

Building Energy Code Study Committee Meeting #3 Notes

Virtual via Teams Meeting

August 22, 2023

9:30 am – 12:00 pm

1. Welcome and Roll Call - Chair (5 minutes)

a. Committee Members:

- i. Senator Chris Bray
- ii. Rep. Scott Campbell
- iii. Mike Desrochers
- iv. Matt Musgrave
- v. Craig Peltier
- vi. Jim Bradley
- vii. Jason Webster
- viii. Kelly Launder
- ix. Tim Perrin
- x. Matt Sharpe
- xi. Bob Duncan
- xii. Chris Burns
- xiii. Sandy Vitzthum
- xiv. Ted Brady

b. Staff and Consultants

- i. Richard Faesy
- ii. Keith Levenson
- iii. Barry Murphy
- iv. Ben Civiletti
- v. Ellen Czajkowski

c. Guests

- i. Stu Slote, Guidehouse
- ii. Caroline Daniels
- iii. Liz Smith, CATIC/Vermont Attorneys Title Corporation
- iv. Peter Tucker, Vermont Association of Realtors
- v. Christopher D'Elia, Vermont Bankers Association
- vi. Walt Adams
- vii. Bill Nash, International Codes Council
- viii. Ben Moffatt, Ast. State Fire Marshall

2. Approval of Meeting #2 Minutes – Chair and Group Discussion (5 minutes)

a. Chris Bray noted thanks for minutes

b. In future, list all attendees in minutes

- i. (Richard Faesy updated draft minutes with attendees' names)

c. Corrections:

- i. Bob Duncan thinks that #2 in Sandy's handout noted in the last minutes should state that "Most states **DO** have a statewide code" whereas not it says "don't" in the handout. Sandy agreed to research to clarify the correct statement.

- i. (Richard noted this potential clarification in the "final" minutes for Meeting #2 since Sandy has not yet been able to clarify this statement.)
 - d. Questions from the minutes:
 - i. Sen. Bray asked some clarifying questions of Mike Desrochers:
 - i. What do you mean by "resources"?
 - 1. "Resources" means staff people
 - ii. What are the DFS budget sources?
 - 1. License and permit fees, stickers, "special fund revenue"
 - 2. No general fund money to run DFS except for just a little for fire training
 - iii. Rental enforcement challenges?
 - 1. 222 health officers statewide now that DFS will be taking over
 - 2. Challenges will be responding to a heavy volume of residential complaints that were serviced locally by health officer will not have to be serviced by 4 DFS inspectors
 - 3. 4 inspectors will be challenged to respond to all responsibilities statewide
 - ii. Sen. Bray: What is "IRC"?
 - i. Richard Faesy: "International Residential Code"
 - e. Add title insurance topic to next meeting
 - f. Motion to approve minutes by Scott Campbell, seconded by Kelly Launder
 - g. Minutes approved
3. In-Person vs. Hybrid Meetings for Future Meetings? - Chair and Group Discussion (*10 minutes*)
 - a. Next meeting and the rest are planned for the PSD Giga Conference Room
 - b. Kelly: last meeting was challenging for the Chair calling on people remotely, parking was challenging with State Street closed
 - i. More difficult to do hybrid vs. all in person, or all-remote
 - c. Sen. Bray plans to attend next meeting in person
 - i. We will start transitioning to decisions going forward
 - ii. When starting to make decisions it will be more helpful to be in person
 - d. Next meeting is 9/5 9:30-12:00 at the Public Service Department, 112 State Street, Montpelier, third floor Giga Conference Room
 - e. We will leave it up to individuals to choose to attend or not, will stick with hybrid, but encourage as many to attend as possible
4. Presentation of Pitches – Richard Faesy (*60 minutes*)
 - a. 10 minutes per pitcher; 5 minutes presentation & 5 minutes for questions
 - b. Present the vision of what Vermont's future code administration system should look like
 - c. Considering:
 - i. Pros and Cons of naming an Authority Having Jurisdiction (AHJ)
 - ii. Strategies to change the culture in the industry so that builders seek out advice and training on energy issues and building science
 - iii. Role of Public Service Department
 - iv. Role of Division of Fire Safety
 - v. Locus for RBES/CBES Authority Having Jurisdiction, if that is needed
 - vi. Cities with building code offices
 - vii. Towns with no building code offices but with zoning ordinances
 - viii. Towns without zoning ordinances
 - ix. Implications for building code administration with a named energy code AHJ

