



International Energy Conservation Code Consensus Committee-Commercial

Meeting Agenda (8/24/23 posting)

August 30, 2023

2 PM Eastern to 5 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 August 23, 2023
6. Administrative issues.-
7. Action Items.

Tabled items CE2D-33-23 and CE2D-34-23	
CE2D-52-23(Remove C406.1.1.1 buildings without heat pumps)	Modeling disapprove 8-1-6
CE2D-54-23(Bldg/Additions not served by heat pumps)	Modeling disapprove 8-1-6
CE2D-55-23(Remove C406.1.1.1)	Modeling disapprove 7-3-3
CE2D-56-23(Remove buildings without heat pumps)	Modeling disapprove 8-1-6
CE2D-68-23(Remove additions not served by heat pumps)	Modeling disapprove 8-1-6
CE2D-65-23(Remove Table C406.3.7)	Modeling disapprove 13-0-1
CE2D-60-23(Remove table of renewable and load management)	Modeling disapprove 12-0-1
CE2D-72-23(Remove additional credit for alterations)	Modeling disapprove 13-0-1
CE2D-74-23(Remove Comm all-electric appendix)	Modeling disapprove 12-0-2
CE2D-49-23(Lighting efficacy alignment with IECC R)	Electrical disapprove 7-2-6
CE2D-11-23(Heating and cooling equip. efficiencies)	HVACR as modified 9-0-2
CE2D-12-23(HVAC equip performance requirements)	HVACR approve 10-0-2
CE2D-13-23(HVAC equip performance requirements)	HVACR approve 9-0-2

CE2D-14-23(HVAC equip performance requirements)
CE2D-15-23(HVAC equip performance requirements)
CE2D-18-23(HVAC equip performance requirements)
CE2D-20-23(HVAC equip performance requirements)
CE2D-21-23(HVAC equip performance requirements)

HVACR disapprove 9-0-2
HVACR approve 9-0-2
HVACR approve 9-0-2
HVACR approve 8-0-2
HVACR approve 8-0-2

8. Subcommittee Reports

9. Other business.

10. Next meeting September 6, 2 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/>

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Kristopher Stenger, AIA, Director of Energy Programs

International Code Council

kstenger@iccsafe.org

Join by meeting number

Meeting number (access code): 2599 815 0421

Meeting password: 3eKk3uWWdi3

Tap to join from a mobile device (attendees only)

