

**ENERGY RATING INDEX WORK GROUP
Hilton at University of Florida Conference Center
1714 SW 35th Street
Gainesville, Florida
July 20, 2016
8:30 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 (late)
Scott Ranck for Brent Caldwell
Jay Carlson
Layla Phillips for Michael Kwart
Lorraine Ross
Eric Stafford
Dennis Stroer
Mark Zehnal

ENERGY RATING INDEX WORK GROUP NOT PRESENT:

Drew Smith

STAFF PRESENT:

Jim Richmond
April Hammonds
Marlita Peters
Norman Bellamy

Mo Madani
Jim Hammers
Chris Howell

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
Tim Graboski, BGG Roofing
Chris Fardelmann, BORA
Justin Kascher, American Chemistry
Mike Fischer, Kellen Co.
Jeremy Susac, Lennar Corp.

Mark Roche, TELCO
Rob Vierira, FSEC
Eric Lacey, ERCA
Curt Rich, NAIMA
Paul Coats, AWC
Doug Buck, FHBA

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Welcome:

Time: 8:30 a.m.

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

Roll Call:

Mr. Blair performed roll call for the Energy Rating Index Workgroup. A quorum was determined with 17 members present. Kelly Smith Burk joined the meeting late bringing total members to 18.

Agenda Approval:

Mr. Blair provided the agenda items for today's meeting and asked for a motion to approve the agenda as posted.

Mr. Ross entered a motion to approve the agenda as posted for today's meeting. Mr. Schock seconded the motion. The motion passed unanimously with a vote of 17 to 0.

Kelly Smith Burk arrived at 8:35 a.m.

Mr. Blair provided a full overview of the procedures and requirements of the Work Group and an outline of the process.

Ms. Hammonds provided the groups with the instructions on the Sunshine Law and penalties there of.

Mr. Madani noted that there were project relevant background documents linked to the Agenda including:

- Section 34 or HB 535.
- Status of proposed code modifications regarding onsite renewable power generation (#6727 And #6933).
- Chapter 4 Residential Energy Efficiency.

Mr. Bassett questioned second part of objective.

Mr. Madani advised this will be discussed within the Work Group today so he asked that they hold this topic until later.

Mr. Madani explained the objective of the group and provided a full work plan presentation via power point presentation titled Energy Rating Index of the 5th Edition (2014) FBC, Energy Conservation Code. Mr. Madani also provided a time line for meetings and reporting to the Energy TAC.

Mr. Blair provided an additional summary of the responsibility of the group and task assigned.

Rob Vieira, FSEC provided a power point presentation entitled Methods and Economics of Achieving Florida's ERI Compliance. He detailed objectives, cities and characteristics on simulated homes with values. Mr. Vieira advised these reports are available online for anyone to view.

Work Group Comments/Questions:

Ms. Hickman asked listed in the baseline is it being configured to meet the 2015 requirements.

Mr. Vieira stated the ERI baseline is based on the 2006 IECC level.

Ms. Hickman said she heard him say he used an ACH 57 and did he use 5.

Mr. Vieira explained the chart ratio to show what was used.

Mr. Ranck questioned the 2009 minimum.

Mr. Vieira used two systems one for envelope and one for efficiency.

Ms. Westmoreland questioned the all Florida home characteristics showing mechanical, ventilation modeled in each of these homes. She said looking at 2009/2015 high efficiency none of the ACH 50 requirements trigger mechanical ventilation.

Mr. Vieira stated in terms of Code that is correct.

Public Comments/Questions:

Arlene Stewart, AZS questioned the chart to understand the e-ratio and ERI the numbers are reasonably equitable the baseline are the same.

Mr. Vieira explained the charting between blue and red.

Ms. Stewart taking out the red to show impact we can see the power usage differences.

Mr. Vieira stated no but explained all the different scenarios. He explained the chart scoring.

Ms. Stewart asked what the impact of PV minimum code score, the comparison between the two colors blue and green on the chart.

Mr. Vieira stated there is no credit for PV under 405.

Ms. Ross asked for clarification on the chart 2015 backstop is what is being used.

Ms. Vieira stated if you use prescriptive method it will not be above code and using solar it would bring you to the 58% which is above code.

Mr. Stroer said it should be mentioned that the prescriptive is not prescriptive due to glass to floor area, the numbers would be very different, they are using 15% glass to floor.

Ms. Calleja stated using an analysis on the blue 94 to 72 would be the 58% score on the ERI and would be 20% improvement above the code.

Tim Graboski, Graboski Roofing clarification 2009 to 2015 to high efficiency shows increase over time growth in efficiency.

Mr. Vieira said the high efficiency was a choice they used to get to 58%.

Mr. Vieira continued his report.

Mr. Cain inquired further on pricing.

Mr. Vieira referred to where he got his numbers.