- x. Cost considerations (administrative cost of your proposal, permits, fees, etc.)
- d. Sen. Bray thanked everyone who prepared a pitch for their time and contribution
- e. Bob Duncan's pitch
 - i. Awareness of codes
 - i. Include conditions on zoning permits to make it clear that RBES and CBES apply to all permits issued
 - ii. Towns and utilities could send out notices and flyers to citizens informing them of the need to follow energy codes for any renovation or new project
 - iii. OPR could put out a list of registered builders
 - iv. Contracts between homeowners and builders required by OPR could have a stipulation about the energy code
 - ii. Increasing compliance
 - i. Need statewide enforcement
 - 1. DFS should be the Authority Having Jurisdiction (AHJ)
 - 2. Some other states adopt the IRC statewide, and yet they leave enforcement to the local municipalities who choose to enforce or not at the local level
 - 3. Cities like Burlington, Barre, Montpelier that have code offices could follow the state lead and enforce locally
 - 4. This would level the playing field for all towns statewide to have a single building code
 - 5. Then, coordinate RBES and CBES with the statewide residential code
 - ii. Ways to increase compliance in the short term
 - 1. Standardize the collection of RBES certificates
 - 2. Offer circuit riders to help understand and implement energy codes in building projects
 - 3. Expand Build Safe Vermont to include energy codes as part of training of the trades
 - 4. Professional trainings and continuing education (CE), energy codes could be part of licensing
 - 5. EVT could be source of trainings
 - iii. DFS
 - i. Include conditions in permits that says applicants must comply with CBES (or RBES for multifamily)
 - iv. Bring in Realtor, Bankers, Attorneys as part of education process
 - v. Marketing campaign
 - i. Statewide campaign for understanding
 - ii. Contractors need to be educated that RBES exists
 - iii. Radio, TV, social media, print with trainings to back it up, EVT outreach
 - vi. Anecdote shared of a client who talked to multiple builders and none knew Vermont had an energy code
 - vii. Questions
 - i. Sen. Bray: What is your cost-effectiveness discussion with customers?
 - 1. Bob:

- a. It used to be that EVT incentives would pay for improvements so incentives or savings have always covered costs, but the EVT programs are changing
 - b. Never has been a problem to go to highest levels of efficiency, but that is changing as the codes are increasing
 - c. Similar to fire rating and protection; it costs money but it protects buildings, occupants and first responders, so most of his customers understand these benefits
 - ii. Scott: Included 2019 Thermal Efficiency Working Group notes
 - 1. Highlight any ways thinking has changed?
 - 2. Bob: It's pretty much all the same now as it was in 2019
 - a. What was in that was true then and today
 - b. Today, we just have more potential compliance examples that he just shared
- f. Jason Webster
 - i. Energy codes are components of the building code
 - ii. Acknowledges that the lift is too big now to enact and enforce a statewide building code
 - iii. Proposes a "code Light" proposal as an initial step
 - iv. Recognizes we won't get an owner occupied building code into place
 - v. Commercial/MF group is different than single-family contractors since they work with professionals (architects and engineers) familiar with the other codes
 - vi. His approach acknowledges the realities in place in Vermont
 - vii. AHJ should move over to DFS
 - i. DPS has some existing staffing and expertise that could help DFS if the energy codes moved there
 - ii. Legislature needs to provide staffing and support
 - viii. Chop up RBES and CBES to align with existing building codes:
 - i. Commercial - CBES
 - ii. Multifamily - RBES MF
 - iii. Single family - RBES SF
 - ix. DFS incorporate CBES and RBES MF into existing plumbing and electrical codes they already administer
 - i. Need more staff to support
 - x. Local Zoning Administrators enforce RBES SF
 - i. Make local town zoning administrators enforce the code and work with builders locally
 - ii. Towns without zoning administrators could opt out of RBES SF
 - iii. Only in towns that agree to take over the code would it be enforced
 - iv. Zoning administrators need to be put into administrative role locally
 - v. Build out DFS software or other admin support for towns
 - 1. Make more prescriptive requirements
 - 2. Point system would need to be layered in
 - 3. Preliminary approval via software for builder to follow
 - vi. Zoning administrator would review checklist builder develops
 - 1. Would ensure that builder complies

