International Energy Conservation Code
Consensus Committee-Commercial

Meeting Agenda (Draft 2/22/23)

February 22, 2023
2:00 PM Eastern to 5:00 PM Eastern (3 hours)
Webex Link

Committee Chair: Duane Jonlin
Committee Vice Chair: Emily Hoffman

1. Call to order.

2. Meeting Conduct. Staff
    a. Identification of Representation/Conflict of Interest
    b. ICC Council Policy 7 Committees: Section 5.1.10 Representation of Interests
    c. ICC Code of Ethics: ICC advocates commitment to a standard of professional behavior that exemplifies the highest ideals and principles of ethical conduct which include integrity, honesty, and fairness. As part of this commitment it is expected that participants shall act with courtesy, competence and respect for others.
    d. ICC Antitrust Compliance Guideline

3. Roll Call – Hoffman

4. Approval of Agenda

5. Approval of Minutes from February 8, 2023

6. Administrative issues.

7. Action Items.
    a. Public Comment Draft 1 Proposals

~~CED1-26-22(Sleeping unit and dwelling unit req)~~	~~Electrical as modified 11-0-3~~
CED1-65-22(Exterior lighting scope expansion)	Electrical as modified 10-2-2
CED1-77-22(Definite purpose machine except.)	Electrical as modified 12-0-1
CED1-172-22(W09 SHW flow adjustments)	HVACR approve 13-0-1
CED1-174-22(W05 point of use water heaters)	HVACR as modified 13-1-1
CED1-204-22(Netzero appendix modification)	Modeling as modified 10-3-3
CED1-86-22(Min. envelope efficiency net zero bldg.)	Modeling approve 10-4-2
CED1-180-22(Adv. Energy credit append removal)	Modeling disapprove 11-3-1
CED1-206-22(Glide path modifications)	Modeling disapprove 12-2-1
CECD1-8-22(ASHRAE 140)	Modeling approve 15-0-1
CED1-127-22(Orientation)	Envelope disapprove 12-0-2

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CECD1-9-22(WDMA references)	Admin approve 8-0-1
CED1-153-22(High capacity heating boiler)	Admin disapprove 12-0-1
CED1-154-22(Heat recovery for space cond. health)	Admin disapprove 12-0-1
CED1-171-22(Heated pool cover update)	Admin disapprove 12-0-1

8. Subcommittee Reports

9. Other business.
   a. Public comment on any matters discussed at the meeting (Please limit comments to 2 minutes. Further comments can be directed to the Secretariat following the meeting to be considered at a future meeting.)

10. Next meeting Wednesday, March 8, 2023 at 2:00 pm Eastern

11. Adjourn.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:
IECC Commercial Consensus Committee Webpage
https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/iecc-commercial-consensus-committee/
ICC Energy webpage
https://www.iccsafe.org/products-and-services/codes-standards/energy/
Code Change Proposal Submittals
https://energy.cdpaccess.com/login/

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Kristopher Stenger, AIA, Director of Energy Programs
International Code Council
kstenger@iccsafe.org

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-026-22 Sleeping unit and dwelling unit requirements
CDP ID #	840
Code	IECC CE
Code Section(s)	C405.1
Location	base
Proponent	Glenn Heinmiller glenn@lampartners.com
Proposal Status	SC review
Subcommittee	CE Elec, Light
Subcommittee Notes	Reason Statement: Provides clarity for efficiency and enforcement.
Recommendation	APPROVE AS MODIFIED **C405.1 General...** **Exception:** *Dwelling units* and *sleeping units* that comply with **Section C405.2.10** ~~and~~ **Section C405.3.3** and **Section C405.6.** **C405.2 Lighting controls**. Lighting systems powered through the energy service for the building shall be provided with controls that comply with Sections C405.2.1 through C405.2.~~9~~ 10 **C405.3 Interior lighting power requirements**. A building complies with this section where its total connected interior lighting power calculated under Section C405.3.1 is not greater than the interior lighting power allowance calculated under Section C405.3.2. *Sleeping units* and *dwelling units* shall comply with C405.3.3. **C405.3.3 Lighting power for sleeping units and dwelling units.** ~~No less than 90 percent of the~~ S*leeping units* in Group I-2 occupancies that are patient rooms shall comply with C405.3.1 and C405.3.2. For all other *sleeping units* and *dwelling units,* the permanently installed lighting ~~serving sleeping units and dwelling units~~, including lighting integrated into range hoods and exhaust fans, shall be provided by lamps with an efficacy of not less than 65 lm/W or luminaires with an efficacy of not less than 45 lm/W. **Exceptions:** 1. Lighting integral to a kitchen appliance. 2. Antimicrobial lighting used for the sole purpose of disinfecting. 3. Luminaires with a rated electric input of not greater than 3.0 Watt.