1-844-740-1264,,25998150421## USA Toll Free

+1-415-655-0003,,25998150421## US Toll



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-52-23 Bldg/Additions not served by heat pumps
CDP ID #	
Code	IECC CE
Code Section(s)	C406.1.1.1
Location	SC rev
Proponent	Emily Lorenz emilyblorenz@gmail.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	The proponent did not provide sufficient support for striking provisions to partially address differences in energy usage between heat pump and non-heat pump buildings, nor were specific changes proposed to address specific concerns.
Recommendation	Disapprove
Vote	Approve – 1, Disapprove – 8, Abstain – 6
Recommendation Date	8/7/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ X _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-54-23 Bldg/Additions not served by heat pumps
CDP ID #	1643
Code	IECC CE
Code Section(s)	C406.1.1.1
Location	SC rev
Proponent	Laura Petrillo-Groh lpetrillo-groh@ahrinet.org
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	The proponent did not provide sufficient support for striking provisions to partially address differences in energy usage between heat pump and non-heat pump buildings, nor were specific changes proposed to address specific concerns.
Recommendation	Disapprove
Vote	Approve – 1, Disapprove – 8, Abstain – 6
Recommendation Date	8/7/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ X _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-55-23 Remove C406.1.1.1
CDP ID #	1762
Code	IECC CE
Code Section(s)	C406.1.1.1
Location	SC rev
Proponent	Kevin Duell kevin.duell@nwnatural.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	The proponent did not provide sufficient support for the changes proposed, and the extent of changes intended by the proponent were unclear.
Recommendation	Disapprove
Vote	Approve – 3, Disapprove – 7, Abstain – 3
Recommendation Date	8/7/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ x _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-56-23 Remove buildings without heat pumps
CDP ID #	1754
Code	IECC CE
Code Section(s)	C406.1.1.1
Location	SC rev
Proponent	Renee Lani rlani@apga.org
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	The proponent did not provide sufficient support for striking provisions to partially address differences in energy usage between heat pump and non-heat pump buildings, nor were specific changes proposed to address specific concerns.
Recommendation	Disapprove
Vote	Approve – 1, Disapprove – 8, Abstain – 6
Recommendation Date	8/7/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ x _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-68-23 Remove additions not served by heat pump
CDP ID #	1793
Code	IECC CE
Code Section(s)	C502.3.7.1
Location	SC rev
Proponent	Eric Tate eric.tate@atmosenergy.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	The proponent did not provide sufficient support for striking provisions to partially address differences in energy usage between heat pump and non-heat pump buildings, nor were specific changes proposed to address specific concerns.
Recommendation	Disapprove
Vote	Approve – 1, Disapprove – 8, Abstain – 6
Recommendation Date	8/7/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee <input checked="" type="checkbox"/> _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-65-23 Remove Table C406.3.7
CDP ID #	1789
Code	IECC CE
Code Section(s)	C406.3.7
Location	SC rev
Proponent	Eric Tate eric.tate@atmosenergy.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	Extensive analysis was provided by PNNL supporting the inclusion of the energy credit adjustment table for the use of heat pump water heaters and demand response in the code.
Recommendation	Disapprove
Vote	Approve – 0, Disapprove – 13, Abstain – 1
Recommendation Date	8/21/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ x _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-60-23 Remove table of renewable and load management credits
CDP ID #	1784
Code	IECC CE
Code Section(s)	C406.1.2 Table
Location	SC rev
Proponent	Eric Tate eric.tate@atmosenergy.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	Renewable energy and load management credits are a key component in supporting the C406 approach to additional energy credits. Extensive analysis has been provided by PNNL supporting this approach.
Recommendation	Disapprove
Vote	Approve – 0, Disapprove – 12, Abstain – 1
Recommendation Date	8/21/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee <input checked="" type="checkbox"/> _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-72-23 Remove additional credit req for alterations
CDP ID #	1795
Code	IECC CE
Code Section(s)	C503.6
Location	SC rev
Proponent	Eric Tate eric.tate@atmosenergy.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	Extensive analysis has been provided supporting the inclusion of additional energy credits for alterations in the code.
Recommendation	Disapprove
Vote	Approve – 0, Disapprove – 13, Abstain – 1
Recommendation Date	8/21/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ X _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-74-23 Remove Com All-Electic Appendix
CDP ID #	1649
Code	IECC CE
Code Section(s)	CG Appendix
Location	SC rev
Proponent	Fredric Zwerg fredric.zwerg@swgas.com
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	"All-Electric Buildings" was not adopted into the main body of the code, however; the consensus committee thought that it should be included in an Appendix to give jurisdictions an option for energy efficient all-electric design.
Recommendation	Disapprove
Vote	Approve – 0, Disapprove – 12, Abstain – 2
Recommendation Date	8/21/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____ x _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-49-23 Lighting efficacy alignment with IECC R
CDP ID #	1560
Code	IECC CE
Code Section(s)	C405.3.3
Location	SC rev
Proponent	Mike Moore mmoore@statorllc.com
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	<ul style="list-style-type: none"> ○ Reason: Retain the simplicity of existing proposal
Vote	Disapprove 7-2-6
Recommendation Date	8/21/23
Next Step	To Subcommittee _____ To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

Replace CE2D-49-23 with the following:

C405.3.3 Lighting power for sleeping units and dwelling units. Sleeping 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, permanently installed lighting 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 other appliances.
2. Antimicrobial lighting used for the sole purpose of disinfecting.

3. General service lamps complying with DOE 10 CFR 430.32.

~~3.4.~~ Luminaires with an input rating of less than 3W.

C406.2.5.6 L06 Reduced lighting power. Interior lighting within all *building* areas shall comply with this section.

1. The connected interior lighting power (LP) determined in accordance with C405.3.1 shall be 95 percent or less than the interior lighting power allowance (LPA) determined in accordance with Section C405.3.2 using the same method used to comply with C405.3. Energy credits shall not be greater than four times the L06 base credit from Section C406.2 and shall be determined using Equation 4-24.

