

**Illinois Energy Code Advisory Council Residential Subcommittee
November 24, 2014 – 10:00 a.m.
Teleconference
MEETING MINUTES**

In Attendance:

Lisa Mattingly, CDB
David Wytmar, Groundwork, Ltd.
Tom Ayers, City of Rock Island
Bruce Selway, Department of Commerce & Economic Opportunity
Jason Huelsmann, New Tradition Homes
Joseph Zimmer, Architect
Shannon Bookey, CDB
Mike Collignon, Green Building Coalition
Bill McHugh, CRCA
Darren Meyers, International Energy Conservation Consultants LLC
Matthew Giudice, MEEA
Dave Bowman, International Code Council

Ms. Mattingly called the meeting to order at 10:08 a.m.

Ms. Mattingly took roll call of the Subcommittee members.

She then asked for introduction of guests.

Mr. Ayers made a motion to approve minutes from the November 14th meeting as amended by Mr. Selway. Chairman Wytmar seconded. Minutes were approved.

Chairman Wytmar asked Mr. McHugh to present CRCA's amendments.

Mr. McHugh stated that CRCA's amendments were written to bring practicality to the code and make it easier for enforcement officials. He also stated that CRCA had proposed amendments based on R-15 and R-20 values. The Commercial Subcommittee determined that they preferred proposals based on the R-20. Mr. McHugh asked that information from the NRCA be shared with the Residential Subcommittee. Ms. Mattingly forwarded the information.

It was clarified that CRCA is not asking for any amendments to new construction. Mr. Ayers made a motion to approve CRCA Proposal 2 which was based on R-20 insulation values. Mr. Selway seconded. Discussion was held. Mr. Selway asked if CRCA had asked for clarifications/interpretations in the past on this issue. An example of this is if roofs weren't originally constructed with room for expanded insulation, have there been compromises or clarifications made by code officials. Mr. McHugh said CRCA does not feel the Code is clearly written to address this issue and it also uses resources that wouldn't be necessary if it were written clearly. He stated CRCA would prefer to see these types of things codified so that the discussions and clarifications from code

officials are not necessary. It would take the burden off of local code officials' resources. Clarifications are appreciated but still leave gray areas. Mr. Selway asked if this is a reduction in efficiency. Mr. McHugh stated that it depends. If you answer it from the existing practice standpoint, it is not a reduction because there are many contractors and owners not currently complying with this requirement. However, if you follow what is in print, it would be a reduction.

Mr. McHugh stated that if this proposal were not to go through, then there would still have to be variances or clarifications on building permits. He also mentioned that in the instance of a future lawsuit, the contractor would still be liable even with the clarifications/variances. He thinks codifying this would be the best.

Mr. Bowman asked if these amendments are related to a roof recover and replacement. He suggested that this language isn't currently included and maybe it should be. He also suggested that all of this language be moved to Chapter 5.

Mr. Meyers asked to go back to Mr. Selway's original question about increase or reduction in efficiency. He asked Mr. McHugh to reconsider his comments about whether this maintains the status quo. Mr. Meyers believes that this is a reduction in efficiency. Mr. McHugh agreed that it does reduce the efficiency in the purest sense.

Chairman Wytmar asked if the language should be changed from shall to may. He also asked for clarification on the exception added to R503.1.1 Building envelope. Mr. McHugh stated that the intent is not to give a pass for all situations, but to provide leeway in existing structures where it would be difficult or cause undue hardship on the project. Mr. Ayers asked that the amendments be redrafted to be clearer.

Mr. Collignon asked if the jobs that fall under these provisions are paid for with cash or are they financed. Mr. McHugh did not know. They discussed the increase in energy costs versus the initial construction costs and the payback of the increased energy efficiency requirements.

A vote was taken and the motion did not pass. Chairman Wytmar asked Mr. McHugh to rewrite and resubmit his amendments. Mr. Ayers asked that verbiage be moved to Chapter 5. Mr. McHugh said that he would provide consistent revisions between CRCA's commercial and residential proposals.

It was clarified that no new proposals would be accepted after December 1, but proposals that had been previously submitted to the Subcommittee and are being reworked at the Subcommittees request can be resubmitted after that deadline.

Chairman Wytmar asked Mr. Zimmer to give an overview of his proposal. Mr. Zimmer explained that his amendments were divided into the following proposals:

- Low energy conditioned building compliance alternative
- Code official option to accept alternative product testing
- Alternative building envelope air leakage test method
- Options for mechanical ventilation quantity
- Code official option to request Verifying (rating)
- Changes since previous proposal submission

Mr. Ayers motioned accepting proposal for the purpose of discussion. Mr. Selway seconded. Chairman Wytmar said he appreciated the work but thinks that it will be difficult to go through. Mr. Ayers stated that ICCA made a general comment that amended versions of the Code muddy the waters from state to state. He also stated that these proposals seem to significantly change the model code. Mr. Zimmer stated that he appreciates that his amendments are very involved. Mr. Ayers commented that he is concerned about making sweeping changes to a model code. He asked if Mr. Zimmer had presented these changes at the national code hearings. Mr. Zimmer said no but he intends to during the next ICC update cycle.

Mr. Zimmer said he would be willing to submit an amendment specific to Table R202.1.

He then asked to focus the conversation on his other amendments.

