

**ENERGY RATING INDEX WORK GROUP**  
**Embassy Suites Ft. Lauderdale**  
**1100 SE 17<sup>th</sup> Street Causeway**  
**Ft. Lauderdale, Florida**  
**August 17, 2016**  
**10:18 A.M.**

**MINUTES**

**ENERGY RATING INDEX WORK GROUP PRESENT:**

Amador Barzaga  
Joe Belcher  
Joe Cain  
Oscar Calleja  
Amanda Hickman  
Michael Power  
Jim Schock  
Steve Strawn  
Lauren Westmorland

Steve Bassett  
Kelly Smith Burk  
Brent Caldwell  
Jay Carlson  
Lorraine Ross  
Drew Smith  
Eric Stafford  
Dennis Stroer  
Mark Zehnal

**ENERGY RATING INDEX WORK GROUP NOT PRESENT:**

Michael Kwart

**STAFF PRESENT:**

Jim Richmond  
April Hammonds  
Marlita Peters

Mo Madani  
Jim Hammers  
Norman Bellamy

**MEETING FACILITATION:**

The meeting was facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu>

**OTHERS PRESENT:**

Arlene Stewart, AZS  
Rob Vierira, FSEC  
Jeff Inks, WDMA  
Michael Fox, Palm Beach County  
Jeff Sonne, FSEC  
Amir Abtahi, Florida Atlantic University

Eric Lacey, ERCA  
Mike Fischer, Kellen Co  
Curt Rich, NAIMA  
Dennis Chappell, AWP, LLC  
Doug Buck, FHBA  
DK Mink, BOMA

**Welcome:**

**Time: 10:18 a.m.**

Mr. Blair welcomed everyone to the meeting of the Energy Rating Index Workgroup in Ft; Lauderdale, Florida.

**Roll Call:**

Mr. Blair performed roll call for the Energy Rating Index Workgroup. A quorum was determined with 18 members present.

Mr. Blair provided some ideas and background with summary from the last meeting held in July. He also provided the purpose of today's meeting along with the deadline for this information to be provided to the Commission to be submitted by October 1, 2016.

Mr. Blair stated the following consensus from the July meeting:

**ISSUE #1:**

**Whether onsite renewable power generation should be an option to achieve compliance when using the ERI path counted toward the ERI score adopted into the code.**

**Action:** The Workgroup voted unanimously, 18 – 0 in favor, to conceptually support the use of onsite renewable power generation as an option to achieve compliance when using the ERI path counted toward the ERI score adopted into the Code.

**ISSUE #2:**

**The amount of time onsite renewable power generation can be used as an option for achieving compliance when using the ERI path.**

**Action:** The Workgroup voted unanimously, 18 – 0 in favor, to recommend that there not be a time stipulation for any approved Code modification providing for the use of onsite renewable power generation. The Workgroup agreed that since the Legislation appeared to stipulate a timeframe of between 3 – 6 years that the Commission should request the maximum time of 6 years, request that the Legislature clarify their intent in this regard, and recommend to the Legislature that there should not be any timeframes associated with this provision.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score:**

**Issue #3: The amount of onsite renewable power generation that can be credited toward the ERI score:**

Mr. Blair thanked the group for the options that were submitted; however, he reviewed all of the options for similarity and came up with analysis that may encompass some ideas to work on and discuss.

He stated options H and I are ones that seem to make an effort to bridge across some of the discussions at the last meeting and some of the concerns especially concerns over the mandatory back stops and ensuring the mandatory minimums in the code.

Mr. Blair stated he would like to start with option H on page 6 of the worksheet.

Mr. Madani stated that H and I are the same.

Mr. Blair stated they would take option I.

Arlene Stewart ASZ, asked for the name associated with the letter I as the agenda is by the submitter's name.

Mr. Blair stated it was submitted by Amanda Hickman.

**Option I:**

**R406.2 Mandatory requirements.** Compliance with this section requires that the provisions identified in Sections R401 through R404 labeled as "mandatory" and Section R403.5.3 of the 2015 *International Energy Conservation Code* be met. For buildings that do not utilize on-site renewable power production for compliance with this section, The building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or 402.1.3 of the 2009 *International Energy Conservation Code*. For buildings that utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table R402.1.2 or Table R402.1.4 of the 2015 *International Energy Conservation Code*.