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Vote	11 - 0 - 3
Recommendation Date	January 23, 2023
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-065-22 Exterior lighting scope expansion
CDP ID #	795
Code	IECC CE
Code Section(s)	C405.2
Location	base
Proponent	Bryan Holland bryan.holland@nema.org
Proposal Status	SC review
Subcommittee	CE Elec, Light
Subcommittee Notes	Reason statement – "this improves the language of the section by addressing situations where third party lighting is installed. It also addresses lighting at the building site that is controlled by the building owner."
Recommendation	APPROVE AS MODIFIED Modifications are included in the following file: CE Electrical Power, Lighting, Renewables > Proposals > **Jan. 23, 2023** CED1-65_v2_1.19.23.docx
Vote	10 - 2 - 2
Recommendation Date	January 23, 2023
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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CED1-65-22 (updated 2/22/23)

IECC: C405.2, C405.5.1

Proponents: Bryan Holland, representing National Electrical Manufacturers Association (NEMA) (bryan.holland@nema.org)

2024 International Energy Conservation Code [CE Project]

Revise as follows:

C405.2 Lighting controls.

Lighting systems powered through the energy service for the *building* and *building site* lighting for which the building owner is responsible shall be provided with controls that comply with Sections C405.2.1 through C405.2.9 .

C405.5.1 Total connected ~~exterior building~~ exterior lighting power.

The total exterior connected lighting power shall be the total maximum rated wattage of all exterior lighting that is powered through the energy service for the *building* and *building site* lighting for which the building owner is responsible.

C405.5.2 Exterior lighting power allowance.

The exterior lighting power allowance (watts) is calculated as follows:

2. For each exterior area that is to be illuminated by lighting that is powered through the energy service for the *building* and *building site* lighting for which the building owner is responsible, determine the applicable area type from Table C405.5.2(2).

Reason Statement for Revisions:

NEMA believes the added language addresses the concerns of the opponents to CED1-69. The new language ensures that building site lighting that is not owned and maintained by the associated building owner or is not within the scope of a building project permit. In short, if the project specifies separate services for the building premises wiring system and exterior lighting that are under the same building project permit or owned and maintained by the building owner, the IECC-C rules apply to that exterior lighting. If the exterior lighting is owner and maintained by a third party and not under the scope of the building permit project, the IECC-C rules may not apply. C503.5 doesn't apply as long as no alterations are made to any existing lighting on the project site. For example, let' s say a permit is issued for a new parking lot with lighting that also includes alterations to existing parking lot lighting. The new work portion of the permit has to comply with C405.5, the existing work portion complies with C503.5. C503.5.2(1) tells us all the lighting now has to comply with C405.5. However, C405.5.1 will now say only the lighting that is under the scope of the building project permit. This prevents a scenario where all existing lighting on a property suddenly comes under the IECC-C compliance requirements as a result of C503.5 requirements.

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Reason for approval as modified by the PLR SC: The revision ensures all exterior lighting on a building site is required to meet the requirements of the code regardless of what electrical service supplies that lighting, as long as that electrical service and the exterior lighting is the responsibility of the building or building site owner.

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-077-22 Definite purpose machine exceptions
CDP ID #	796
Code	IECC CE
Code Section(s)	C405.8
Location	base
Proponent	Bryan Holland bryan.holland@nema.org
Proposal Status	SC review
Subcommittee	CE Elec, Light
Subcommittee Notes	Reason Statement: This change ensures that the code is consistent with federal energy efficiency requirements and exceptions for motors.
Recommendation	APPROVE AS MODIFIED **c405.8 Electric motors...** **Exception**: The standards in this section shall not apply to the following exempt electric motors: 6. Definite purpose machines ~~covered in~~ within the scope of ANSI/NEMA MG 1-2021, Part 18.
Vote	12 - 0 - 1
Recommendation Date	January 23, 2023
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____

