active development process, allowing the development process to proceed to resolution. If a topic is contained in the scope or intent statement, it may be included either in the base of the code or as an appendix, as determined by the consensus body. Generally, appendices in the I-Codes fall under one of two categories: available for state/local adoption and for informational purposes only. In both cases, they undergo the rigors of the process no differently than text considered for the minimum requirements in the code. Each appendix in the respective I-Code notes the specific application of the appendix.

#### **The Code Council provides the following direction:**

Any content within the scope and intent of the code may be included either in the body of the code as minimum requirements or as an adoptable appendix based on the determination of the responsible Consensus Committee. Where content is to be included in an adoptable appendix, the appendix must include mandatory enforceable language.

# THE APPEALS AND ICC STAFF RESPONSE

## I. Scope and Intent Issues

### A. AGA Appeal and APGA Appeals

AGA and APGA first argue that the appealed provisions are in direct conflict with the scope and intent provisions of the IECC, which indicate that the codes “may include non-mandatory appendices incorporating additional energy efficiency and greenhouse gas reduction resources.” AGA and APGA believe this language means that greenhouse gas reduction resources can only be included in non-mandatory appendices and disagrees with the ICC staff’s February 15, 2022 memorandum that states that such resources may be included in either the main text of the code or an appendix. AGA and APGA claim that ICC provided conflicting guidance in a September 2021 presentation to the IECC Commercial Consensus Committee, when it stated that greenhouse gas reduction resources could only be included in listed greenhouse gas reduction measures such as “Electrification”, “EV Charging”, and “Renewables” under “Appendix Chapters for elements outside base scope.”

Next, AGA and APGA raise issues regarding the process by which the staff memorandum was issued. First, they argue that the staff is not permitted to change the scope and intent provisions because *Leading the Way to Energy Efficiency* states that only the Code Council Board may set the intent/scope of the IECC procedures for the IECC development committees.

AGA and APGA also take issue with the process by which the Code Council addressed this issue. They argue that providing its guidance midway through the code development process conflicts with the ICC’s stated processes and procedures for issuing guidance and its due process principles. AGA further asserts that the memo was provided “without prior notice, nor inviting comment or appeals.” AGA and APGA note that they were among the group of organizations that objected to the issuance of the ICC memo after it was issued. See American Gas Association, American Public Gas Association, National Propane Gas Association, Letter to ICC Board of Directors (December 12, 2022); Sustainability Energy and High-Performance Code Action Committee, Letter to ICC Board of Directors (October 3, 2022).

### B. NMHC/BOMA and Region VI

NMHC/BOMA’s heat pump appeal and Region VI briefly state that including requirements intended to decarbonize buildings does not comply with the intent statements in the IECC codes. Because the only mention of carbon reduction measures in the intent statement is that they may be included in non-mandatory appendices, they interpret the intent statements to mean that provisions specifically incorporated to mitigate greenhouse gas emissions must be placed in non-mandatory appendices.

## ICC STAFF RESPONSE – Scope and Intent

The memo (issued by ICC staff on February 15, 2022) does not change the scope or intent of the code but rather provides the committee members with guidance on how scopes and intents are traditionally interpreted within the codes and standards development process—namely, if a topic is mentioned in the scope or intent statement it is considered to be within the scope or intent unless expressly prohibited. Thus, by including “greenhouse gas reduction resources” in the intent statement, and should sufficient consensus exist, code development committees are not limited as to where these resources can appear within the code. In short, the memo by staff was a clarification on typical process and procedure explaining historically how similar issues had been handled. Such a clarification is in no way an infraction of process or procedural.

The intent statement provides that “The code may include non-mandatory appendices incorporating additional energy efficiency and greenhouse gas reduction resources” (emphasis added). Within codes and standards, “may” constitutes permissive language. This statement provides the development committees

with flexibility to assess whether proposed resources warrant (1) inclusion in any way, (2) inclusion as minimum requirements within the body of the code, or (3) inclusion as an adoptable appendix.

The intent statement also includes the word “additional” as a modifier of energy efficiency and greenhouse gas reduction resources to indicate that these appendices would be additive to the content contained elsewhere in the code. The inclusion of the term “additional” would be superfluous were greenhouse gas reduction resources prohibited from inclusion in the body of the code.

Based on the discretion afforded them in the consensus process, an overwhelming majority of the development committee members (both residential and commercial), representing a diversity of interest categories in accordance with the Consensus Procedures, found that provisions related to greenhouse gas reductions were valuable to be included within the body of the code and represented a piece of a comprehensive code that delivers energy conservation benefits.

## II. Definition of Building/Occupant

### A. NMHC/BOMA – “Building” Related to Demand responsive Controls

This NMHC/BOMA appeal contends that the scope statement of each IECC code states that it applies to the design and construction of buildings. Per the definition of the term “building” in Section C202, mechanical and electrical equipment within the scope of the IECC must support the building. The appeal contends that controls equipment that cannot be used for the intended control does not support the building and therefore is out-of-scope of the IECC.

