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Letter of Support - 2025 Adoption Hearing - Part 6

Additional submitted attachment is included below.

Support for Adoption of 2025 Energy Code

California Statewide Utility Codes and Standards Team

Docket Number 24-BSTD-01

September 10, 2024

Commissioner McAllister and Building Standards Branch staff,

The California Statewide Utility Codes and Standards Enhancement Team (Statewide CASE Team) supports the adoption of the 2025 California Energy Code (Title 24, Part 6 and Part 1, Chapter 10).

Three California investor-owned utilities — Pacific Gas and Electric Company, San Diego Gas and Electric, and Southern California Edison — and two publicly owned utilities — Los Angeles Department of Water and Power and Sacramento Municipal Utility District — supported the Statewide CASE Team’s participation in the 2025 code cycle.

Adoption of the 2025 code represents a significant milestone in the state’s continued efforts to meet critical energy and climate goals, demonstrated by the California Energy Commission (CEC) estimate that the 2025 code will reduce statewide energy use by 404 GWh and 34.5 million therms of natural gas savings during the first year the code is in effect.¹

Throughout the 2025 code cycle, the Statewide CASE Team had the opportunity to collaborate with CEC staff and many stakeholders to develop 60 unique code change proposals; 44 of which are included in the draft language slated for adoption. Code changes led by the Statewide CASE Team account for 313 GWh and 30 million therms and of the estimated statewide energy savings. We are proud to support cost effective energy savings that will also result in lower utility bills for California’s residents and businesses. The code changes as a whole are expected to result in \$4.2 billion of net

¹ California Energy Commission (CEC). *Initial Study and Proposed Negative Declaration for 2025 Energy Code for Residential and Nonresidential Buildings*. March 2024. Docket 24-BSTD-01; TN 255315-7. Page 25. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=255315-7>.

saving over 30-years.² In addition to energy savings, the 2025 code will support building decarbonization, load management, grid resiliency, and over 68 million gallons of reduced water use per year.¹

The Statewide CASE Team would like to highlight the following code changes that exemplify how discrete changes to the code will allow the state to make progress on statewide energy and climate goals:

- **Controlled Environmental Horticulture Lighting Efficiency:** with an expected 112 GWh of statewide energy savings during the first year the 2025 code is in effect, this is the highest electricity savings measure of the Statewide CASE Team's 2025 cycle portfolio. Building on the newly introduced horticultural lighting efficacy requirements in the 2022 Energy Code, this change updates the mandatory photosynthetic photon efficacy (PPE) for horticultural lighting luminaires and lamps to an LED level (2.3 micromoles per joule).
- **Swimming Pool and Spa Heating:** new heating systems for pools and spas will be required to use one of five heating systems that will reduce greenhouse gas emissions and energy consumption. The requirement will apply to newly constructed pools and spas or when a heating system is added to an existing pool or spa that did not have a heating system previously. With 10.2 million therms of natural gas savings and 57,574 metric tons of CO₂e reductions expected during the first year, this code change is the highest natural gas and GHG savings measure in the 2025 portfolio. The requirements offer significant design alternatives with five options available through the prescriptive approach.
- **Nonresidential HVAC Controls — Guideline 36:** this code change has the highest peak demand reductions (39 MW) of the Statewide CASE Team's 2025 cycle portfolio. It requires that when the code requires HVAC controls on direct digital control systems that sequences are in accordance with *ASHRAE Guideline 36-2021, High-Performance Sequences of Operation for HVAC Systems*³, which provides detailed, uniform sequences of operation for HVAC systems that maximize energy efficiency and performance, provide control stability, and allow for real-time fault detection and diagnostics. This code change

² CEC. September 11, 2024 Business Meeting. *Backup Material for Item 7: Adoption of the 2025 California Energy Code*. Page 6. <https://www.energy.ca.gov/filebrowser/download/6636?fid=6636#block-symsoft-page-title>. Estimated cost over 30-years is \$692 million; estimated savings over 30-years is \$4.9 billion; net savings of \$4.2 billion.

³ *ASHRAE Guideline 36-2021, High-Performance Sequences of Operation for HVAC Systems* is available from the ASHRAE bookstore here: https://store.accuristech.com/ashrae/standards/guideline-36-2021-high-performance-sequences-of-operation-for-hvac-systems?product_id=2229690

is an example of how the Statewide CASE Team recognizes the value of and supports the use of national design guidelines and the energy benefits they offer. This measure also serves to offset expected peak demand growth from all-electric buildings and the importance of continuing to pursue sensible energy efficiency and load management requirements as the state continues to encourage all-electric buildings.

- **Electric Readiness Requirements:** The Statewide CASE Team supported revisions to requirements for newly constructed buildings that will remove barriers if a building owner wants to switch from gas to electric equipment in the future. Electric readiness requirements for multifamily water heating and commercial kitchens enable buildings to electrify in the future with significantly lower retrofit costs. While these proposals do not have energy or GHG savings today, the forward-looking requirements could help the state meet climate goals at a lower overall cost to building owners and the state.
- **Multifamily Restructuring:** For the 2022 code cycle, the Statewide CASE Team provided significant support to the CEC to separate requirements for multifamily into their own section of the code. Doing so simplified the code structure, clarify requirements that apply to multifamily buildings, and streamlined compliance and enforcement. For the 2025 cycle, the Statewide CASE Team continued to support the multifamily restructuring effort by addressing issues that remained unclear after the major revisions occurred for the 2022 cycle. The Statewide CASE Team's is committed to advocating for making the code easier to understand, which can lead to improved compliance.

The Statewide CASE Team is grateful to the many stakeholders who offered feedback on proposed code changes. Between January 2023 and May 2023 we hosted 17 public to discuss proposed changes; individuals representing over a hundred unique organizations attended public meetings. We also sent draft CASE Reports to more than 3,000 contacts from a diverse variety market actors inviting feedback and recommendations. The Statewide CASE Team developed and implemented a tailored outreach and engagement strategy to reach the energy equity and environmental justice (EEEJ) community and to keep equity as an integral consideration. More information about this work can be found in the 2025 Code Cycle EEEJ Summary Report.⁴ The thoughtful feedback we received and constructive dialogue we had with stakeholders

⁴ Statewide CASE Team. *Energy Equity and Environmental Justice Summary Report*. March 2024. https://title24stakeholders.com/wp-content/uploads/2024/03/2025_T24_EEEJ-Summary-Report.pdf

led to proposals that balance many interests, are cost effective, feasible, and enforceable.

As the state prepares for the effective date of the 2025 code, we encourage stakeholders to visit EnergyCodeAce.com for resources and tools that the utility Compliance Improvement Team offers, including the “What’s new...” and “What’s changed...” resources that are expected to be complete by the end of the year.

The Statewide CASE Team is committed to continued participation in the Energy Code updates. In the near term, we plan to collaborate with other HVAC stakeholders to use the process described in Section 10-109 of Title 24, Part 1, Chapter 10 to propose additional prescriptive alternatives for nonresidential multi-zone space conditioning system types (Section 140.4(a)3). The Statewide CASE Team, in collaboration with others in the HVAC industry, would appreciate guidance on how to effectively prepare and submit proposals that will result in timely approvals in advance of the effective date of the 2025 Energy Code.

Additionally, the Statewide CASE Team is developing proposals for the 2028 code cycle that will support the continued effort to improve building energy and climate performance through the evolution of the Energy Code. We look forward to continued engagement with CEC staff and all stakeholders to accomplish this.