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Date	

International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-172-22 Energy Credits Water Flow Maximums
CDP ID #	655
Code	IECC CE
Code Section(s)	Tables C406.2(1), C406.2(3), C406.2.3.4
Location	base
Proponent	Reid Hart reid.hart.pe@gmail.com
Proposal Status	SC review
Subcommittee	CE Envelope
Subcommittee Notes	**Reason Statement**: The uniform pluming code recently lowered the flow limit for showerheads from 2.5 to 2.0 gpm (9.5 to 7.6 L/m). To maintain a savings for this energy credit measure, the limit for measure W09 is reduced to 1.8 gpm (6.8 L/m). In addition, other residential fixture flow is reduced to 1.2 gpm (4.5 L/m) This aligns with appliance standards in California, Colorado, Washington and possibly other jurisdictions. In addition, the maximum flow for residential lavatory fixtures is reduced to 1.2 gpm (4.5 L/m), aligning with those jurisdictions. The energy impact was reanalyzed with the new differentials between base and improved, with the energy credits being cut in half.
Recommendation	**Approve as submitted**
Vote	**Approve as submitted** 13-0-1
Recommendation Date	12/26/22
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	

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Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-174-22 Energy Credits Point-of-Use Water Heaters
CDP ID #	671
Code	IECC CE
Code Section(s)	C406.2.3.2
Location	base
Proponent	Reid Hart reid.hart.pe@gmail.com
Proposal Status	SC review
Subcommittee	CE Envelope
Subcommittee Notes	**Reason Statement**: The changes are primarily editorial and for purposes of clarification. Three substantial changes include: • Reducing the size of building where the credit is allowed, allowing for more applicability. • The IECC HVACR and Water Heating Subcommittee added water piping volume requirements for commercial kitchens and showers. • Reducing the volume of fluid in the piping to other fixtures to 16 ounces. With 3/8" supply piping, a 3 floor stack of restrooms with 4 lavatories on each floor can be effectively served while allowing timely delivery of hot water to the fixtures.
Recommendation	**Approve as modified** **See below**
Vote	**Approve as modified** 13-1-1
Recommendation Date	12/26/22
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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C406.2.3.2 Water-heating distribution temperature maintenance. A project is allowed to claim energy credits from only one of the following SHW distribution temperature maintenance measures.

1. **W04: Service Hot Water Piping Insulation Increase.** Where service hot water is provided by a central water heating system, the hot water pipe insulation thickness shall be at least 1.5 times the thickness required in Section C404.4. All service hot water piping shall be insulated from the hot water source to the fixture shutoff. Where no more than 50 percent of hot water piping does not have increased insulation due to installation in partitions, the credit shall be prorated as a percentage of lineal feet of piping with increased insulation.
2. **W0S Point of use water heaters.** Credits are available for office or school buildings larger than 5,000 square feet ~~10,000 ft^2~~ (~~930~~ 460 m^2) where service water heating systems meet the following requirements:

   2.1. Fixtures requiring hot water shall be supplied from a local i~~zed source of hot~~ water heater with no recirculating system or heat trace piping.

   Exception: Commercial kitchens or showers in locker rooms shall be permitted to have a local recirculating system or heat trace piping where water heaters are located not more than 50 lineal feet (15 m) from the furthest fixture served.

   2.2. Supply piping from the water heater to the termination of the fixture supply pipe shall be insulated to the levels shown in Table C404.4.1. ~~C403.12.3 without e~~

   Exceptions:

   1. Piping at locations where a vertical support of the piping is installed.
   2. Where piping passes through a framing member ~~if~~ and insulation requires increasing the size of the framing member.

   2.3. The water volume in the piping from the water heater to the termination of ~~the~~ any individual fixture ~~supply pipe~~ shall be limited as follows:

   ~~2.1~~ 2.3.1. Non-residential Public lavatory faucets that are available for use by members of the general public ~~ies~~: not more than 2 oz (60 mL)

   2.3.2 Commercial kitchens or showers in locker rooms with recirculating systems or heat trace piping: not more than 24 oz (0.75 L) from the recirculating system or heat trace piping.