Ms. Westmoreland if leasing system do you get the same calculation.

Mr. Vieira advised economic rates used with 30 year life cycle.

Mr. Bassett asked if pace programs have any returns.

Mr. Vieira stated it may look different.

Ms. Ross said with little onsite solar is being used, what are cost implications and what is the life time of the panels.

Mr. Vieira stated 30 years but inverter after 15 years.

Ms. Ross advised that DOE has information that could be helpful.

Mr. Calleja said factoring maintenance is in the cost.

Mr. Strawn stated replace inverter could be one time or factored.

Mr. Vieira continued with his presentation.

Mr. Zehnal said 30 year life cycle and roof maintenance taken into the costs.

Mr. Vieira stated that would be homeowner specific.

Mr. Cain said cost assumption 1.2 kw required for difference and sized for demand in lieu of kw.

Mr. Stafford said numbers may not reflect what onsite is.

Mr. Vieira stated roof area is net zero.

Ms. Hickman requested ERIs of zero.

Mr. Vieira responded.

Ms. Hickman said they want to achieve 0% renewables to get 0.

Mr. Vieira said yes you would have to use renewables to get to 0.

Mr. Vieira provided information with differences in the cities used.

Mr. Calleja stated same house in three cities the percent with frame with RA ducts makes numbers irrelevant, he said percentage of frame houses in Miami he would need to see this on block R6 insulation would show true ERI.

Mr. Vieira completed his presentation.

BREAK 10:25 a.m.

Reconvened at 10:50 a.m.

Eric Lacey, ERCA provided a presentation entitled 10 Key Issues to Resolve before Allowing On-Site Power to Count toward Compliance in the IECC. This presentation was the perspective of the ERCA.

Mr. Calleja requested copy of power point.

Ms. Hammonds stated he should tread lightly on legal issues as in the State of Florida there are UPL requirements.

Eric Stafford stated he felt this was extensive scrutiny and felt this was way out of the scope of what the group should be looking at.

Mr. Belcher stated he believes this is way beyond the scope of the Legislative mandate.

Mr. Blair stated the group will decide the key issues.

Mr. Lacey completed his presentation.

Public comment key issues:

Mr. Buck, FHBA stated should renewables be included in the ERI calculations in the 5th Edition of the Code, he said it needs to be kept simple.

Mr. Graboski, Graboski Roofing stated the July 1 this new code compliance act came into effect, should this renewable be included. He said if it adds value for the homeowner then it should be added.

Work Group comments on key issues:

Jeff advised the group they need to list the issues that need to be addressed.

Mr. Calleja said that the terms need to be defined to determine what action can be taken by the Commission. He said define the energy conservation guidelines and he expanded on what that may include.

Mr. Madani look at the definition of the energy rating index contained in the Code.

Mr. Schock stated an issue is backstop, what happens with age and maintenance and credits also wind verses solar.

Ms. Ross stated she questioned if renewables should be in the Code and whether they should be included in code modifications to include the fiscal impact. She stated the upcoming changes in November could change what is decided within this group.

Mr. Bassett stated reducing amount of energy from outside of the building has been a constant issue that is being brought up. He further said anything that changes the input of energy into the building should be considered. Mr. Bassett stated human component must change.

Work Group comments on key issues (cont.):

Mr. Ranck said number one solar energy issues not efficiency issues, PV equipment in homes, and he felt instead of going back to prior codes they should use current code so you are not losing the efficiency of the envelope and the equipment within the home and you are being consistent and if the PV goes away you still have a quality structure built to the current code. Mr. Ranck continued by saying the envelope has to be at the 2009 Code the verbiage should read the current code standards.

Mr. Blair stated the group would need to identify the key issues that need to be evaluated and focus on that.

Mr. Stroer stated it would be difficult to reach net 0 without renewables. He said one point of discussion should be the ERI threshold before the solar starts to count in the ERI in a Code situation, so if you consider using renewables in the Energy Code then certainly there should be an ERI threshold before the renewables count.

Mr. Blair reminded the group again that they need to focus on the threshold question whether onsite renewable power generation should be an option. He reminded them this is an alternate compliance path not a mandatory path and he asked the group to keep that in mind.

Mr. Cain stated the solar power industry feels that solar power is the answer and renewables should be allowed as part of the ERI approach. He further stated he believes that it is already in the basic 2015 IECC. Mr. Cain further explained his thoughts on the renewables and effect on the economy and spoke on threshold costs. He said there should be flexibility for builders in choosing compliance options.

Ms. Hickman stated the ERI path is an option and there are issues and this is a stringent path. She provided information that would require consideration of the renewables based on scale. Ms. Hickman covered areas that may need to be looked at for this group.

Ms. Westmoreland stated consideration should be given to make sure it is clear to the code official to determine if there is compliance onsite.

