



International Energy Conservation Code E4C-HVACR Subcommittee

Meeting Notes

January 13, 2022
11:30 AM EST to 1:30 PM EST (2 hours)
[Webex Link](#)

Committee Chair: Shaunna Mazingo, Mazingo Code Group LLC
Committee Vice Chair: Blake Shelide, Oregon Department of Energy

1. **Call to order**-Chair.

2. **Meeting Conduct.** Staff

- Identification of Representation/Conflict of Interest
- ICC [Council Policy 7](#) Committees: Section 5.1.10 Representation of Interests
- 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.

3. **Roll Call** – Establish Quorum- Vice-Chair

	First Name	Last Name	Category	Company
<input type="checkbox"/>	Christopher	Arnold	Consumer	Grand forks Public Schools
<input type="checkbox"/>	John	Bade	Utility	2050 Partners
<input type="checkbox"/>	Ellen	Eggerton	Gov. Regulator	City of Alexandria
<input type="checkbox"/>	Drake	Erbe	Standards Promulgator	ASHRAE
<input type="checkbox"/>	Henry	Ernst	Manufacturer	Daiken
<input type="checkbox"/>	Mark	Heizer	Gov. Regulator	Oregon Bldg Codes Div
<input type="checkbox"/>	Adrian	Jones	Gov. Regulator	City of Lawrence
<input type="checkbox"/>	Gary	Klein	User	Self
<input type="checkbox"/>	Jeff	Kleiss	Manufacturer	Lochinvar (AO Smith)
<input type="checkbox"/>	Benjamin	Levie	Consumer	UCSF
<input type="checkbox"/>	Dick	Lord	Manufacturer	Carrier
<input type="checkbox"/>	Frank	Morrison	Manufacturer	Baltimore Aircoil
<input type="checkbox"/>	Shaunna	Mozingo	User	Mozingo Code Group
<input type="checkbox"/>	Christopher	Perry	User	US DOE
<input type="checkbox"/>	Daniel	Nall	Gov. Regulator	Dan Nall Consultant/ AIA
<input type="checkbox"/>	Laura	Petrillo-Groh	Manufacturer	AHRI
<input type="checkbox"/>	Kevin	Rose	Public Segment	NEEA
<input type="checkbox"/>	Thomas	Schultz	Utility	American Gas Assoc.

<input type="checkbox"/>	Blake	Shelide	Gov. Regulator	OREGON
<input type="checkbox"/>	Amin	Tohmaz	Gov. Regulator	City of San Antonio
<input type="checkbox"/>	Doug	Tucker	Manufacturer	Mitsubishi
<input type="checkbox"/>	Jeremy	Williams	Gov. Regulator	US DOE
<input type="checkbox"/>	James	Yeoman	Gov. Regulator	City of Orem

4. **Approval of Minutes** Approval of December 9, 2021 meeting minutes

- The notes from the December 9 meeting will be voted on during the January 27, 2022 meeting.

5. **Old Business**

- None

6. **Approval of the agenda.**

- Motion to approve the agenda: Ellen Eggerton Ben Levie approved unanimously by voice vote.
- Steve Rosenstock's proposals moved to the end of the order as he had to join late.

7. **Action Items.** (We will hear as many of these as possible. Any proposal not gotten to in this meeting will be moved to the first items on the next meeting's agenda)

a. CEPI-088-21, HVAC Table Updates, Proponent- Steve Rosenstock

- Changed the 12.1 SEER2 to 12.0 to match DOE and 90.1
- Removed reference to AHRI 210/240-2017
- Added (2020) after 2023
- Realized that the small unitary 3-phase needed more updates. **This item Tabled** for additional review by a working group.
- Working group: Richard Lord, Laura Petrillo-Groh, Steve Rosenstock, John Bade, Chris Perry.

b. CEPI-090-21, Heat Pump Table Updates, Proponent- Steve Rosenstock

- Tabled for additional review by the working group assigned to CEPI-088-21

c. CEPI-091-21, Furnace Table Updates, Proponent- Steve Rosenstock

- Moved as modified by Mark Heizer, Frank Morrison 2nd. Passed by unanimous voice vote.
- Noted problems with the < vs >= signs in rows 2 and 4 were changed.
- Reason statement: To update the table to remove obsolete information, to align with 90.1, and to correct the inequality signs in row 2 and 4 to greater than or equal from "less than."