   ~~2.2~~ 2.3.3~~2~~. All other plumbing fixtures or appliances: not more than ~~0.25 gallons~~ 16 oz (~~0.95~~ 0.5 L)

   ~~Exception: Where all remotely located hot water uses meet the requirements for measure W05, separate water heaters serving commercial kitchens or showers in locker rooms shall be permitted to have a local recirculating system or heat trace piping.~~

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-204-22 Net zero appendix modifications
CDP ID #	744
Code	IECC CE
Code Section(s)	CC101.1
Location	appendix
Proponent	Greg Johnson gjohnsonconsulting@gmail.com
Proposal Status	SC review
Subcommittee	CE Model, Metrics
Subcommittee Notes	This proposal makes several editorial changes to the Net Zero Appendix, Appendix CC, and includes a renewable procurement factor exception for R-2 occupancies.
Recommendation	Approve as modified
Vote	Approve as modified – 10, Disapprove – 3, Abstain – 3
Recommendation Date	2/13/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____

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CED1-204-22

APPENDIX CC
ZERO ENERGY COMMERCIAL BUILDING PROVISIONS

SECTION CC101
GENERAL

CC101.1 Purpose. The purpose of this appendix is to supplement the *International Energy Conservation Code* and require renewable energy systems of adequate capacity to achieve net zero operational energy.

CC101.2 Scope. This appendix applies to new buildings that are addressed by the *International Energy Conservation Code*.

Exceptions:

1. Detached one- and two-family dwellings and townhouses as well as Group R-2 buildings three stories or less in height above grade plane, manufactured homes (mobile dwellings), and manufactured houses (modular dwellings).
2. Buildings that use neither electricity nor fossil fuel.

SECTION CC102
DEFINITIONS

CC102.1 Definitions. The definitions contained in this section supplement or modify the definitions in the International Energy Conservation Code.

ADJUSTED OFF-SITE RENEWABLE ENERGY. The amount of energy production from off-site renewable energy systems that may be used to offset building energy.

BUILDING ENERGY. All energy consumed at the building site as measured at the site boundary. Contributions from on- site or off-site renewable energy systems shall not be considered when determining the building energy.

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

DIRECT ACCESS TO WHOLESALE MARKET. An agreement by the owner and a renewable energy developer to purchase renewable energy from the wholesale market.

DIRECT OWNERSHIP. an *off-site renewable energy system* under the ownership or control of the building project owner.

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FINANCIAL RENEWABLE ENERGY POWER PURCHASE AGREEMENT (FPPA). 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."

GREEN RETAIL PRICING. A program by the retail electricity provider to provide 100-percent renewable energy to the building project owner.

MINIMUM RENEWABLE ENERGY REQUIREMENT: the minimum amount of on-site or adjusted off-site renewable energy needed to comply with this appendix.

OFF-SITE RENEWABLE ENERGY SYSTEM. Renewable energy system which serves the building project and is not an *on-site renewable energy system*, including contracted purchases of renewable energy and renewable energy certificates.

ON-SITE RENEWABLE ENERGY SYSTEM. Renewable energy systems located on any of the following:

1. the building,
2. the property upon which the building is located,
3. a property that shares a boundary with and is under the same ownership or control as the property on which the building is located, or
4. a property that is under the same ownership or control as the property on which the building is located and is separated only by a public right-of-way from the building served by the renewable energy system.

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

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 systems; also known as an energy attribute and energy attribute certificate (EAC).

RENEWABLE ENERGY INVESTMENT FUND (REIF). A fund established by the local government or other entity to accept payment from building owners to construct or acquire qualifying renewable energy (along with RECs) on their behalf.

RENEWABLE ENERGY SYSTEM. Photovoltaic, solar thermal, geothermal energy extracted from hot fluid or steam, wind, or other approved systems used to generate renewable energy.

SEMIHEATED SPACE. An enclosed space within a building that is heated by a heating system whose output capacity is greater than or equal to 3.4 Btu/h × ft2 of floor area but is not a conditioned space.

SECTION CC103
MINIMUM RENEWABLE ENERGY

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CC103.1 Renewable energy. On-site renewable energy systems shall be installed, or adjusted off-site renewable energy shall be procured to meet the *minimum renewable energy requirement*.

(Equation CC-1)

$RE_{onsite} + RE_{offsite} \geq RE_{min}$

where:

RE_{onsite} = Annual site energy production from *on-site renewable energy systems*, including installed *on-site renewable energy systems* for compliance with C405.13.1 and C406.5.

$RE_{offsite}$ = Adjusted annual energy production from *off-site renewable energy systems* that may be credited against the *minimum renewable energy requirement.* This includes off-site renewable energy purchased for compliance with C405.15.1 and C405.15.2.