**Exception:** *Supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6.*

Ms. Hickman, InterCode stated she submitted two proposals but said option I she felt this answered the questions the group had she further provided an overview of her option and proposal.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Commissioner Calleja stated he had reservations getting into prescriptive components rather than performance and limiting designers with specific values especially in South Florida. He further stated that this is correct approach to get back stop for renewables, but by going to 2015 table there could be issues with the values in the walls and might not be economically feasible.

Ms. Hickman responded stating in their view they are in favor of maximum flexibility thus why they proposed the proposal in this manner. She stated she agreed that 2015 is more stringent than across the board 2009, however, we are talking about limiting renewables. She provided information on limiting paths and 2015 is a more flexible path.

Lauren Westmoreland expanded on the 2009 ICC insulation table which is being currently being used and the 2015 she sited the differences walls, skylights and R values and similarities in wood frame R4, mass wall values or foundation.

Commissioner Calleja questioned the differences in zone 1 for windows.

Ms. Westmoreland stated for zone 1 the penetration factor is 1.2, skylight factor is .75 and SHGC is .3 in 2009.

Commissioner Calleja stated that U factor does not come into play in South Florida, it is the shading code that is the key and that is what makes the windows more expensive to try to go super low E double or single pane. He said that is where the dollar figures come in. Commissioner Calleja asked for the 2015 shading code factors.

Mr. Madani advised the difference is .25 for 2015 to .3 in 2009.

Dennis Stroer spoke on the 2009 prescriptive path restrict the amount of windows. The 2015 does not restrict the number of windows as long as you meet the SHGC. He said prescriptive rules.

Commissioner Bassett expressed concerns over looking at this as a whole. He said the original intent of Energy conservation was to use less electric and sees no reason to limit the credit as long as it meets the electric savings. Commissioner Bassett stated this is to save electrical energy.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Mr. Richmond stated that Commissioner Bassett's comments are very valid but should be taken before the Energy TAC. He stated the Workgroup must focus on required mandate by the Legislature which is the credit to be allowed on a particular compliance path that they have been directed to incorporate. Mr. Richmond stated the focus on conservation and its integration into the minimum requirements for construction by itself that is something that is ongoing with the Commission in full but the Workgroup needs to focus on the task at hand.

Commissioner Bassett stated half of the conversation is what we do with the part of the building that we are going to give credit for if we put in the Energy so we have to talk about it is in here we have to discuss it. He said he did not feel back stops were needed.

Mr. Blair stated he agreed with Mr. Richmond and the group must accomplish the task as described with the very strict time line.

Mr. Madani stated the legislature has directed us to take section 406 and incorporate it into the current code and that section has the concept as to how this is to be accomplished using the 2009 as the back stop for the prescriptive. He said whatever the group do they have to work within this concept otherwise they will be creating a new approach to the ERI. Mr. Madani suggested that they stick with this concept.

Lorraine Ross stated that if you look at the proposals most all are going to some back stop improvement and provided long term actions on buildings. She stated she would go with option I as the best proposal and supports this concept.

Joe Belcher, FHBA stated he supports option I as the starting point.

Dick Wilhelm, Window Industry stated he also supported option I.

Commissioner Schock asked for clarification from Mr. Madani on the 2009 back stop being dictated.

Mr. Madani stated the proposal before them as staff would be the best option to consider where you want the renewable.

Mr. Blair stated this conforms to what they are statutorily are being required to do.

Commissioner Calleja stated he is going along with the intent of what the Legislature did to establish a testing method ERI. He said if they keep the 2009 and keep everything the same and there was a separate component it may be a simpler way to comply by using renewables.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Commissioner Calleja stated that is why his approach would be to rate the house without the renewables and come up with a number and then do the renewables and then you can give credit for the renewables. He said this allows more flexibility to the builder and not use the prescriptive.

Commissioner Smith asked Commissioner Calleja if he was limiting the amount that can be added once the house passes.

Commissioner Calleja stated his point is if you achieve a basic back stop again and your reach that by the number we choose as the house is rated without the solar so you have achieved the back stop why should you limit the solar energy what is the purpose of limiting it if you have achieved that point that the house twenty years from now and you remove the solar panels it would still be an efficient house because we set it that way and that will change over time with the code.