2. All permanently installed lighting serving dwelling units and sleeping units, including ceiling fan light kits and lighting integrated into range hoods and exhaust fans shall be provided by lamps with an efficacy of not less than 90 lumens per watt or by luminaires that have an efficacy of not less than 65 lumens per watt.

Exceptions:

1. Lighting integral to other appliances.
2. Antimicrobial lighting used for the sole purpose of disinfecting.

3. Luminaires with an input rating of less than 3 W.



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-11-23 Heating and cooling equip. efficiencies
CDP ID #	1821
Code	IECC CE
Code Section(s)	C403.2
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> • Editorial changes to the tables • The requirements for before 1/1/2023 in tables C403.3.2(1) and (2) should be deleted because the date has already passed. Just show the after 1/1/2023 requirements • Also for footnote c the following change should be made: Remove the word "are" in the footnote for grammar reasons
Recommendation	<p>Approve As Modified</p> <p>Reason: The requirements for before 1/1/2023 in tables C403.3.2(1) and (2) should be deleted because the date has already passed and just show the after 1/1/2023 requirements.</p>
Vote	Approve As Modified 9-0-2
Recommendation Date	8/17/2023
Next Step	To Subcommittee _____ To Advisory Group _____ To Consensus Committee <u> X </u>
Consensus Committee	
Committee Response	

Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

CE2D-11-23 As Modified

Reason:

This is just editorial changes to the tables that were not modified in the public review but do need some fixing.

The requirements for before 1/1/2023 in tables C403.3.2(1) and (2) should be deleted because the date has already passed and just show the after 1/1/2023 requirements.

Example:

TABLE C403.3.2(1)(staff note: table to be updated with ASHRAE 90.1-2022 version)
ELECTRICALLY OPERATED UNITARY AIR CONDITIONERS AND CONDENSING UNITS—MINIMUM EFFICIENCY REQUIREMENTS^{c, d}

EQUIPMENT TYPE	SIZE CATEGORY	HEADING SECTION TYPE	SUBCATEGORY OR RATING CONDITION	MINIMUM EFFICIENCY	TEST PROCEDURE ^a
Air conditioners, air cooled	< 65,000 Btu/h ^b	All	Split system, three phase and applications outside US single phase ^b	13.0 SEER before 1/1/2023 13.4 SEER2 after 1/1/2023	AHRI 210/240—2017 before 1/1/2023 AHRI 210/240—2023 after 1/1/2023
			Single-package, three phase and applications outside US single phase ^b	14.0 SEER before 1/1/2023 13.4 SEER2 after 1/1/2023	AHRI 210/240—2023 after 1/1/2023

Also for footnote c the following change should be made.

c. DOE 10 CFR 430 Subpart B Appendix M1 includes the test procedure updates effective 1/ 1/2023 that will be incorporated ~~are~~ documented in AHRI 210/240—2023.



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-12-23 HVAC equip performance req
CDP ID #	1769
Code	IECC CE
Code Section(s)	C403.3.2
Location	SC rev
Proponent	Eric Tate eric.tate@atmosenergy.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> This comment was originally made earlier to help ensure that during the IECC process we kept up with the ASHRAE tables. Okay with removing it now
Recommendation	<p>Approve</p> <p>Reason: Statement is no longer needed</p>
Vote	Approve 10-0-2
Recommendation Date	8/10/23
Next Step	<p>To Subcommittee _____</p> <p>To Advisory Group _____</p> <p>To Consensus Committee <u> X </u> _____</p>
Consensus Committee	
Committee Response	
Vote	<p>Affirmative _____ Negative _____ Table _____</p> <p>To Subcommittee _____</p>