RE_{min} = *Minimum renewable energy requirement.*

When Section C401.2.1(1) is used for compliance with the *International Energy Conservation Code*, the *minimum renewable energy requirement* shall be determined by multiplying the gross *conditioned floor area* plus the gross semiheated floor area of the proposed building by the prescriptive renewable energy requirement from Table CC103.1. An area weighted average shall be used for mixed-use buildings.

When Section C401.2.1, Item 2 or Section C401.2.2 is used for compliance with the International Energy Conservation Code, the *minimum renewable energy requirement* shall be equal to the *building energy* as determined from energy simulations.

CC103.2 Calculation of on-site renewable energy. The annual energy production from *on-site renewable energy systems* shall be determined using ~~the PVWatts software or other~~ *approved* software.

CC103.2.1 Renewable energy certificates. Renewable energy certificates (RECs) associated with the *on-site renewable energy system* shall be assigned to the initial and subsequent building owner(s) for a cumulative period of not less than 15 years. The building owner(s) are permitted to transfer RECs to building tenants occupying the building.

CC103.3 Off-site renewable energy. Off-site energy shall comply with Sections CC103.3.1 and CC103.3.2.

CC103.3.1 ~~off~~Off-site procurement methods. Off-site renewable energy procurement methods used to comply with Section CC103.1 shall be one or more of the following:

1. *Community renewables energy facility*
2. *Renewable energy investment fund*
3. *Financial renewable energy power purchase agreement*
4. *Direct ownership*
5. *Direct access to wholesale market*
6. *Green retail pricing*
7. Unbundled *Renewable Energy Certificates (RECs)*

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8. *Physical renewable energy power purchase agreement*

TABLE CC103.1
PRESCRIPTIVE RENEWABLE ENERGY REQUIREMENT FOR BUILDING TYPES AND CLIMATES (kWh/ft²-yr)

	Building Area Type											
Climate Zone	Multifamily (R-2)	Healthcare/hospital (I-2)	Hotel/Motel (R-2)	Office (B)	Restaurant (A-2)	Retail (M)	School (E)	Warehouse (S)	Grocery Store (M)	Laboratory (B)	Assembly (A)	All others
0A	13	35	23	10	129	17	16	3	27	41	5	17
0B	12	34	22	10	123	17	15	3	26	40	5	16
1A	11	32	20	9	113	14	13	3	24	36	4	15
1B	11	32	20	9	118	15	14	3	24	37	5	15
2A	11	32	20	8	114	13	12	3	22	34	4	14
2B	11	30	18	8	108	12	11	3	22	33	4	13
3A	11	30	18	8	117	13	11	3	21	31	4	13
3B	10	29	18	8	110	12	10	3	20	31	4	13
3C	9	28	18	7	100	10	9	2	18	27	3	12
4A	12	31	18	8	123	15	11	6	21	32	4	14
4B	11	29	18	7	113	12	10	4	20	30	4	13
4C	10	28	17	7	111	13	10	4	18	28	3	13
5A	12	31	19	8	133	17	11	8	22	34	4	15
5B	11	29	18	8	125	14	11	5	21	31	4	14
5C	10	29	17	7	116	13	10	4	18	27	3	13
6A	14	33	20	10	151	20	13	11	26	39	5	17
6B	13	33	19	8	137	17	11	7	22	34	4	16
7	14	37	21	9	164	20	13	10	25	37	5	18
8	15	40	22	11	190	23	16	10	28	43	5	20

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CC103.3.2 Requirements for all procurement methods. Offsite renewable energy systems used to comply with Section Cc103.1 shall comply with ~~all~~ all of the following:

1. The building owner shall sign a legally binding contract or other approved agreement to procure qualifying off-site renewable energy.
2. The procurement contract shall have duration of not less than 15 years and shall be structured to survive a partial or full transfer of ownership of the property.
3. RECs associated with the procured off-site renewable energy shall comply with the following requirements:

   3.1 The RECs shall be retained or retired by or on behalf of the property owner or tenant for a period of not less than 15 years.

   3.2 The RECs shall be created within a 12-month period of the use of the REC; and

   3.3 The RECs shall be from a generating asset placed in service no more than 5 years before the issuance of the certificate of occupancy.
4. The generating source shall be a *renewable energy system*.
5. The generation source shall be located where the energy can be delivered to the building site by any of the following:

   5.1. Direct connection to the off-site renewable energy facility

   5.2. The local utility or distribution entity

   5.3. An interconnected electrical network where energy delivery capacity between the generator and the building site is available
6. Records on power sent to or purchased by the building project shall be retained by the building owner and made available for inspection by the code official upon request.

