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Energy Advisory Committee (EAC) of the Board of Building Regulations and Standards MEETING NOTES

Wednesday, August 14th 2019, beginning @ 2:00 p.m. and ending @ approximately 4:10 p.m.

Department of Energy Resources (DOER) Offices

100 Cambridge Street, 10th floor, Boston, MA

Roll Call

Members

| 1. | Ian Finlayson (IF), Chair | present | |
|-----|---|---------|--------|
| 2. | Michael Andelman (MA), Vice-chair | present | |
| 3. | Dan Walsh or designee (Adelle Reynolds) | present | |
| 4. | Fran Boucher – designee Kevin Rose (KR) | present | |
| 5. | Michael Browne (MB) | | remote |
| 6. | Alan Glynn (AG) | present | |
| 7. | Mark Halverson (MH) | present | |
| 8. | Isabel Kaubisch (IK) | present | |
| 9. | Peter Ostroskey or designee (Jennifer Hoyt) | | absent |
| 10. | Don Vigneau (DV) | present | |
| 11. | David Weitz | | absent |

Other attendees:

OPSI Attorney Charles Kilb (CK)

Item 1: Discussion of quorum

Chair IF determines a quorum is assembled despite omissions in the meeting notice EAC member list.

Action item: IF sends Daniel Walsh (DW) up-to-date member list to correct this going forward.

Item 2: Background on BBRS request for EAC task to investigate a 'net zero' stretch energy code

IF and DW provided EAC members with background on BBRS's ask for developing a framework for a net zero stretch energy codes and discussion of a potential Stretch Code update timeline in alignment with the 10th edition. DW stressed the BBRS interest in a definition of net-zero.

Action Item: IF to have call with John Couture to check in on BBRS intent.

Item 3: Discussion of high-level policy considerations

IF summarized recent enquiries to other US states and cities with 'net zero' energy codes, and walks EAC members through "BBRS Energy Advisory Committee – Briefing Memo" document, which includes 7 specific Key Policy Considerations developed through meetings with cities requesting a 'net zero' stretch code update and Mass Save staff.

Action Item: MH to send IF information on ASHRAE Performance methods work that is adaptable to a zero energy code.

3.1 Adoption Timeline:

Default option is immediate adoption of a stretch code update. DOER Green Communities division in interested in a phased adoption over a 3-year period to allow local action to opt into (or out of) new Stretch Code at any 6-month period during the code cycle. (after 3 years, communities default into updated stretch code). DW notes wide adoption of current 'stretch code'', and that BBRS may not welcome multi-tiered system. DV proposes altering building area / size thresholds that require use of stretch code – currently limited for commercial buildings.

CK notes that EAC should provide guidance on where 2021 IECC will bring us, what a non-zero energy stretch code would look like, and what a zero energy stretch code would look like.

Action Item: for next meeting, develop BBRS's potential choices, taking into account the state's projected likely future code outlook.

3.2 On-site vs off-site renewable energy

IF notes that some jurisdictions (other states) have included off-site renewables in their codes, and that a handful of municipalities in the state would like clarification on where BBRS jurisdiction ends and municipal jurisdiction begins. If the Stretch Code does not cover off-site energy, these jurisdictions would like clarity that this in not within the scope of BBRS.

CK notes that, BBRS has only regulated on-site.

MH notes that IECC and 90.1 stays on-site, but IgCC and 189.1 consider off-site.

IF notes that MA Stretch Code is in a grey area but BBRS historically has only regulated on-site.

The general opinion of the EAC is that it would be easier to stay within BBRS's current on-site purview.

CK: Would be useful to show that zero energy is not possible without off-site renewables.

Action Item: IF proposes bringing options for how this is handled (and preferably develop recommendations).

3.3 Fossil Fuel combustion

IF notes that municipalities are interested in package of policy tools that enable net zero – not just the building code.

DV how does our net zero definition consider process loads in C&I buildings. Code covers recovering energy from process loads, but does not directly regulate these loads. Potential to use this as "bonus points". MB suggests looking at residential first. Electric only approach is incentivized under such approaches as DOE's ZERH program.

3.4 Peak demand

IF explains that new buildings can now be grid assets – or at least neutral in peak periods – as opposed to strictly adding to peak load. This is a benefit that aligns with state energy policy so would like to see if reducing or offsetting peak load can be addressed in updated stretch code.

3.5 Multi-family code

IF notes that for many years code developers have been suggesting that multi-family high rise should be treated differently from other commercial buildings in energy codes.

MB expresses that distinguishing 1-4unit from 5+ unit buildings is unnecessary for most multi-family new construction.

IF notes that at some point on-site renewables becomes implausible in high rise buildings.

DW notes that an EAC recommendation for a multi-family code does not follow from BBRS's ask for a zero-energy definition.

MA asks if there is a feasibility study of zero energy high rise multifamily.

IK notes that it is feasible and there are studies on this.

EAC notes that the "zero energy" name is limited.

CK notes BBRS putting up a list of assumptions that is needed to achieve simple net zero definition would be useful.

4:00-4:10 Next Steps

KR proposes starting with "definition" of zero energy, then break this definition out into specific components. For specific building sectors (proposal: (1) residential, (2) multi-family, (3) all other. Then explain for each building type what components are reasonable to apply under the building code, and which are applicable to other policy levers.

IF suggests amending to propose 'Pathway to zero energy' for specific building sectors, recognizing that 'zero energy' on-site is only practical for a sub-set of new construction.

IK clarifies that adding an introductory paragraph solidifying what zero energy is and BBRS role.

Action Item: EAC begins working toward a brief document (a few pages at most) stating a simple definition of net zero energy but focusing on the pathways towards zero-energy that are applicable to different construction types covered by the building code.

Meeting concludes at 4:10 by unanimous vote.