- xi. Need to influence what needs to happen at permitting phase at the beginning of the project
- xii. Education is very important up front
- xiii. DFS as the AHJ handles conflicts and appeals
- xiv. Town can go to stretch code as an option
- xv. Town zoning administrators don't have to be energy experts, they just need to make sure that the builder follows through on what they said they'd do to meet the code
- xvi. Codes need to stay as prescriptive as possible
- xvii. For towns that chose not to administer the code, then there should be no code in that town
- xviii. This approach focuses on the front of the construction process, not on the back end, which is the current focus
 - i. Move it to the permitting phase
 - ii. Set it up so builders know what they need to follow up front
- xix. As codes ramp up, there is an increasing risk to builders, and this approach takes some of that risk away if the software provide approval that the home meets the code standards
- xx. Keep RBES focused on prescriptive and larger buildings with professionals involved more prescriptive
- xxi. Richard: What happens with towns with no zoning?
 - i. Jason: the code would not be enforced
- xxii. Sen. Bray: what does this look like?
 - i. Jason: With more stringent codes, old building practices will more likely fail which opens up builders to more liability
- xxiii. Sandy:
 - i. Appreciates Jason's proposal and recognition of reality
 - ii. Not a problem with first owner but the second owner if they go back if there is a defect or sub-code
 - 1. Jason is focused on both short and longer term
 - 2. Builders' risk issues are in both short and longer term
- xxiv. Jim Bradley:
 - i. There are potential health issues with tighter homes without proper mechanical ventilation
 - ii. Questions about who is at risk if there are future building issues
 - iii. Builders are at risk down the line and it's not clear whose liability is on the line if no on signed off that the home met code
 - iv. Jason: third part sign off helps protect the builders to cut off lawsuits in the future
- g. Matt Musgrave
 - i. His is just addressing #1 Act 47 issue with AHJ and whether DFS should be the AHJ
 - ii. There is no budget for this
 - iii. VT is running high budgets now that will go away in the future along with the federal funds
 - iv. We need to consider cost
 - v. No feasibility studies have been run on how to pay for the code compliance
 - i. This is missing and needed

- vi. Towns are already stretched
- vii. Little promotion of compliance and education to date has taken place
- viii. Contractor registration at OPR if primarily focused on fraud, but eventually could support builder education
- ix. AGC proposes a phased approach
- x. Recommendations
 - i. We need to determine whether RBES is mandatory or "optional"
 - 1. Pass legislation that clarifies that it is required
 - ii. OPR registry
 - 1. Have builders certify that they understand and will follow RBES
 - 2. Remove from registry if found to not follow RBES
 - 3. Put stipulation on all builders to be a VT builder you must agree to follow the building code
 - a. Would solve the problem of customers shopping around for builders who don't want to build to code if they know they will be delisted
 - iii. Training at their own expense, similar to other trainings
 - iv. If cities and town choose to enforce, do so locally
 - v. Res inspectors can offer inspection services
 - vi. Do not expand on title impacts
 - 1. Fraud already raises a defect to title
 - 2. Would cause real issues if title was impacted
 - vii. AHJ database
 - 1. Need to set up state level at DPS
 - 2. Could be moved to DFS later if needed
 - 3. Just would take on state employee
 - 4. CBES compliance is working now, but could add to the RBES database later
 - x. Start with these simple asks
 - xi. Jim B: likes requirement for builder training, but OPR is just looking at fraud now
 - i. How do we get around this to raise this issue with OPR?
 - 1. Matt: Set it up to fill out application to get on registry
 - a. Attestation that you understand the RBES and that you will follow the code
 - b. Puts the builder on notice
 - c. If they don't build to RBES, that would be a fraud issue
 - xii. Sen. Bray: appreciates the concern on budget
 - i. Legislature always wants to know what resources it takes would fund an initiative
 - 1. Matt: this effort would compete with other humanitarian issues (homelessness, child care, other issues)
 - 2. We need to be budget conscious in our proposal
- h. Mike Desrochers
 - i. Likes proposals he's heard so far; likes Matt's and Jason's comments
 - ii. Has been through 100 summer studies and appreciates the expertise
 - iii. Budget process will be interesting this year
 - iv. DFS responsibilities are large and so impacts need to be considered
 - v. "Code management" is a better term to use than "code enforcement"