CC103.3.3 Adjusted off-site renewable energy. The process for calculating the adjusted off-site renewable energy is shown in Equation CC-2.

(Equation CC-2)

$$RE_{offsite} = PF_{NonRecs} \times RE_{NonRecs} + 0.20 \times RE_{Recs}$$

where:

$RE_{offsite}$ = Adjusted off-site renewable energy.

$PF_{NonRecs}$ = The renewable energy procurement factor for off-site renewable energy other than RECs per Section CC103.3.3.1.

$RE_{NonRecs}$ = Annual energy production for renewable energy procurement methods other than RECs.

$RE_{NonRecs}$ = Annual energy production associated with unbundled RECs.

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~~**CC103.3.3.1 Procurement Factors.** When installed on-site renewable energy capacity is 7.5 W/ft^2 of roof area or greater, the procurement factor is 1.00, otherwise, the procurement factor is 0.75. A procurement factor of 1.0 shall also be used when the conditions of exceptions 1, 2, or 3 to C405.15.1 are satisfied. In all cases, unbundled renewable energy certificates shall have a procurement factor of 0.20.~~

CC103.3.3.1 Procurement Factors. The procurement factors for renewable energy system compliance alternatives shall be as specified in Table CC103.2.

Exception: Other than for RECs**,** procurement factors for R-2 occupancies shall be 1.00. The procurement factors for R-2 occupancies using RECs to comply shall be 0.33.

TABLE CC103.2.

Procurement Factors for Renewable Energy System Compliance Alternatives

On-Site Renewable Energy	Procurement Factor	
	Unbundled RECs	Other Procurement Methods
7.5 W/ft^2 of roof area or more or where one or more of exceptions 1, 2 or 3 to C405.15.1 are satisfied	0.20	1.0
Less than 7.5 W/ft^2 of roof area and no exceptions 1, 2 or 3 to C405.15.1 are satisfied	0.20	0.75

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-086-22 Minimum envelope efficiency for Zero energy buildings
CDP ID #	870
Code	IECC CE
Code Section(s)	CC103.1
Location	base
Proponent	Amy Boyce amy.boyce@imt.org
Proposal Status	SC review
Subcommittee	CE Model, Metrics
Subcommittee Notes	This proposal ensures that minimum envelope efficiency requirements are met for projects that use offsite renewable energy to comply with the zero-energy provisions of Appendix CC.
Recommendation	Approve
Vote	Approve – 10, Disapprove – 4, Abstain – 2
Recommendation Date	2/13/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____x_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-180-22 Advanced energy credits appendix removal
CDP ID #	880
Code	IECC CE
Code Section(s)	Appendix CF
Location	appendix
Proponent	Laura Petrillo-Groh lpetrillo-groh@ahrinet.org
Proposal Status	SC review
Subcommittee	CE Model, Metrics
Subcommittee Notes	This proposal would remove the additional energy credit appendix, Appendix CF due to Energy Policy Act preemption concerns. The recently passed CED1-190 demonstrated that energy credit compliance can be achieved by trading off excess load management and renewable credits without affecting preemption.
Recommendation	Disapprove
Vote	Approve – 3, Disapprove – 11, Abstain - 1
Recommendation Date	2/13/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____x_____
Consensus Committee	
Committee Response	

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Proposal #	CED1-206-22 Glide path modifications
CDP ID #	884
Code	IECC CE
Code Section(s)	CD101.1
Location	appendix
Proponent	Laura Petrillo-Groh lpetrillo-groh@ahrinet.org
Proposal Status	SC review
Subcommittee	CE Model, Metrics
Subcommittee Notes	This proposal would remove the additional energy credit requirement in the Glide Path Appendix, Appendix CD, due to Energy Policy Act preemption concerns. The recently passed CED1-190 demonstrated that energy credit compliance can be achieved by trading off excess load management and renewable credits without affecting preemption.
Recommendation	Disapprove
Vote	Approve – 2, Disapprove – 12, Abstain – 1
Recommendation Date	2/13/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____x_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CECD1-008-22 Modeling Software Testing
CDP ID #	
Code	IECC CE
Code Section(s)	C407.5
Location	base
Proponent	Mike Tillou tillou@pnnl.gov
Proposal Status	SC review
Subcommittee	CE Model, Metrics
Subcommittee Notes	This proposal incorporates AHSRAE Standard 14-2020 modeling software acceptance criteria into Section C407.5.
Recommendation	Approve
Vote	Approve – 15, Disapprove – 0, Abstain – 1
Recommendation Date	1/30/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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Code Change Proposal Tracking Sheet