### B. NMHC/BOMA – “Building” Related to EV Charging Infrastructure

NMHC/BOMA raise concerns that the 2024 IECC-R requirements for the provision of electric vehicle charging infrastructure (EVCI) and the IECC’s requirement for the provision of equipment for the monitoring of electric vehicle (EV) charging are outside of the scope and intent of the IECC-R and IECC-C.

NMHC/BOMA argue that requirements for EVCI infrastructure and EV charging monitoring equipment are outside of the scope of the IECC because it doesn’t support a building. The IECC-R and the IECC-C apply to “buildings.” Both codes define a building as: “Any structure used or intended for supporting or sheltering any use or occupancy, including any mechanical systems, service water-heating systems and electric power and lighting systems located on the building site and supporting the building.” NMHC/BOMA argue that EVCI, as codified in Section R404.7, may be located on a building site, but it does not “support a building.” For example, no residential building must have EVCI to fulfill its purpose. Even the advocates for requiring EVCI at residential buildings argue that it is for the “convenience” of building residents and that EVCI is “an amenity.” Requiring amenities and conveniences for non-building purposes would run afoul of this IECC-R’s intent to provide enforceable “minimum efficiency requirements” for residential buildings. The IECC-C also requires monitoring of EV charging loads, a specific feature of EVCI that NMHC/BOMA argue fails to meet the scope and intent of the IECC-C.

NMHC/BOMA point to the ICC Board of Directors’ decision that requiring EVCI was outside of the scope of the 2021 IECC. NMHC/BOMA argue that the definition of “building” in the 2024 IECC was amended in such a way that the scope is even narrower than it was in 2021, where the scope statement specified that the code “applies to residential buildings, building sites and associated systems and equipment.” Based on this premise, they assert that if EVCI was outside of the scope of the 2021 IECC, then it is even more clear that it is outside of the scope of the 2024 IECC, which provides that the systems and equipment must “support the building” to be within scope.

NMHC/BOMA argue that the reference to EVCI in the 2024 IECC-R’s intent statement is not dispositive. ICC staff’s February 15, 2022 memorandum specifies that “[a]ny content within the scope and intent of



the code may be included either in the body of the code as minimum requirements or as an adoptable appendix based on the determination of the responsible Consensus Committee.” They contend that because EVCI does not fall within both the scope and the intent of the IECC-R, if it can be included in the IECC-R at all, it must appear in non-mandatory appendices.

#### C. Region VI – “Building” Related to Electrical Infrastructure for EVs

Region VI argues that the requirement to install electrical infrastructure for EV-capable, EV-ready or EVSE regardless of whether they own an EV should not be in the body of the code. Region VI asserts simply that “none of ICC’s building codes dictate vehicle maintenance and fueling in a dwelling setting.” Including these requirements would be “an overreach of building code.”

### ICC STAFF RESPONSE – Scope of “Building”

#### A. Demand Responsive Controls

The appellants’ arguments make clear that 66% of utilities offer demand response programs. The controls equipment therefore can be used in many locations. The core intent of the IECC is to provide “minimum efficiency requirements for buildings that result in the maximum level of energy efficiency that is safe, technologically feasible, and life cycle cost effective, considering economic feasibility, including potential costs and savings for consumers and building owner, and return on investment.” The code change proponent’s cost statement indicates that buildings that participate in a demand response program see cost benefits that outweigh the cost of the control. Thus, these provisions fall squarely within the intent statement.

#### B. EV Charging Infrastructure

Section R404.7 specifically states that the requirement for EV power transfer infrastructure applies to automobile parking spaces “for residential buildings,” which are spaces that support the residential buildings. If no automobile parking spaces are provided, then the requirements of the section are not applicable. Additionally, if the parking spaces are provided, the EV power transfer infrastructure is installed within the building itself. This infrastructure therefore falls within the design and ultimately the construction of the building.

In 2021, the Board of Directors determined that adding mandatory electric readiness at the time of construction and facilitating future installation and use of Electric Vehicle Supply Equipment conflicted with the intent statements of the IECC Residential and Commercial, which at that time specified that the codes “shall regulate the design and construction of buildings for the effective use and conservation of energy over the useful life of each building.” The decision to sustain the appeal of those provisions did not focus on the definition of the term “building.” The arguments presented emphasized that the provisions extended beyond efficient energy use as a direct function of the operation, use and occupancy of the building.

The Board of Directors subsequently revised the scope and intent statements for the IECC codes considerably. As discussed above, the current intent statement explicitly states that the code may include greenhouse gas reduction resources.

#### C. Electrical Infrastructure for EVs

The I-Codes do in fact include requirements that extend to garages related to the maintenance of vehicles. The IRC includes requirements for opening and penetration separation of garages from a dwelling unit (Section R302.5 and R302.6), floor surface (Section R409.1), and carbon monoxide detection (Section R315.2.1). NFPA 70/IRC E3901.9 also includes requirements that electrical outlets be provided in a garage for each vehicle bay. These outlets assist in maintaining vehicles such as battery charging of ICE vehicles or block engine heaters for vehicles in colder climates.