Mr. Selway asked if there were any other codes or standards that utilize these amendments. Mr. Zimmer said no one had codified this methodology. There are building modeling systems that do this. Mr. Selway stated that he thinks these amendments would require a new understanding and training for builders and code officials. Mr. Huelsmann commented that most builders in Southern Illinois are following the performance path and utilize HERS raters.

Mr. Zimmer stated that this seems too much for the State to take on right now. He would like to focus on other his amendments. He moved to his second proposal "code official option to accept alternative product testing". There was an inquiry made about what the Commercial Subcommittee decided on this point. The response was that the Commercial Subcommittee determined that this was already covered in the code and so this amendment is unnecessary. Mr. Ayers said that most code officials seem to be aware of this option in the Code. Mr. Zimmer asked if there is a resource to send to the code official that would give them a level of confidence that they can make these decisions on alternative products. Mr. Meyers responded yes, he is currently that resource and he has written letters to this effect before. He also said that he covers this in training. Mr. Selway suggested adding this to the list of FAQ's.

Chairman Wytmar commented that a lot of this seems to be going back into the existing code and adjusting little pieces to format it. Mr. Meyers suggested that Mr. Zimmer resubmit the proposals as five separate packages. Mr. Zimmer said that based on the discussion, he would resubmit three proposals because the State did not seem ready to move forward with his first two proposals. Mr. Ayers stated that he did not think that is what the committee was saying. He suggested putting the alternative compliance path into to a separate section. It makes it confusing by inserting it into the existing sections. Mr. Zimmer stated that 95% of it is contained in Section R407 which is a new section, but definitions and other provisions had to be covered in the existing sections. Mr. Zimmer stated that he's still getting the impression that Illinois is not ready for this. Mr. Meyers stated that if this provision was added, future training sessions would have to cover it. Mr. Zimmer plans to present this on the national level for 2018.

Chairman Wytmar asked if Mr. Zimmer was willing to bring some of his proposals back broken out separately.

Chairman Wytmar asked for a vote on the proposal. Mr. Selway stated that the subcommittee and Council need to think about how these changes might affect RESCheck. PNNL/DOE might not be receptive to making changes for an Illinois specific version.

Mr. Meyers stated that he is not a part of the voting committee, but he would like to make some observations regarding Mr. Zimmer's proposals.

1. On Page 1 regarding the definition of conditioned space, Mr. Meyers has reservations about making degree requirements on conditioned space.
2. The definition of semi-heated space in the proposed amendment also has a temperature requirement. This is inconsistent with ASHRAE.
3. On Page 3 Section R302.1 Interior Design Conditions includes ranges for min and max for heating and cooling. This is also inconsistent.
4. The definition of site energy vs. source energy, change comparison from energy cost to consumption. There are sophisticated factors that are included. Making this conversion from cost to consumption would make it difficult to reconcile existing code tests. There would be two methodologies in the code.
5. Location of R202.1. Code requirements are not usually located in the definitions chapter. This needs to be moved to Chapter 4.
6. Section R402.4.1.2. This proposal is not consistent with the amendments made to the 2012 IECC or the recommendations made by the Subcommittee to stay with 3 ACH's vs. 5. If approved it would change the Code from 3 ACH's to 5 which would make it more stringent than it currently is.
7. The word "may" should be removed from the exception for R402.4.1.2.
8. Page 3 Section 402.1 Exception 3 - Greenhouses need to be defined. The definition from the commercial section could be utilized.
9. A copyright release will probably be needed for the language that comes directly from AHSRAE 62.2. Mr. Meyers suggested that Mr. Zimmer contact ASHRAE to see if they would endorse or allow this.
10. Page 9 footnote c, has the term "thermal storage element". It is defined there. This term probably needs to be defined in Chapter 2. There are also some design parameters.

Mr. Meyers suggested that Mr. Zimmer consider separating the proposals for the Commercial Subcommittee as well.

In response to Mr. Meyers, Mr. Zimmer stated that on page 1 of his proposal the temperatures come from Section R405.3. For the testing section, he will make the proposal consistent with Illinois for ACH's. He would appreciate contact information for ASHRAE. Mr. Zimmer also noted that the "Thermal Storage Element" is verbatim from the table already in the code for the energy cost budget method.

Mr. Zimmer will rewrite and submit separate proposals for:
Alternative building envelope air leakage test method
Options for mechanical ventilation quantity

Code official option to request verifying (rating)

A vote was called to approve the submitted proposals. They did not pass.

A poll will be sent out to the Subcommittee to schedule the next meeting.

The amendments that were made to the 2012 IECC will need to be addressed. Mr. Meyers will propose a change to strike the 2015 IECC and replace it with the 2012 IECC with amendments.

It may help in decision making if the Subcommittee or Council would be willing to hear from PNNL on the prescriptive path and compliance with this path. Rose Bartlett or Todd Taylor from PNNL could be contacted. Mr. Selway and Mr. Meyers will make the call to PNNL.

It was noted that the references to the IMC will need to be updated for the 2015.

Mr. Zimmer asked if the State of IL adopts an altered amendment of the 2015, would this affect the State in receiving federal funds. The response was currently no. ARRA funds were based on the 2009 IECC.

Meeting adjourned at 12:14 p.m.