Proposal #	CED1-127-22 Orientation
CDP ID #	696
Code	IECC CE
Code Section(s)	C402.5.1.3
Location	base
Proponent	Emily Toto etoto@ashrae.org
Proposal Status	SC review
Subcommittee	CE Envelope
Subcommittee Notes	**Reason**: Proposal limits design flexibility and would be better suited to an optional compliance path.
Recommendation	**Disapprove**
Vote	**Disapprove** 12-0-2
Recommendation Date	2/16/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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Code Change Proposal Tracking Sheet

THIS FORM HAS BEEN UPDATED BY SUBCOMMITTEE ACTION ON 2/16/23

Proposal #	CED1-127-22 Orientation
CDP ID #	696
Code	IECC CE
Code Section(s)	C402.5.1.3
Location	base
Proponent	Emily Toto etoto@ashrae.org
Proposal Status	SC review
Subcommittee	CE Envelope
Subcommittee Notes	**Reason**: As modified this proposal introduces requirements to ensure the energy efficient design of fenestration with East and West orientations.
Recommendation	**Approve as modified** **Modification:** NORTH-ORIENTED. facing within 67.5 degrees of true north in the northern hemisphere~~;~~ ~~(however,~~ or facing within 67.5 degrees of true south in the southern hemisphere.~~)~~ SOUTH-ORIENTED. facing within 45 degrees of true south in the northern hemisphere~~;~~ ~~(however,~~ or facing within 45 degrees of true north in the southern hemisphere.~~)~~ EAST-ORIENTED. facing within 45 degrees of true east to the south and within less than 22.5 degrees of true east to the north in the northern hemisphere~~;~~ ~~(however,~~ or facing within 45 degrees of true east to the north and within less than 22.5 degrees of true east to the south in the southern hemisphere.~~)~~ WEST-ORIENTED. facing within 45 degrees of true west to the south and within less than 22.5 degrees of true west to the north in the northern hemisphere~~;~~ ~~(however,~~ or facing within 45 degrees of true west to the north and within less than 22.5 degrees of true west to the south in the southern hemisphere.~~)~~
Vote	**Approve as modified** 7-6-3
Recommendation Date	1/5/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____X_____
Consensus Committee	
Committee Response	

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Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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Proposal #	CECD1-9-22 WDMA reference
CDP ID #	
Code	IECC CE
Code Section(s)	Chapter 6
Location	base
Proponent	Craig Drumheller and Jennifer Hatfield
Proposal Status	SC review
Subcommittee	CE Admin
Subcommittee Notes	Reason: based on proponent's reason statement
Recommendation	approve
Vote	8-0-1
Recommendation Date	1/31/23
Next Step	To Subcommittee To Advisory Group_____ To Consensus Committee_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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International Energy Conservation Code
Code Change Proposal Tracking Sheet

Proposal #	CED1-153, CED1-154, and CED1-171
CDP ID #	
Code	IECC CE
Code Section(s)	C407.3.2.(6), C409.6.1.9, C403.10, C403.11.6, C404.8.3
Location	
Proponent	Bruce Swiecicki, bswiecicki@npga.org
Proposal Status	SC review
Subcommittee	CE Admin
Subcommittee Notes	The SC would like the HVAC SC to reconsider CED1-153, 154, and 171. The SC would like the PLR SC to review all five public comments for technical merits.
Recommendation	Reason Statement: The proposed revisions to CED1-153, 154, and 171 are not reflect the intent or original cost-effectiveness rational that was provided when the exceptions were added to the code.
Vote	Disapprove: 12-0-1
Recommendation Date	1/17/2022
Next Step	To Subcommittee: HVAC SC (153, 154, 171) and PLR SC (All) To Advisory Group_____ To Consensus Committee_____
Consensus Committee	
Committee Response	
Vote	Affirmative_____ Negative_____ Table_____ To Subcommittee_____
Date	

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