

May 7, 2018

Energy Codes Compliance Collaborative

Oak Park, IL

Meeting Notes

Agenda

1. Introductions | Overview | Meeting Goals

Chris Lincoln, William Ryan Homes

Julia Sander, Lidos

Raoul Johnston, City of Elgin/President of Northwest Code Officials

Eric Makela, NBI

Frank Heitzman, Heitzman Architects/Oak Park Building Codes

Jean Ascoli, New construction offerings for ComED

Mindy Agnew, Sustainability Coordinator for City of Oak Park

Ted Schmitz, ICC Government Relations and Adoptions in Midwest

Michelle Britt, ICC – New Energy Program

Tianyao Zhang, Seventhwave

Chris Chwedyc, Architect with code group – work with City of Chicago, Chair of Codes and Standards Committee at AIA, on ICC's Fire Code Action Committee

Keith Steiskal, ICA

Deb Nussbaum, Architect Consulting Engineers

Chris McTaggart – Energy Rater/RSENET Board

Edith Makra – Metropolitan Mayors office

Stacey Dexter – Village of Oak Park

Alison Lindburg – MEEA

Chris Burgess – MEEA

Nicole Westfall – MEEA

Alison gave an overview of MEEA and our role in the collaborative

MEEA's role – we're here to help and learn from you. Primarily a facilitator in this process

Want meeting to be free-flowing

MEEA's meeting goals

- Knowing what baseline studies are about and what utility program goals are
- What are key areas that need attention from code compliance
- Gain commitment for future collaboratives

Why is this collaborative a bold concept? We're not here to talk about adoption. We are assuming code is law, and we're talking about how to comply with it

Some collaboratives in other states talk about adoption, but because that might be contentious, we're just going to talk about compliance

Would like to see additional **involvement from real estate sector**

2. Ongoing compliance work in Illinois

MEEA is working with SEDAC/IL EPA to be sure we are not duplicating efforts

Alison gave an overview of the trainings, etc. offered by SEDAC

SEDAC – hotline and email address (very successful), online resources, workshops (Vandalia on Wednesday), webinars, online on-demand training modules*

Different from work DCEO was in the past

www.sedac.org/energy-code

MEEA/SEDAC have two separate funding streams to work on this

SEDAC is no longer giving out code books – can access them online

3. Results of commercial buildings retrofit survey (Nicole Westfall)

Send out full report with follow-up

<http://www.mwalliance.org/sites/default/files/meea-research/existing-comm-buildings-enforcement-4.11.18.pdf>

4. Upcoming energy code improvement studies (Chris Burgess)

Illinois energy code baseline study

DOE started with sensitivity analysis – what drives energy use in homes in KY? 8 key items

Data collection in teams -they did not collect full set of data per home, so totally anonymous.

Can only visit each home once

Challenging to get homes at the right stage of construction

Question: Residential study – You are not listing mechanical ventilation as one key impacts, is that true for IL too?

- Chris B – MEEA can include mechanical ventilation for IL – let us know what else would be helpful

Jean – Concerned about high impact measures – we see most commercial buildings following performance path. Is there a plan for how to address this?

- Eric M- DOE has developed measures that impact commercial construction. Focus on those measures regardless of compliance path. The data collection protocol they designed should work regardless of compliance path. A lot of savings at top tier items and less at the bottom – still 70+ items to observe.
- Jean- Would encourage partnering with Seventhwave because they have enormous amounts of data about what people are complying with. They've experienced people thinking they are in compliance and they are not. Often people don't know who enforces the code.
- DOE perspective- 2 ways looking at compliance, (provision by provision, or energy basis)
- AL – point about performance is very important, we need to measure what is happening in the field. One of the reasons why we're bringing this group together is because this study has not been 100% developed yet.

Chris McTaggart - Simulated performance alternative is a very popular compliance path. In phase one, identifying which compliance path is being used would be very important.