- vi. Rulemaking process for energy code updates
 - i. DPS does a great job currently and we don't need to break something that works well
 - ii. Could continue regardless of AHJ
 - iii. DFS already has too many rules to promulgate; it would be a disservice to energy supporters
- vii. Owner occupied dwellings
 - i. Does not see SF enforcement happening
 - ii. Jason's comments were spot on with education and training of workforce
 - iii. Database could capture where we are over time without spending a lot of money
 - iv. Educate and train people
 - 1. Education should really be our focus
 - 2. It needs to be done right the first time with educated builders, since there won't be a follow up inspector
 - v. Think about impact of managing the energy codes
- viii. Multifamily
 - i. Supports education and training
 - ii. Does put in permit letters to comply with RBES and CBES on all permit applications to comply
 - iii. Could do a better job validating that the certificate is in the building, but sometimes allow for phased-in occupancy
 - 1. But could do a better job with this
 - 2. Need to consider phased occupancy and issuance of a final certificate
 - iv. Energy code interpretations
 - 1. There is room to better collaborate with DPS on interpretations
- ix. Compliance
 - i. Likes the idea of an app that will tell builder if the building will be in compliance
- x. There will be very little money, no appetite for SF homes, focus on education of more builders up front
- xi. Sen. Bray: Is there any interest in and demand for the energy code by customers who want to make sure their building is efficient?
 - i. DFS does purchase and sale inspections of condos before sale to determine whether that condo complies with various codes
 - 1. Bianchi case
 - 2. Doing over 1000 inspections annually (up from about 100), so there is a market for these inspections
 - 3. Huge demand, out 30 days
 - 4. No requirement, but sellers look for these
 - 5. Might this become a marketability issue in the future? He thinks so
- xii. Matt Sharpe:
 - i. What is the difference between voluntary adoption and compliance?

1. DFS has no authority over SF homes and would rather keep it that way, thinks it won't go through the legislature, so focus on education
 2. Matt S: Should we remove the energy code completely, or maintain it under DPS now and make compliance voluntary?
 - a. Unclear so not answered
- xiii. Jason:
- i. In response to Sen. Bray's previous question about whether clients are willing to pay for building to code:
 1. 2020 RBES was the first time the bar was raised higher than standard building practice
 2. Huntington Homes would offer points as options to customers and they weren't willing to pay for any of the additional points, even if required
 3. They just moved the code requirements into the standard package now, and don't even give customers the choice.
 - a. It's unclear how many clients they have lost with higher cost/code compliant homes
- xiv. Sen. Bray: It's like shopping for cars
- i. Customers probably wouldn't choose to pay for airbags and other safety features
 - ii. But since they are now required and standard in cars, they have benefitted car safety
- xv. Matt Musgrave: Clients in large buildings look at 30-40 ROI, but SF homes customers only look at 5-10 years
- i. It depends on the buyer
- i. Walt Adams
- i. Three steps
 - ii. Information gathering step
 - i. CBES requires permit
 - ii. RBES needs to align with a certifier before permit is issued
 - iii. Information that could be transferred into database
 - iv. This is most important step in the process
 1. Information would be in place so that reviews and inspections might follow
 2. Names and building information
 - a. Energy details, construction, and use of that particular building or addition
 - iii. Reviews and Reviewers
 - i. State could review at any point
 - ii. Contact certifier to follow up at certain points in the construction process
 1. Commercial DFS can follow up
 2. Res
 - a. Town could review or state would follow up
 - iii. Puts more people into looking at the code throughout the construction process
 - iv. On-site inspections

