International Code Council

Economics, Modeling, and Whole-Building Subcommittee

Meeting Minutes

# Meeting Date: March 23, 2022

**Sub-Committee Chair:** Ian Finlayson

**Sub-Committee Vice Chair:** Brian Shanks

**Secretary:** Alamelu Brooks

1. Call to order. The meeting was called to order at ~11:00 AM EST
2. Meeting Conduct. IECC Secretariat Kris Stenger reiterated the following:
   1. Identification of Representation/Conflict of Interest
   2. ICC [Council Policy 7](https://www.iccsafe.org/wp-content/uploads/CP07-04.pdf) Committees: Section 5.1.10 Representation of Interests
   3. ICC [Code of Ethics](https://www.iccsafe.org/wp-content/uploads/CodeOfEthics.pdf): 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.

Sub-committee members in attendance: (20) Aaron Gary, Alamelu Brooks, Amy Boyce, Ben Edwards, Brian Shanks, Gavin Mabe, Gayathri Vijayakumar, Ian Finlayson, Jay Crandell, Jerry Phelan, Kelly Thomas, Michael Noble, Pamela Fasse, Robert Salcido, Ryan Meres, Shilpa Surana, Steve Stelzer, Ted Williams, Thomas Marston, Vladimir Kochkin

Sub-committee members not attending: (2) Cherylyn Kelley (Alt), Michael Tillou

ICC Staff in attendance: Kris Stenger

Interested Parties in attendance: Amanda Hickman, Bob Raymer, Bryan Ahee, Craig Conner, Eric Lacey, Greg Johnson, Jamie Howland, Joe Cain, Joel Martell, Joseph Lstiburek, Kevin Rose, Keith Emerson, Marcin Pazera, Martha Vangeem, Matthew Brown, Paul Duffy, Payam Bozorchami, Philip Fairey, Robby Schwarz, Steve Orlowski, Steve Rosenstock, Thomas Culp

1. Review of Agenda, Chair (note: no meeting minutes to approve at this meeting)
2. Action Items.

a). Update on cost-effectiveness tool and recommended application to remaining code proposals

Chair and vice chair encouraged using the tool for the measure analysis if the proponents can. Kris confirmed using the tool is entirely voluntary. This is not a screening tool.

b). Discussion and straw poll (but not a final vote) on code proposals assigned to this sub-committee from code proposal proponents as follows:

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| **No.** | **Proposal Number and Subcommittee Response** | **Proponent** | **Section** | | | | **Description** | |
| **Panel 1: Modifications in approach to Section R408 (Discuss all 5 proposals together then straw poll)** | | | | | | | | |
| 1 | REPI-18-21 | Mark Lyles/Diana Burk | R408 | | | | Move to a points-based system | |
| No voting - Straw poll only | | | | | | | |
| 2 | REPI-19-21 | Amy Boyce / Cherylyn Kelley | R408 | | | | Maintain current structure but require 2 items not 1 item | |
| No voting – Straw poll only | | | | | | | |
| 3 | REPI-20-21 | Dan Wildenhaus/Kevin Rose | R408 | | | | Maintain current structure but require 2 items for homes over 5,000 sq ft | |
| No voting – Straw poll only | | | | | | | |
| 4 | REPI-33-21 | Amanda Hickman | R408 & Envelope | | | | Weaken envelope table\* and modify R408 to have climate zone specific options (ie. No cold-climate heat pump option) | |
| No voting – Straw poll only | | | | | | | |
| 5 | REPI-167-21 | Aaron Vandermeulen / Thomas Marston | | | R408 & Envelope | | | Weaken envelope table\* and comprehensively modify R408 options. Only apply R408 to prescriptive path, not applied to R405 baseline or R406 ERI path |
|  | No voting – Straw poll only | | | | | | | |
| **Panel 2: Determining the maximum ERI in R406 (Discuss all 3 proposals together then straw poll)** | | | | | | | | |
| 5 | REPI-135-21 | Seth Wiley | | R406 | | Update R406 max ERI values based on Appendix RC values from 2021 IECC | | |
| No discussion or voting – the proponent was not present | | | | | | | |
| 6 | REPI-126-21 | Robby Schwarz | | R406 | | Remove the Env Backstop & edit vent rate (same as REPI-132 & 23); split the max ERI table similar to Appendix RC | | |
| Will be discussed in the next meeting | | | | | | | |
| 7 | REPI-127-21 | Gayathri Vijayakumar | | R406 | | Update R406 max ERI values based on R405 Standard Reference Design | | |
| Will be discussed in the next meeting | | | | | | | |

\* These proposals have been flagged for input from Envelope sub-committee

Straw poll questions and voting results:

1. For prescriptive path projects using R408 what is the highest improvement you would support?
2. 5% (no change); 5 votes
3. 10%; 12 votes
4. Or more; 5 votes
5. Would you support modifying the current R408 structure that result in better equivalency between options?
   1. Yes; 15 votes
   2. No; 1 vote
   3. Undecided; 2 votes
6. Should R408 add additional measures for more flexibility?
   1. Yes; 17 votes
   2. No; 0 votes
   3. Undecided; 2 votes
7. What would be the best way to achieve the existing or increased requirement for the prescriptive path (R408)? Choose two of the preferred options?
8. Require two additional energy efficiency options; 7 votes
9. Expanded additional energy efficiency options converted to points-based system and require target of 10 points; 11 votes
10. Modify the envelope table and offset the increase in energy use by modifying or requiring additional R408 options; 4 votes
11. For the R405 performance path what is the most stringent improvement you would support?
12. Less than 95% annual energy cost of the standard reference design (no change); 3 votes
13. Less than 90% annual energy cost of the standard reference design; 7 votes
14. Less than 80% annual energy cost of the standard reference design; 7 votes
15. Undecided; 3 votes

1. For the R406 ERI path what is the highest improvement you would support?
2. 5% of the ERI index target specified in Table R406.5 (no change); 6 votes
3. 10% of the ERI index target specified in Table R406.5; 8 votes
4. Greater than 10% of the ERI index target specified in Table R406.5; 1 vote
5. None; 3 votes

1. Above what Conditioned Floor Area threshold, should homes be required to secure additional efficiency?
2. No limit (no change); 5 votes
3. 5,000 sq ft; 9 votes
4. Other; 9 votes
5. Undecided; 6 votes
6. Which compliance paths should require more efficiency for “larger” homes? Choose two of the preferred options.
7. All; 12 votes
8. Only Prescriptive; 3 votes
9. Should R408 options or points vary by climate zone?
   1. Yes; 15 votes
   2. No; 0 vote
   3. Undecided; 3 votes
10. Should R408 options incentivize use for renewables?
    1. Yes; 12 votes
    2. No; 2 votes
    3. Undecided; 1 vote
11. Discussion/proposal for upcoming meeting Agenda and ordering of proposals.
12. The meeting was adjourned

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

[ICC Energy webpage](https://www.iccsafe.org/products-and-services/codes-standards/energy/)

[Code Change Monograph](https://www.iccsafe.org/wp-content/uploads/2021-Public-Input-Complete-Monograph.pdf)

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

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Subcommittee Chair

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