Mr. Carlson stated as a builder clients are given options to accommodate their options. He asked if the onsite renewable power generation be an option to achieve compliance and he feels the answer is yes it is an option that can be provided.

Mr. Bassett said the question he has is who would use ERI to rate a house when it is more stringent than our standard process. He said he felt if it is an option no one will use it due to costs to satisfy the ERI.

Work Group comments on key issues (cont.):

Mr. Zehnal stated his concern of what happens after the 3 years.

Mr. Blair provided examples of what could be recommended. Mr. Blair stated what the actual responsibility of this group is and that the Work Group needs to make a decision on the topic set before them.

Mr. Madani stated this is a clear yes or no question and if they vote yes then the percentage can be decided and if no there is no reason to continue the discussion.

Mr. Blair said this is not a decision set that they cannot change their mind on later, however, to move to the next step they need to make a vote on the first question.

Mr. Zehnal stated for clarification that making a decision of 3 and 6 year are in stone but could be changed further into discussion.

Mr. Buck, FHBA stated when this was debated in Legislature this would continue on into the future. He said the cycle discussion there was no answer as to how long the 5th Edition and not the time after, it was not clear what Edition would be the effective time limits. Mr. Buck said the sequence is out of sort and it needs to be defined and they should address the first question and the rest will fall into place.

Mr. Calleja stated the language of the Legislative language should have been plain to what Edition this should have been used and where it would be after that.

Mr. Buck stated yes that would be correct and that it should be in the base code and earlier than in the 6th Edition and now it is causing concern as to which Edition it should be.

Mr. Blair stated they need to make the recommendation and allow the Commission to address the Edition.

Mr. Cain asked for correction in notes being taken in the meeting on the big screen and asked Ms. Peters to correct to the numbers.

Mr. Strawn stated it is not the life of the system but the life of the code so with the question of renewables is a good idea, using 2009 Edition may not make sense but use the current Code and provided explanation.

Mr. Blair said if you can agree on the concept this will allow a report back to the Commission. He said they need to decide a threshold question first.

Work Group comments on key issues (cont.):

Mr. Madani asked for clarification from Mr. Strawn if the 2015 threshold.

Mr. Richmond stated that the Legislation is that we would adopt the threshold this was mandated. Hew said the ERA path was defined and we cannot change that.

Ms. Hickman stated the 3 and 6 year cycle the letter from the Sponsor and Co-Sponsor could be used.

Ms. Hammonds stated there is case law that says they cannot use letters as legislative intent.

Mr. Richmond stated we do not need to get into Legislative intent.

Mr. Ranck stated he is versed in HERS, this recommendation should be defined with ERI score and more usable and benefit more people. He said the ERI is showing above code requirement and provided further information.

Mr. Schock stated the backstop verbiage should be a code under which the house was built.

LUNCH BREAK 12:07 P.M.
RECONVENE 1:20 P.M.

Mr. Blair advised the group of the goal and stated a straw poll should be taken on the subject of onsite renewable being allowed in concept. He provided the group again with the interest of the vote and how this can be changed if they choose to do so, that this will not lock them into this as a final decision.

Mr. Stafford stated the HB is as it reads and cannot be changed at this time. He said the incentive is not there to use the backstop. He further spoke on the current solar conservation under 366.80 and .81.

Mr. Richmond asked if the renewables are part of the 2015 code and this is the question and mandate and there are opposing opinions and we need to decide if this should be in the Florida Building Code.

Mr. Stafford again stated if he had known there could be presentations he would have prepared information for the group and he knows you cannot use Legislative intent, the ICC does use the intent of the Code in making decisions. He said the videos of the ICC committee meetings at least 8 times and they understood that the ERI methods did include renewables and it was voted on in conference.

Work Group comments on key issues (cont.):

Mr. Blair again advised of the task at hand and this group has been assigned this task to provide information and advice to the Commission.

Ms. Ross stated the issues are not clear 5th Edition or not. She said expectations of yes or no and this is not that simple.

Mr. Madani stated the Legislature did not specify the Edition.

Ms. Hammonds stated there are two specific mandates that have to be addressed and responded to.

Mr. Blair advised they can change their mind, there just needs to be a yes or no answer but to move on this needs to be accomplished.

Ms. Ross stated the 5th Edition of FBC Energy Conversation doe this not have to be certified to Department of Energy and can we retroactively do something to the code that was not adopted.

Mr. Madani said this has already been certified.

Ms. Ross stated the LBA publication shows that this was not mentioned. She said all involved need to be taken into account and this could cause a less quality house and they should discuss qualification.

Mr. Power stated there is a pressure to a simple yes or no. He said we need more information to make this decision.

Mr. Ranck stated rather than saying yes or no as it is not clear what the code says, but offered 3 years now and then address at 6th Edition speak to it again and then allow renewables at that point.