Ms. Hickman said with the 2015 back stop with the renewables is saying you achieve that and you have unlimited credit for renewables that is the cap. She further stated you meet that and comply with the 58 which is the Florida number for the ERI regardless how you do it whether you put a cap or meet the minimum requirements 2009 or 2015 you still have to achieve that number and that number is not inhibited somehow further than that back stop. Ms. Hickman stated you have to meet the 58 so for the non-renewables you have to meet the 2009 envelope and if you have renewables you meet the 2015 and in order to get to the 58 you can do what you want you can do mechanical tradeoffs you can do renewables and it is a 100% credit thru the program software. She stated they are not only looking at Florida they are looking all over the US for maximum flexibility for the builders as the numbers would be different for each group.

Joe Cain, Solar Energy Association stated an attractive offer for this is good for the homeowner making a decision to add this energy savings. He provided many examples of types of savings with solar.

Michael Power, American Chemistry Council, stated looking at all of the options he feels that I does presents the best option for this important issue.

Mr. Madani again stated based on their last meeting that I is the best option.

Commissioner Calleja stated his proposal was to use the ERI and to score the house with the ERI not performance method without renewables you achieve a score add the dollar to get the credit as long as you pass with the ERI that guarantees the ERI using higher number.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Eric Stafford, IBHS stated he is in support of option I and stated it is the cleanest and stated his reason for this choice.

Dennis Stroer, Energy Raters stated that he feels the decision is moving forward and stated his support for Option I as well and provided his reason.

**Public Comments:**

Rob Vieira, FSEC stated that the ERI is set up to be an alternative method and provided examples.

Arlene Stewart, AZS provided her concerns on verbiage it is an inverse from the prescriptive language and she feels there will be issues at the local level. She stated some language changes could help.

**Workgroup:**

Mark Zehnal, FRSA stated he felt they needed a straw poll. He also asked if they needed motions to remove the others.

Mr. Blair advised no if they reach a consensus. He stated they will do a 4 point ranking and he explained the ranking.

Option I rating:

There were 9 members voting #4, there were 6 members voting #3, two members voting #2 and one member voting #1.

Mr. Blair advised that is a 75% consensus. He asked Commissioner Bassett what his major reservation was.

Commissioner Bassett stated there should not be any restrictions and he thinks it should be unqualified you can put 100% energy renewable in.

Commissioner Smith stated he feels similar feelings as Commissioner Basset and has reservations using the tables and using the 2015 back stop. He further stated he does not think this option will be a benefit and we will end up not using a lot of solar because of this.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Commissioner Calleja stated he wanted to make it to be an incentive to using solar energy and his point is not to make it compliant with the table. He said there is no incentive for solar and he provided the reasoning and added there needs to be a reason that solar is chosen.

Mr. Blair stated they have covered the three tasks of the workgroup with the number three the one just accomplished using option I as methodology.

Lorraine Ross stated there are two key issues, one is option I is without contingency and two is this now be viewed as a Florida specific.

Ms. Hammonds stated the mandate has tied everyone's hands with the three to six years and there is nothing we can do about that. She said this is why this was discussed at the last meeting. She said for Florida specifics some roll off and some do not and they are under Legislative mandate. Ms. Hammonds stated it seems the way the language is written it is 3 to 6 years and under the last straw poll the consensus was that they as a group did not feel there should be a time limit which is something that could be reviewable for determination as time went on. She said whether Legislature will take it and make some adjustments otherwise it will just go away in six years.

Ms. Ross stated it will be reviewed at the next code and that should be the way it works.

Mr. Madani stated the code cycles will be open for addressing and the IBHS will also be updated.

Ms. Ross stated add it should be a part of the normal code update cycle.

Ms. Hickman questioned if this will fold into the 6<sup>th</sup> Edition and this is on the 5<sup>th</sup> Edition.

Mr. Madani said the findings of this group along with the two modifications that were deferred will go to the Commission for final determination. He said the deferred modifications will go before the Energy TAC for their recommendation prior to going to the Commission.

Commissioner Calleja said we should be free to make a determination as this will go back to the Energy TAC.

Ms. Hammonds stated the modification s will go to the TAC and then to the Commission. She said the decision from this group will go to the Commission and will not go before the TAC.

Commissioner Calleja stated he is asking where the decision of this group will go.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Mr. Blair stated the decision of this work group will go before the Building Commission.

Commissioner Calleja said the Commission would be the one to do the fine tuning\ and decision on how to approach the Legislature. He said they are not going to take our findings verbatim if they do not want to.