Raoul Johnston – We'll get a set of plans to review for compliance, and after the fact the architects do their valued engineering and disregard the code. Somehow this needs to get reinforced with design professionals

- Deb- sometimes design professionals don't have the option for "valued engineering". This often happens in the construction phase. A lot of times contractors don't understand the code
- Need approved drawings on construction sites. When changes occur, they need to be approved by jurisdiction

Michelle Britt – A Clarification – when information is collected on site, its not a yes/no compliance. They are collecting values and then determining compliance later

Jean- With commercial, want to be sure they are not oversimplifying compliance. We need to look at performance as well

Chris B - Phase 2- going proactively out to stakeholders to help with compliance

ILs programs will be different than what Kentucky identified.

IL has programs that we want to compliment and supplement; Kentucky did not.

IL Sampling Plan -Comments

- Substitutions can be made in sampling plan amongst similar jurisdictions if a home cannot be found
- 1 house on sampling plan really means 2 (one for p1 and one for p3)

Stacy - Kendall County is fastest growing county in the state – need to include in the sampling plan

- Huge boom in single family and townhome. 6 different commercial builders active in Kendall as well

Chris McTaggart

- Include DeKalb (multifamily) and McHenry (single family).
- More rural areas are building more houses – might be better for new construction.
- Maybe look at a trend of permits over several years?
- Shelby county – what towns are there??
- If you want to include affordable housing developments, consider looking at development in Effingham. Look at affordable housing tax credit list and see what has been approved/ what are they building where
- Not much is happening in Rockford

Also look at builders – had several small builders combine. Go to builder websites and look at where they are building their communities

AL – To Clarify: PNNL makes 14 sampling plans. MEEA picked one to start rather than showing the collaborative all 14

Julia – What is the timeline for this?

AL – Trying to get into the field in the next few weeks. We’re reconvening collaborative in Peoria and O’Fallon. In the next few weeks we’ll submit the plan to the collaborative for review. Next meeting will review commercial. Cadmus will do data collection for the both baseline studies.

Gene – Is there any talk of dealing with the gap of low-rise multifamily?

CB- Multifamily will be talked about when we do the commercial study

AL – townhomes will probably go into residential, but other stuff will be going in commercial.

DOE study doing a multifamily study, so we are going to see how they do that and go from there

BREAK

Keith- IL council of code administrators – comments on challenges/opportunities

- Statewide training – concerned ComED is not offering trainings across the whole state. What about online trainings?
- Website – not always up to date. Hard to get information to everyone
- More data to code officials on savings – there are thousands of code officials that will review plans etc. It becomes difficult to sell to construction people. Code officials need more information to combat resistance
- Roofers took to energy code because they have information, HVAC has had a harder time with this. NO permits for this either.
- Chicago – outlier. They don’t enforce the code

- Inspectors – it is a difficult time. Economy is going up, but governmental budgets is going down. Working with very small staff, very little training. Online training would help a ton.
- **Checklist that includes the Illinois amendments for code officials**

5. Discussion – review of items identified in past meetings

Going through things that were identified at last meeting in Oak Brook, followed by a discussion:

- Are these still things we're working on?
- Should we be?
- What (else) should we be working on?

Julia – www.energycodesIL.com – You can download all the information from past collaborative meetings

- Website for collaborative with meeting notes, presentations, etc.

From previous meeting in Oak Brook:

Challenges

- Resources and staffing
- Understanding the code book is different than implementation
- Who enforces?
- Enforcement varies
- Some officials don't want to stick their necks out
- Not life safety codes
- Confusion over 3rd party- especially in Chicago area
- Different types of modelling software – only as good as information you put into it
- Too many codes to keep track of
- Assistance going away
- Codes/changes to code are too costly
- Consumers need to be educated first
- Not every jurisdiction can afford new code books – SEDAC may help with this

Opportunities

- Collaborative can help inform about code changes. SEDAC is looking at what to do when IL adopts 2018
- More on-site trainings (Envelope sealing and duct sealing identified)
- Additional clarification from state to local jurisdictions
- New software interfaces
- Educate local government/decisionmakers
- Better communications
- Improving QAC for raters
- Template checklist for plan review
- Online videos
- Success with energy codes – right v wrong

Discussion: What are some of the challenges/opportunities that you see?