d. CEPI-092-21, Boiler Table Updates, Proponent- Steve Rosenstock

- Moved by John Bade to approve as submitted, Seconded by Mark Heizer, State of Oregon. Approved 0 no votes. Abstain by Chris Perry. **However, after reviewing CEPI-093-21, the subcommittee agreed the two proposals should be combined and that this proposal should not be forwarded to the full**

committee. Chris Perry will lead the work to combine the proposals.

- Proposal to remove obsolete values from the table and align with DOE and ASHRAE values.
 - Nick O'Neil noted that his proposal has higher values that reflect the DOE values for commercial boilers that go into effect on 1/10/23.
 - Drake stated that some of the values are out of line with ASHRAE 90.1. He suggested that we should be in alignment with DOE.
 - John Bade suggested that we go forward with CEPI 93 since it aligns with DOE, but understand that the court case is in process.
 - Ben Levie suggested we should go forward with the higher DOE values.
 - Nick noted that 93 does not include changes to consumer boilers.
 - Shawna suggested that the tables would be combined.
 - Nick suggested moving forward with Steve's table and then his later.
 - Steve Rosenstock pointed out that the consumer values are already in effect with no lawsuits.
 - Reason statement: To update the residential equipment to match DOE values and remove obsolete values.
- e. CEPI-093-21, Boilers Min Efficiency Req Gas and Oil, Proponent- Nicholas O'Neil
- To be combined with CEPI-092-21.
- f. CEPI-094-21, Variable Refrig Air Conditioners Table, Proponent- Steve Rosenstock
- Held for the next meeting due to lack of time
- g. CEPI-100-21, HVACR Start and Stop, Proponent- Emily Toto/ASHRAE
- Subcommittee agreed that with adding "with direct digital controls of individual zones."
 - John Bade suggested changing to "optimum start and stop controls." The subcommittee agreed. Automatic start and stop to be changed to Optimum Start and Stop Controls in all places.
 - Mark Heizer suggested adding Dwelling Units and Sleeping Units to the start of the exception. The subcommittee agreed. Add "Dwelling Units and Sleeping Units" to the start of the exception.
 - **Ellen Eggerton moved to approve, Mark Heizer 2nd. As modified. Unanimous voice vote.**
 - Need a reason statement. Ellen suggested to align with 90.1 and to clarify the exception. John Bade to write the reason statement.
- h. CEPI-102-21, Humidity Controls, Proponent- Emily Toto/ASHRAE
- Held for the next meeting due to lack of time
- i. CEPI-106-21, Outdoor Air Relief, Proponent- Emily Toto/ASHRAE
- Held for the next meeting due to lack of time

j. CEPI-111-21, Parking Garage Ventilation, Proponent- Emily Toto/ASHRAE

- Held for the next meeting due to lack of time

9. Other business.

a. Discuss order for hearing proposals for next meeting

- Subcommittee agreed to start with combined 92 and 93.
- These proposals will be on the agenda: 88, 90, 93, 94, 102, 106, and 111.

b. The chair has identified proposals 64, 65, and 72 as requiring review by the envelope subcommittee, and she will send them the proposals.

11. Upcoming meetings.

a. Second and fourth Thursday of each month, 11:30am – 1:30pm Eastern Time
Next meeting is January 27, 2022.

12. Other business

a. A suggestion was made to create a spreadsheet list all the proposals and their status to use as a consolidated schedule.

13. Adjourn. Motion by Blake Shelide, seconded by Thomas Schultz.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

[ICC Energy webpage](#)

[Code Change Monograph](#)

FOR ADDITIONAL INFORMATION, PLEASE CONTACT Shaunna Mozingo, Subcommittee Chair at sdmozingo@mozingocodegroup.com or Blake Shelide, Subcommittee Vice-Chair at blake.shelide@energy.oregon.gov