Mr. Blair stated yes the Commission can do what ever they feel is necessary to meet the task.

Commissioner Calleja said he thinks they as a work group should be free to decide whatever solutions we find and throw it to the Commission and let them decide.

Ms. Hammonds stated the Commission does take seriously what the work group has done and their proposals.

Dennis Stroer, Energy Raters, stated the question he has is based on what he has heard is a vote for no solar energy if you vote for option I.

Amanda Hickman, IBHSs stated this is the 2015 so you are not meeting the whole prescriptive. She said there are additional things to consider and it is an alternative path and voluntary.

Dennis Stroer, Energy Raters said ERI is not more stringent and provided many examples where this would not be the case.

Mark Zehnal, Roofing Contractors said basically we are jump starting what the IBHS is going to do.

Mr., Madani stated this is already in effect.

Mr. Zehnal said the path is there and we are trying to move ahead so we will be using the 2018 code.

Mr. Blair stated this will be up for any changes during the normal code cycles.

Commissioner Schock said listening to the requirements of solar, he would be interested in a straw poll using the 2009 as the back stop and see if that would bring in Commissioners Smith and Calleja. He said it is subject to updates and he did not feel it is a big problem to update when they go through code cycles.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Dick Wilhelm, Building Product Manufacturers for Windows, said that he disagreed with the gentlemen stating homes with a lot of windows are energy hogs.

Joe Cain, Solar Energy Association said that he felt there were two discussions going on at this point one being option I and the other question two. He said on the time duration one thing that is tough on the solar builders, it would not be helpful to lead them to believe we are going to have the same debate every time the code changes convening with the same group and to show there could be a solution that moves from one cycle to the next.

Mr. Blair stated he wanted to close the loop on number two. He said the group agrees that there should be no time limit but since the Legislature required it we are saying we are recommending the maximum amount of time but our recommendation is to clarify the intent of the statutory time frame this code amendment like all code amendments are subject to review every three years by the FBC. He said that is the same level of equity as any other code. Mr. Blair stated he felt that would close the loop on number two.

Joe Belcher made reference that there will be no incentive for solar. He said FHBA is totally in favor of power savings and if they could go to 2009 and this would not be the thing to do to reach consensus in this group.

Commissioner Burk-Smith said for clarification renewable energy that is based in our definition are we just referring to solar in this group and when we are talking about this are we including meeting all renewable energy in our definition.

Mr. Madani said the code modifications reference standard ICC 301 which has the definitions for renewables to consider and the percentages so he feels they are covered.

Lorraine Ross sated to the point the Legislation referenced onsite renewable power generation and they understood it to be electrical solar power. She said the 301 does have definitions in it. Ms. Ross said when looking at the code updates would we be looking at 301 standards.

Mr. Madani said the concept 406 lacks standards and will be looked at.

Ms. Hickman said FSAC maybe could clarify. She said following 301 path they will be using it and it should be noted for clarification.

Mr. Madani stated the proposals deferred do reference 301.

Ms. Hickman wanted to know about the current code.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Mr. Madani stated this could be a recommendation.

Mr. Blair asked how that would be added.

Mr. Madani explained these deferred both have comments and will be addressed by the TAC. He did confirm that 301 is in the modification request. Mr. Madani looked up the changes being requested and the language for the group.

Jeff asked for this to be captured.

Mr. Madani:

“The ERI for the rated design shall be determined in accordance with ICC 301, 2016.”

Mr. Blair stated this would make it consistent.

Ms. Ross said she is confused about the mods that were deferred.

Mr. Madani stated 6727 was approved as submitted and 6933 was NAR however both had comments on them. He further stated they have to be resolved in the TAC after this group has finished its work and then a recommendation is made to the Commission.

Ms. Ross asked if their recommendations will go to the Commission.

Mr. Madani stated the TAC will look at this groups recommendation to assist them with the deferred modifications.

Ms. Ross said ok that is 6<sup>th</sup> Edition, what about the 5<sup>th</sup> Edition and how does this get into the 5<sup>th</sup> Edition.

Mr. Richmond stated this will be decided once the workgroup has completed their recommendation. He said there could be sufficient authority but at this point they have not looked at that.

Jeff Sonne, FSAC said for reference is the resident reference ICC 301 -2014 the standard they had referred to both in the options for the 2014 Code for ERI and also one that was approved for the 2017 Code for the next code cycle.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Mr. Madani asked if the 2016 is final.