Julia – checklists which Keith mentioned is something that is done in other states, would be helpful. One of the other topics – local jurisdictions don't necessarily know code was adopted by state and they need to take ownership. We need to figure out how to do this. Energy code is part of a non-regulatory part of government is also an issue – supposed to comply but can't enforce it. These are some of the low-hanging fruit – what can we do as a group and how can we move things forward

Edith– Education of public officials. Would like to see this happen and work with municipalities to better connect on the political sphere around enforcement.

Raoul – building officials' position: Too many different compliance avenues which makes it probably the toughest on field inspectors. Builders need to have documentation at job site starting at rough inspections, - often they don't have it and it creates a problem in the field. Getting better at having them have proper documentation, but not perfect. Education would benefit. Budget constraints also mean short-staffed. Always looking for inexpensive or free training, but even when inexpensive trainings occur, they can't send everyone because of short staffing. More frequent trainings would help because it is not possible to have everyone gone at the same time. Unfortunately, also, the state of IL is horrible at notification about when they do change their codes. You don't know when they pass new codes.

Eric – in NY, they just developed a training program for mayors/decision makers on benefits of energy codes. Short, 1-hour training session on importance of energy codes, energy savings. On site envelope/duct sealing trainings – implemented in Idaho and certified people in that. A lot more third party there. DET training is part of this. Circuit rider program in Idaho –successful in reaching out to jurisdictions(Funded by NEEA for last 4-5 years) QA for ERI approach – misconception that ERI for Hers-based approach is opening up pandora's box. RESNET is trying to improve the QA. With ERI comes third party verification, could help with short-staffing. RESNET has a lot of fact sheets on this to help jurisdictions

Frank – Codes change frequently (Every 3 years) and bar is getting higher – many times you don't know when things change. 2x6 houses with R19 as a standard for many years, but many people don't realize that now, its R-20. They don't send out a notice. Also, you can't find R-20 insulation at home depot (where most builders buy their material), and R-21 is much more expensive than 19. RESCHECK is common proof that building meets energy code. a lot of data is put in by yes/no questions. You can configure buildings to pass in RESCHECK, but nobody ever follows up and checks. plan check capability of people who are reviewing drawings may not be as sophisticated as it should be. They need to know all the codes, so main concern may not be energy codes, and they may not be as aware of the requirements of those as they are of others. Opportunity – experts can get help. Also, may consider implementing a specific reviewer within a department for energy codes

Jean- a lot of us are trying to think about this from a strategic perspective. ICC is looking at big hitters. There are a lot of us thinking about this, so let's make sure that we're all talking about this together. A lot of data exists of what people are doing to save energy, what are the most common things, and what are the most successful things.

Mindy – Second what Edith said. A few communities have dedicated sustainability professionals that have some experience with codes/construction/overall sustainability. They can work to push education. Developing simple set of talking points, parameters, etc. would be very helpful

Stacey – create a “most popular marriage” between building codes and energy codes. This may encourage advancement in codes. Create an FAQ page to give that information out to builders/etc. more compliance if we’re a collective

Tim ICC – energy is most difficult code to get adopted by community. Builders go to table and say that code will cost a lot of money, and “I can’t sell that to my buyers”. This makes energy codes a tough sell at a podium at a city council. I don’t think we do a good job of showing that by not moving forward with the energy code, we’re losing out on savings.

Michelle – Marketing energy codes is hard. ICC is developing information for policymakers about energy code., tracking how much energy savings was left on the table with adoption (how much more could you have saved). Trying to tailor it to jurisdictions. ICC is developing a training program, meeting jurisdictions where they’re at, simplified approach to energy codes, starting with 8 key DOE items, designed to show you where to start

Tianyao – Training education for builders – Site verifications on LEED projects showed some LEED certified buildings were not meeting energy code

Chris C. – 2 things: predictability and consistency. Those are hard to achieve sometimes. Codes are getting more complicated, and they change quickly. To have a core person/group involved in making compliance interpretations is essential because it can be very confusing. Code officials see a lot of “this guy did it, why can’t I”. There are a lot of opportunities for third parties (Review, inspections, commissioning). Incentivizing process through rebates, etc. to say ‘if you prove to me you did what you were supposed to, here is some money back’

