

2024 IECC

NBI has submitted proposals into the ICC process to advance the 2024 IECC. The proposed amendments cover a wide range of measures and improve the code by adding additional efficiency, clarifying requirements, and creating greater flexibility for code users and local jurisdictions. Learn more at newbuildings.org/code_policy/2024-iecc-national-model-energy-code-base-codes.

Code Change Title: Mandatory On-site Renewable Energy CEPI-5-21

Summary: Requires on-site renewable energy generation.

Revise as follows:

C103.2 Information on construction documents. Construction documents shall be drawn to scale upon suitable material. Electronic media documented are permitted to be submitted when *approved* by the *code official*. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, systems and equipment herein governed. Details shall include the following as applicable:

14. Location of pathways for routing of raceways or cable from the on-site renewable energy system to the electrical service panel.

Revise definition as follows:

RENEWABLE ENERGY CERTIFICATE (REC): A market-based instrument that represents and conveys the environmental, social, and other non-power attributes of one megawatt hour of renewable electricity generation and could be sold separately from the underlying physical electricity associated with *renewable energy resources*; also known as “energy attribute” and “energy attribute certificate” (EAC).

Add new definitions as follows:

COMMUNITY RENEWABLE ENERGY FACILITY. A facility that produces energy harvested from *renewable energy resources* and is qualified as a community energy facility under applicable jurisdictional statutes and rules.

FINANCIAL RENEWABLE ENERGY POWER PURCHASE AGREEMENT. A financial arrangement between a renewable electricity generator and a purchaser wherein the purchaser pays or guarantees a price to the generator for the project’s renewable generation. Also known as a “financial power purchase agreement” and “virtual power purchase agreement.”

PHYSICAL RENEWABLE ENERGY POWER PURCHASE AGREEMENT. A contract for the purchase of renewable electricity from a specific renewable electricity generator to a purchaser of renewable electricity.

Revise text as follows:

C405.1 General. Lighting system controls, the maximum lighting power for interior and exterior applications and electrical energy consumption and generation shall comply with this section. Sleeping units shall comply with Section C405.2.4 and C405.1.1 or C405.3. General lighting shall consist of all lighting included when calculating the total connected interior lighting power in accordance with Section C405.3.1 and which does not require specific application controls in accordance with C405.2.4.

Add new text as follows:

C405.13 Renewable energy systems. Each *building site* shall have equipment for on-site renewable energy with a rated capacity of not less than 1.5 W/ft² (16.1 W/m²) multiplied by the sum of the gross conditioned floor area of the three largest floors.

Exception: Where the *building site* cannot meet the requirement, either in part or in full, with an *on-site renewable energy system*, the *building site* shall procure and be credited for an amount of renewable energy not less than otherwise required by this section with one or more of the following:

1. A *physical renewable energy power purchase agreement*.
2. A *financial renewable energy power purchase agreement*.
3. A *community renewable energy facility*.

The renewable energy shall be delivered or credited to the *building site* under an energy contract with a duration of not less than 15 years. The contract shall be structured to survive a partial or full transfer of ownership of the building property.

C405.13.1 Additional efficiency package options. The PV capacity required in this section shall not be used for compliance with the on-site renewable energy option of Section C406.5.

C405.13.2 Total building performance. Where the total building performance of Section C407 is used for compliance, the PV capacity required in this section shall be the same in the *standard reference design* and the *proposed design*.

C405.13.3 Renewable energy certificate documentation. The property owner or owner's authorized agent shall demonstrate that any RECs or EACs associated with on-site and off-site renewable energy comply with the following:

1. Are retained and retired by or on behalf of the property owner or tenant for a period of not less than 15 years;
2. Are created within a 12-month period of the use of the REC; and
3. Are from a generating asset constructed no more than 5 years before the issuance of the certificate of occupancy.

Revise text as follows:

C406.5 On-site renewable energy.

Buildings sites shall comply with C405.13.3 and with Section C406.5.1 or C406.5.2.

Revise text as follows:

CC103.3.2 Requirements for all procurement methods.

The following requirements shall apply to all off-site renewable energy procurement methods:

1. RECS and other environmental attributes associated with the procured off-site renewable energy shall ~~be assigned to the building project for the duration of the contract~~ comply with Section C405.13.3.

This code proposal change is based on approved ASHRAE addenda by, ck, and cp to Standard 90.1-2019 which will be published in ASHRAE Standard 90.1-2022 and a recent technical brief developed by PNNL in support of further revisions to 90.1. Proposed definitions clarify renewable energy requirements for community renewable energy facility, financial renewable power purchase agreement, physical power purchase agreement and renewable energy credits. The proposal more closely aligns these definitions with language under consideration both in ASHRAE Standard 228P, The Standard Method of Evaluating Zero Energy Building Performance, and in ASHRAE Standard 189.1, which will be the basis of the 2024 IgCC.