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2025 Energy Code Update Rulemaking

Additional submitted attachment is included below.

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September 5, 2023

CEC Docket: 22-BSTD-01

Re: 2025 Energy Code Update Rulemaking

Hello:
We would like to voice a few of our concerns regarding the 2025 Energy Code development to date via the presentations made available in the Docket. It is difficult for many of us to attend the stakeholder meetings, but we look forward to making further comments when additional presentations are made available to the docket.

1. **All Building Types: Compliance Metrics**
   We have seen some compliance modeling done with the latest 2025 CBECC-Res and CBECC software, specifically considering single-family building types (we are finding that although there is a small swing for multifamily buildings, it is not at the scale we are seeing for single-family buildings). We have concerns that the new metric is favoring compliance energy savings in the wintertime to the detriment of cooling energy savings. This does not support our understanding of California's energy goals to not only consider heat pump space heating and water heating equipment, but to also maintain the goals met to date in regard to space cooling and the effects on the electric grid here in California. Although my clients will love having the additional flexibility allowed with the new metrics for "trading" cooling energy against heating energy savings, we have concerns about the impact on the grid and reliability of electricity in the peak use times in the summer.

2. **New Mandatory U-factor of 0.40 for Single-Family Fenestration and Nonresidential U-factor of 0.47**: This will cause issues when trying to build homes and nonresidential buildings that have fire-rated window requirements because it will limit the ability to consider alternate window products in fire areas. In our experience, it is just not possible to meet these new mandatory U-factors with fire-rated windows (which also leads to the weighted U-factor issue we address next). We have found that in many locations for many designs in California, NFRC-rated or certified vinyl windows are not always a solution to meet the health and safety considerations for specific projects.

3. **Area Weighted U-factor for Fenestration:** Please retain the area weighted method for determining compliance with the U-factor requirements of the Energy Code. It is important because it allows for uncommon fenestration types to be possible for custom building design. Mandatory requirements cannot always consider all applicable building features used by the industry, and as long as the overall weighted U-factor is being met, this does not provide too much of a hardship.

4. **Cathedral Ceiling for Single-Family**: We fully support this measure since this is a common roof type for ADUs, and the current high-performance attic requirements are often difficult, if not impossible, for these building types to achieve due to height limitations.

5. **Cool Roof for Multifamily Steep Sloped:** Increasing the aged solar reflectance can cause difficulties in meeting local planning requirements which require specific colors for features of the building that can be viewed from the street. Part of the problem is that limited roofing products are available that meet this aged solar reflectance. Although steep sloped roofs do not happen often, being unable to meet these requirements may cause many to do this type of work without a permit, especially for roof alterations.

6. **Mandatory U-factor for Metal Framed Walls for Multifamily:** Please be aware that this U-factor will cause issues with demising walls. Might I suggest that there be a separate line item for demising walls that keeps the 0.151 U-factor?

7. **Nonresidential Vestibules:** When we work on projects in our impacted cities, such as San Francisco, Oakland and Los Angeles, there are always concerns when we are taking away from the rentable floor area of the building (which already is difficult due to the Battery Storage additional electric equipment room sizing needed to support the Energy Code). Planning typically dictates the look of a project and is approved many months or even years before a project goes in for a building permit. Redesigning to include a vestibule may add many months and substantial cost to a project that has already been approved by planning. What happens if planning does not agree with the look associated with a vestibule? How can that be mitigated? Having this as a mandatory requirement, with no ability to use the performance approach for flexibility, seems short sighted because not all project scopes can be considered when adopting these requirements. There is also no code language guidance on how this is to be considered for additions and alterations to existing buildings, or even first time build-outs of tenant improvement buildings.

8. **PV and Battery Storage for Nonresidential Buildings:** We are uncertain on why “Parking Garage” is being considered since this is mostly an unconditioned building type. Will unconditioned floor area now be considered for determining PV and Battery Storage system sizing? As stated in public meetings, please confirm the Energy Code fully supports the definitions of the building types being adopted so that application of these requirements can be smoother than it has been for the 2022 Energy Code cycle.

9. **Multifamily Appendix M DHW Sizing:** Whereas I see the energy savings value of this measure, I am concerned about the enforcement roadblock to adopting an Energy Code measure typically dictated by the Plumbing Code. We did see this problem in the past when the Energy Code pipe insulation requirements did not align with the Plumbing Code (as is the case for multifamily buildings only in the 2022 Energy Code). If this is a prescriptive measure, would the Performance Approach allow for not using Appendix M?

10. **Multifamily Pipe Insulation:** I see this is being added as a HERS measures for central systems, but this is a concern since very few HERS Raters that I am aware of currently support the voluntary HERS measures associated with multifamily hot water systems. Will we have enough HERS Raters ready for when this code cycle goes live?

11. **Multifamily Central DHW Thermostatic MMV:** Who would be responsible for supporting these new installation and commissioning requirements in RA4.4.20? If HERS Raters, see concerns listed above in #10.

Sincerely,

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