Deb – Software. Approaches for design professionals they have now isn’t the same as the ones engineers use. Better education of design professionals, but also checking to see what they must use to design buildings. Rescheck/etc. shows compliance but doesn’t show what they’re asking for in ICC. Also, often times design professionals aren’t educated in this. Also, having uniform jurisdiction enforcement, education of code professionals., education of design professionals. Nobody wants to build bad buildings. Everyone needs to work together to educate each other (contractors included)

Chris McTaggart – Concerns: existing code adoption process in IL – a little bit skeptical. ILECAC needs better reasons for why they amend codes. Not a lot of rigorous scientific thought put into it. Advisory council does not have building scientists or energy advocates on it. For this reason, it makes it easier to make conjecture arguments – no rationale or science why amendments are passed. Mechanical ventilation needs more information and clarification. Where is there an overlap and how can we simplify?

On board of directors for RESNET – trying to strengthen the internal reputation of work raters do. Want to change the conversation about raters to help them become an asset. More compliance means more business opportunities for raters. If MEEA or state or collaborative can serve as clearing house “here’s how you convey the energy code, here are materials you can take to code officials” with pre-vetted information they can share with energy code officials, etc.

Raoul – collaborative needs to focus on getting more information out to design professionals, home builders, builder associations. Individual codes affect individual trades, but energy code affects everything. Uphill battle because trades people don't have an avenue for proper education on this

6. Discussion – Collaborative Structure

Alison – gave background on other collaboratives

Part of what we see this collaborative doing is helping make programs that may come out of our baseline study good and useful and utilized

MEEA's role is just to facilitate and learn

Chris McTaggart- It will be tough to get participation on more than quarterly basis

Eric – suggests full group as quarterly. For baseline studies, it's critical to meet monthly on phone or have subcommittee meetings. May need to be more than monthly.

Julia – is the plan to convene one collaborative across the state? It's important for group to meet as a whole. What we've found is different opinions/ideas/suggestions/etc. depending on where you were in state. Unified collaborative is important.

- AL - Once we move to phone format, we will have a more representative group

Frank – **Residential vs commercial** is good subcommittee. **Remodeling** would be good addition to that because it is very different than new construction.

Michelle – Throughout the process, is there potential for gathering information and opinions about what is not working in the code right now?

AL – To summarize: Quarterly meetings of the collaborative together. In terms of subcommittees, potentially residential, commercial, and renovations. Meetings will be over the phone.

Frank – Might be better to use Go-to Meeting vs, telephone so we can review documents etc.

7. Discussion – Involvement in Baseline Studies

Chris Burgess – How do people get involved and how can we make sure this is a success?

Recruiting buildings are the hard part and hitting them at the right time can be difficult. Helping to disseminate information – contact info for builders, etc. is helpful.

We want multiple points of contact – really helpful from people at cities, designers. And then we need builders to grant access. Would like cities to communicate with builders to talk to them about how this is a good thing for them to allow access to. Totally anonymous, etc.

Frank – Compliance test system might be skewed. Buildings that you’re going to get into are likely the most compliant.

Eric- can’t tell people we’re going to come without their consent, so you end up with some sort of self-selection. You’re trying to get typical construction while being as random as you possibly can.

Raoul – don’t deal with builders, deal with building departments. You’ll get a much better representation than dealing with builders themselves.

Chris McTaggart- Leverage some of RESNET’s data. Could be potentially useful in identifying trends.

Jean – could see from evaluator standpoint, building department could have biases as well and could lead to just looking at worst case scenarios

8. Next steps – next meeting date

Alison – setting up 3 different regions, overall with 2 different committees, list of different opportunities, set next meeting dates. Sending sampling plan for residential for responses. MEEA will put together areas we could use more oversight in.

Who else might need to be participating? What would you like to see covered at the next meeting?
What did we miss?

Edith: If there is any opportunity to work at a higher level, that would be helpful because I will not get involved in any sort of deeper dives.

ADJOURN