Mr. Belcher said this is a simple question are renewables allowed yes or no and FHBA says yes.

Mr. Barzaga stated his concern on the renewable and is something that can be rendered inactive by just turning this on and off and he would like for this to be addressed.

Ms. Hickman said that the conversation on DOE and the ERI and that will not make the determination. She said this is a yes or no directive and then figure out does that mean do we just look at a part of the trade off or at evidence of intent.

Ms. Ross said with the DOE determination, it was not their decision what she was looking at is that decision are sent to them for compliance.

Public Comment:

Jeremy Susac, Lennar Corp. stated he came to put forth comment on Edition and the language does specifically stated 5th Edition. He then provided the sequence of events that they went through and how they made the determination

Mr. Lacey, ERCA cited statutes and publications speaking to responsibilities of these changes. He said DOE's report does not speak to renewables. He said the role is how far to take this as a group.

Mr. Buck, FHBA said that he would not understand that they are not going to find us into compliance with the 2015 because the ERI is in the 2015 Code. He said he hopes there can be a consensus a straw poll would be great to see where everyone stands on the issue.

Mr. Richmond said fighting assumptions, presumptions based on imperfect information. He said the two sides claiming silence are charging victory. He said we are not hear to discuss this and try to determine what ICC meant. Mr. Richmond stated this is not a commitment.

Justin Kascher, American Chemistry stated there is a need for consumer protection and the values of consumer protection.

Mr. Blair again stated they are not locked into conceptual agreement and that threshold will be answered but not locked into the answer.

Work Group comments:

Mr. Fischer, Kellen asked the members to keep in mind the statutory requirement.

Ms. Hickman addressed additional concern on shutting off the PV system and is that a concern and she explained why.

Mr. Strawn stated he supports renewables with no sacrifice to mechanical features and make sure design performs as best as possible.

Mr. Calleja stated if the Commission is under scope then they can establish renewables and can be added to Rules and conditions.

Mr. Hammonds says it clearly states that the Commission does have to comply with this decision and provide answer. She said the Commission must comply with an answer.

Mr. Blair again stated just because you answer yes does not mean you are obligated.

Work Group comments (cont.):

Mr. Scott responded again to Net 0 homes and building efficient homes as well as justification of BSM.

Mr. Belcher questioned the threshold on straw poll.

Mr. Blair explained the 75% threshold to go forward.

Mr. Blair then called for the straw poll vote as to 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).

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).

Mr. Blair then advised the next item to address is the amount of time onsite renewable power generation can be used as an option for achieving compliance when using the ERI path.

Mr. Cain said it should not be where you say turn it on and then turn around and say turn it off.

Mr. Belcher added comments on the 3 to 6 year intent.

Mr. Bassett stated Florida amendment drops out unless pulled and adopted or has been asked to be removed.

Mr. Richmond stated motive is irrelevant it is to address mandated time period and this determination needs to be made.

Mr. Schock stated he agreed with result of Florida specifics.

Mr. Calleja stated again the 3 to 6 year recommendation does not suggest 5th or 6th Edition cycle.

Mr. Hammonds offered clarification again and possible solutions.

Mr. Belcher stated there needed to be clarification on wording.

Work Group comments (cont.):

A motion was entered by Mr. Zehnal 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. Mr. Calleja seconded the motion. The motion passed unanimously with a vote of 19 to 0.

Mr. Blair introduced the last item which is the amount of onsite renewable power generation that can be credited toward the ERI score.

There was additional discussion on this item and clarification for the group that when using the ERI method for demonstrating compliance with the requirements of the Florida Building Code, Energy Conservation one would still have to meet the mandatory minimums (backstop requirements) provided in the 2009 IECC, and these requirements could not be traded off.

It was decided that this issue will be evaluated at the August 17, 2016 Workgroup meeting.

Mr. Blair tasked the group to send their proposed specific language options for addressing Workgroup issue on is the amount of onsite renewable power generation that can be credited toward the ERI score.

The Work Group will send proposals to Jeff Blair, Commission Facilitator, by close of business on Wednesday, August 3, 2016 for incorporation into an options evaluation worksheet. Members of the public were also invited to send specific options regarding issue number three. The Workgroup will evaluate all submitted options at their next meeting on August 17, 2016. Options should be sent to Jeff Blair in a word document format at: jblair@fsu.edu.

The Work Group also voted unanimously, 18 – 0 in favor, to recommend, consistent with the Energy TAC's recommendation, that the Florida Building Commission defer action on proposed Energy Code modification numbers 6727 and 6933 pending the Workgroup's final recommendations to be delivered consistent with the Project Work plan.

There were no further public comments.

There were no further Work Group comments.

Mr. Belcher entered a motion to adjourn. Mr. Bassett seconded the motion. The motion passed unanimously with a vote of 19 to 0. The meeting adjourned at 3:21 p.m.