Mr. Sonne stated he was not sure.

Lauren Westmoreland suggest that instead of referencing the 2009 and 2015 IECC it might make sense to put tables in for use in the field.

Mr. Madani explained why this might not work and it why it would be better to keep it as a reference in 2015.

Mr. Blair stated the first ranking was on 2009. He said the next ranking will be 2015 as proposed by Commissioner Schock.

Commissioner Calleja stated there is no back stop in 2009 so this would be standard calculation ERI there needs to be some backstop.

Joe Belcher , FHBA stated if you are using ERI today you would be using backstop so you are incorrect it is there.

Commissioner Calleja stated using the values of 2015 with a variable scale to reach the number.

Mr. Blair performed a straw poll on 2015

There was 1 member voting #4, there was 1 member voting #3, 3 members voting #2 and 13 members voting #1.

Eric Stafford stated this is where we were before and find 2009 acceptable.

Mr. Blair stated there was not a consensus on this straw vote.

Mr. Blair read the language of the motion for the work group to send to the Commission as follows:

The Workgroup recommends that onsite renewables be allowed, that there should be no statutory time frame it should fall under normal code review cycle process and the implementation methodology be based on Option I and incorporating in addition the ICC 301 standard and ensuring the language that would be included and conformed with what the Commission approves as it relates to the specific code modifications that they will be considering that relate to this topic.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Commissioner Carlson entered the motion that The Workgroup recommends that onsite renewables be allowed, that there should be no statutory time frame it should fall under normal code review cycle process and the implementation methodology be based on Option I and incorporating in addition the ICC 301 standard and ensuring the language that would be included and conformed with what the Commission approves as it relates to the specific code modifications that they will be considering that relate to this topic. Mark Zehnal seconded the motion. The motion passed with a vote of 16 in favor and 2 against.

Discussion followed in regards to 5<sup>th</sup> to 6<sup>th</sup> Edition.

Ms. Ross asked about this applying to both the 5<sup>th</sup> Edition and 6<sup>th</sup> Edition.

Mr. Madani stated this is a legislative mandate and we will take recommendation to the Commission and they will make the decision.

Ms. Hammonds advised staff does not take positions they are here to serve the Commission to put things together.

Commissioner Calleja stated he asked at the Energy TAC if this renewal pertains to the 5<sup>th</sup> and 6<sup>th</sup> and if memory served him the response was no it did not apply to the 5<sup>th</sup> Edition.

Ms. Hammonds stated she responded that it was badly written legislation and did not direct reply.

Commissioner Calleja should be clarified.

Mr. Blair separate motion on whether the recommendation should apply to the current code 5<sup>th</sup> Edition.

Mr. Richmond stated we are requesting your desire for the editions.

Amanda Hickman entered a motion that this package should be in the 5<sup>th</sup> and 6<sup>th</sup> Edition. Mr. Zehnal seconded the motion.

Ms. Ross stated that they needed to know how to add to the 5<sup>th</sup> Edition.

Mr. Richmond stated that would be something the Commission would work out and not something the workgroup would not need to take up.

**Review of proposed options submitted for evaluation regarding the amount of onsite renewable power generation that can be credited toward the ERI score (cont.):**

Ms. Ross asked if this is going to have to go through Rule process and all that goes with it.

Ms. Hammonds stated they just finished today changes to 5<sup>th</sup> Edition and that took two months. The time frame is up to those that are involved.

Joe Cain stated he read the requirement from the Legislature and it is specific to the 6<sup>th</sup> Edition.

Mr. Richmond stated this workgroup was developed to answer the last two sentences.

Amanda Hickman continued to question moving this language into the modifications.

Mr. Madani stated this is why the modifications were deferred and will go to the TAC and the Commission.

Commissioner Bassett stated there are three members of the workgroup that are on the Energy TAC.

Arlene Stewart stated there can be a Rule Development hearing later.

Mike Fisher, Kellan, stated this should be in 6<sup>th</sup> Edition only and provided reasoning.

Curt Rich, American Insulation stated it should be applied to both Editions.

Doug Buck, FHBA stated 5<sup>th</sup> Edition should be included.

Mr. Blair stated he would like to take the vote on the motion.

The motion passed with 14 member in favor and 4 members against. The motion passed with 78% threshold.

Mr. Blair adjourned the meeting at 12:02 pm