- i. State would review construction and approval process
 - ii. Milestones for review during construction
 - v. Chris Bray
 - i. Collecting data keeps coming up
 - vi. Walt: may be getting commercial energy information, but probably not a lot of residential data
 - vii. Kelly: PSD has a simple Excel spreadsheet of RBES certificates
 - i. Farmed out job but is behind with inputting them
 - ii. Not updated at this time
 - iii. Receive more RBES than CBES certificates
 - iv. Matt Sharpe: What information is in the Excel file database?
 - 1. Name address, some additional basic information
 - 2. Scanned with link to a PDF of each certificate
 - viii. Richard: database development seems like a worthy DOE funded project for possible future grant
 - ix. Jason: Just filing a certificate doesn't indicate that this is good data or enough information
- j. Sandy:
 - i. VT set goals 20 years ago, but we set up a system with major flaws
 - ii. This Committee should set up a direction to take us on next 30-50 years
 - iii. Options
 - i. Give cities and municipalities authority but since VT is so small, we need absolute authority at the statewide level
 - iv. Training
 - i. Need to focus on whole infrastructure
 - v. Models
 - i. Statewide authority
 - ii. Muni authority
 - iii. No authority
 - vi. Need to focus on whole state for consistency
 - vii. Clearer roles
 - viii. Database of projects
 - ix. Focus down to the smallest towns so no one is left out
 - x. Clear goals
 - i. 90% compliance with 100% submissions
 - xi. Education, incentives should be focus
 - xii. Simplify requirements; keep the base level of regulation simple to understand
 - xiii. DFS needs to be statewide authority
 - i. Establish standard of care
 - ii. Adopt IRC so that it's clear what the right thing to do is
 - 1. Would help insurance companies by providing a reference
 - xiv. Move oversight of all trades over time to DFS
 - xv. DFS already has commercial database
 - i. Just add residential data
 - xvi. Establish the IRC as the statewide building code so it's clear what is the right thing to do, even if it's not enforced, which would be ok
 - i. This would help insurance companies
 - xvii. Business model for DFS is reliant on building fees

- i. Receive a proportion of all municipal fees
 - ii. Subject to boom and bust cycles for their funding
 - xviii. Education will be big lift
 - i. 20 years of deficits, so we'll need to make up lost ground
 - ii. Center for training is coming
 - 1. Bring in Steve Spatz from Efficiency Vermont to discuss in next meeting
 - xix. Town administration
 - i. Link with DFS and whoever would be responsible locally
 - ii. Local presence is needed; could be zoning person or even the road commissioner if they have the link to the DFS
 - xx. Towns not interested in participating
 - i. Add a full time position at regional DFS with focus on health and supporting energy codes
 - ii. Focus would be on helping to comply rather than an punishment
- 5. Review and Discussion of Pitches – Chair and Richard Faesy (50 minutes)
 - a. Process for Committee decisions/consensus
 - b. Identify common themes and threads
 - c. AHJ options
 - d. Cost considerations for energy code administration
 - e. Parking lot issues for Meeting #4
 - f. Discussion
 - i. Craig Peltier:
 - i. How are we going to break this out?
 - ii. Presentation themes
 - 1. On-line registration (Jason)
 - a. Set people up at the beginning of projects with data collection
 - 2. Notifications (Bob)
 - a. Education through fliers and notifications
 - ii. Matt Musgrave:
 - i. Thanks everyone for their hard work
 - ii. Phased approach to address "let's not make perfect be the enemy of the good"
 - iii. This will take some time, as the OPR registry exemplifies
 - iv. Look at something that can pass the legislature, maybe phased in over time, and would be acceptable to the administration
 - v. Sen. Bray:
 - 1. What is take on the legislature regarding timing and appetite?
 - a. Matt: Legislators respond to constituents' requests
 - i. While everyone on this call was supportive of the contractor registry, local individuals called their representatives to push back and oppose it, so it took 5-7 years to be put into place
 - iii. Jason
 - i. Summary of what he heard:

1. Contractor registry with signature that builders are familiar and commit to comply with the energy code
 2. No enforcement for SF will be forthcoming, so how do we address?
 3. Walt noted on the CBES side that there is a commitment up front to a plan for compliance and commitment to knowing the plan up front
 - a. This seems like a good approach that could be adopted for RBES too
 4. Authority to oversee
 - a. Local to help see project through
 - b. Tie into database to connect the dots
 - c. No permits without registering and collecting data at the end
- iv. Sen. Bray's synopsis:
- i. Phasing
 1. Take stepwise approach, as was done with food waste
 2. Do over time to phase in
 - ii. Incentives over enforcement
 - iii. Data
 - iv. Assemble a strategy
 - v. AHJ is next meeting 9/5
 1. Look at Work Plan for next agenda items
 - vi. Review pitches and minutes to tee up next meeting to start towards and action plan
 1. Include timelines
 - vii. Suggestions for Meeting #4 agenda items:
 1. Resolving issues, concerns
 2. Administration steps
 3. Compliance enforcement mechanisms and there's a number of details underneath that
- v. Richard
- i. It would be helpful to understand Efficiency Vermont's role in supporting energy codes and new construction going forward beyond code training
 - ii. Can EVT provide an update?
 - iii. Matt Sharpe: EVT and the DPS are discussing this role
- vi. Scott
- i. 9/5 and 9/12, then final meeting on 10/5
 - ii. Keep an eye on the schedule
- vii. Sandy
- i. She can't be at 9/12
 - ii. What are the hidden costs if we do nothing?
 - iii. What are the health costs?
 1. Mold is very important and needs to be considered

2. Bray: OEO talks about the health benefits being equal to the energy benefits for WAP customers
6. Addressing "Cost-Effectiveness" in a Subcommittee – Richard Faesy (5 minutes)
 - a. Solicit volunteers
 - i. Craig Peltier
 - ii. Sandy Vitzthum
 - iii. Scott Campbell
 - iv. Walt Adams
 - v. Jason Webster
 - vi. Matt Sharpe
 - vii. Barry Murphy
 - viii. Keith Levenson
 - b. Richard to organize meeting to discuss
7. Additional Meetings
 - a. 9/5 and 12
 - b. 10/5 and 31
 - c. Final meeting 11/16
8. Follow on
 - a. Kelly
 - i. Funding resources list coming to Vermont from DOE and different federal sources
 - b. Training Center
 - i. Matt Sharpe will ask Steve Spatz re. WAP vs. broader training
 - ii. Sarah Phillips or Steve Spatz to present
 - c. OPR and SOS
 - i. Certifications to include in registry
 - ii. Richard to check with Lauren Hibbert on registry updates
 - d. Title Insurance Update
 - i. Michelle Farnham or Liz Smith from CATIC
 - e. EVT and role supporting codes
 - i. Education and outreach roll out
 - ii. Role in supporting codes in the future
 - i. Responsibilities and roles in the future
 - f. Insurance companies
 - i. We should bring them to discuss property impacts
 - ii. Sandy will research
9. Stakeholder/Public comments -Chair (15 minutes)
 - a. Liz Smith, CATIC/VATIC Title Insurance Company
 - i. Manager of counsel
 - ii. Will bring her back in next meeting
 - b. Peter Tucker
 - i. VT Association of Realtors
 - ii. Studies have shown a decline, and would like to see those studies
 - i. RF send him link
 1. (Done 8/24/23)
 - iii. Following IRC as part of contractor registry would provide "first knowledge" and could work for contractors

- iv. If Realtors don't commit to following to standards, they are in jeopardy
- v. Education
 - i. NAR and VAR industry provides education for members
 - ii. Contractors don't have this requirement
- vi. Most concerning:
 - i. Non-compliance could be a defect on title
 - ii. Our goal is to manage contractors
 - iii. But disruption to title could be a real problem and really disruptive to innocent folks
- vii. Inspections
 - i. Would cost a lot of money
- viii. Realtors would be open to educating their members
 - i. Could bring education to OPR and work to educate members

10. Wrap Up

- a. Notes are all on DPS website
- b. Sandy is more focused on insurance damages issue, beyond title insurance
- c. Thank you for all the good meeting
- d. For parking for next meeting, the Association of General Contractors' lot is a possibility (reach out to Matt Musgrave) or behind the Montpelier High School
- e. Adjourned at 12:05