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-13-23 HVAC equip performance req
CDP ID #	1811
Code	IECC CE
Code Section(s)	C403.3.2
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	
Recommendation	<p>Approve</p> <p>Reason: AHRI 210/240-2023 has already been published in 2022. The -2023 is the name of the standard and not the year of publication.</p>
Vote	Approve 9-0-2
Recommendation Date	8/10/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee <u>X</u> _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-14-23 HVAC equip performance req
CDP ID #	1831
Code	IECC CE
Code Section(s)	C403.3.2
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> • Comment suggests not calling out ASHRAE 90.1-2022, but call out specific tables. • Specific tables are already called out in the beginning of the paragraph, and the last sentence has already been removed in prior subcommittee action
Recommendation	<p>Disapprove</p> <p>Reason: Sentence was already eliminated in a prior action and the referenced tables are already called out in the first sentence.</p>
Vote	Disapprove 9-0-2
Recommendation Date	8/17/2023
Next Step	<p>To Subcommittee _____</p> <p>To Advisory Group _____</p> <p>To Consensus Committee <u> X </u></p>
Consensus Committee	
Committee Response	
Vote	<p>Affirmative _____ Negative _____ Table _____</p> <p>To Subcommittee _____</p>



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-15-23 HVAC equip performance req
CDP ID #	1837
Code	IECC CE
Code Section(s)	C403.3.2
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> Sort of an omnibus comment to remove any references to 2023 Passing this would be authorization for ICC staff to go through text and remove all requirements and references to 2023 dates
Recommendation	<p>Approve</p> <p>Reason: Good idea to remove references to outdated dates</p>
Vote	Approve 9-0-2
Recommendation Date	8/27/2023
Next Step	<p>To Subcommittee _____</p> <p>To Advisory Group _____</p> <p>To Consensus Committee <u> X </u> _____</p>
Consensus Committee	
Committee Response	
Vote	<p>Affirmative _____ Negative _____ Table _____</p> <p>To Subcommittee _____</p>



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-18-23 HVAC equip performance req
CDP ID #	1827
Code	IECC CE
Code Section(s)	C403.3.2(3) table
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> Discussion about how all tables that were posted for comment were intended to be updated to match ASHRAE tables, but some didn't
Recommendation	<p>Approve</p> <p>Reason: In the table C403.3.2(3) the capacity range for the water cooled electrically operated centrifugal is missing and ≥150 and <300 tons needs to be added. Just an editorial to add the missing capacity category for water cooled centrifugals.</p>
Vote	Approve 9-0-2
Recommendation Date	8/17/2023
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee <u>X</u> _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-20-23 HVAC equip performance req
CDP ID #	1875
Code	IECC CE
Code Section(s)	C403.3.2(8) table
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> • Explanation of table updates • There are errors in the existing table with duplicate IEER values. • When adopting the 90.1 table 6.8.1-8 eliminate the requirements before 1/1/2023 and also the 2014 AHRI 1230-2014 addendum 1 reference because the new AHRI 1230-2021 goes into effect on 1/1/2024 which will be the effective date for the IECC 2024 standard.
Recommendation	<p>Approve</p> <p>Reason: to eliminate dates prior to the publication of 2024 IECC, to harmonize with ASHRAE 90.1 and regulations</p>
Vote	Approve 8-0-2
Recommendation Date	8/17/2023
Next Step	<p>To Subcommittee _____</p> <p>To Advisory Group _____</p> <p>To Consensus Committee <u> X </u> _____</p>
Consensus Committee	
Committee Response	
Vote	<p>Affirmative _____ Negative _____ Table _____</p> <p>To Subcommittee _____</p>



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-21-23 HVAC equip performance req
CDP ID #	1877
Code	IECC CE
Code Section(s)	C403.3.2(9) table
Location	SC rev
Proponent	Richard Lord richard.lord@carrier.com
Proposal Status	SC rev
Subcommittee	CE HVACR & WH
Subcommittee Notes	<ul style="list-style-type: none"> Similar text as CE2D-20, but this comment applies to table 9 instead of table 8
Recommendation	<p>Approve</p> <p>Reason: to eliminate dates prior to the publication of 2024 IECC, to harmonize with ASHRAE 90.1 and regulations</p>
Vote	Approve 8-0-2
Recommendation Date	8/17/2023
Next Step	<p>To Subcommittee _____</p> <p>To Advisory Group _____</p> <p>To Consensus Committee <u> X </u></p>
Consensus Committee	
Committee Response	
Vote	<p>Affirmative _____ Negative _____ Table _____</p> <p>To Subcommittee _____</p>