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CALIFORNIA ENERGY COMMISSION

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NINE-POINT CRITERIA ANALYSIS FOR PROPOSED BUILDING ENERGY EFFICIENCY STANDARDS OF THE CALIFORNIA ENERGY COMMISSION REGARDING THE 2022 ENERGY CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11 AND PARTS 2, 2.5, 3, 4, AND 5

Docket No. 21-BSTD-03

Building Energy Efficiency Standards (building standards) submitted to the California Building Standards Commission (CBSC) for approval are required by Health and Safety Code section 18930(a) to be accompanied by an analysis which will, to the satisfaction of CBSC, justify their approval. The approval of these proposed building standards is justified as follows:

Section 18930(a)(1)

The proposed building standards do not conflict with, overlap, or duplicate other building standards.

The California Energy Commission (CEC) is the only state agency authorized to set efficiency standards for buildings. Therefore, there is no overlap, duplication, or conflict with other regulations, and for the same reason there is no possibility of conflict with other building standards (i.e., no situation in which it is impossible to comply with both an Energy Commission standard and another building standard). The CEC is not aware of any provision of these proposed standards that conflicts with, overlaps, or duplicates other building standards. Furthermore, many of the proposed changes here were made at the request of, and coordinated with, proposing agencies to help provide readers with clarification about differences between the various codes (for example, which climate zones apply to Part 6 compared to other parts.)

Section 18930(a)(2)

The proposed building standards are within the parameters established by enabling legislation and are not expressly within the exclusive jurisdiction of another agency.

State Building Standards law allows agencies in addition to the Building Standards Commission to adopt green building standards (CALGreen provisions) codified in Part 11. (Health and Safety Code, Sections 18930.5, 18941.5.) The CEC has statutory authority under Public Resources Code Sections 25213, 25218, 25218.5, 25402, subdivisions (a) and (b), 25402.1, 25402.4, 25402.5, 25402.8, 25910, 25942, and

25943 to promulgate and update energy- and water-efficiency standards for residential and nonresidential buildings, including both newly constructed buildings and additions and alterations to existing buildings. The CEC is the only state agency with the authority to set efficiency standards for buildings. Proposed changes to Parts 2, 2.5, 3, 4, and 5 consist entirely of nonsubstantive cross-references to Part 1, Chapter 10 and Part 6 (Energy Code) made at the request of, and coordinated with, proposing agencies..

Section 18930(a)(3)

The public interest requires the adoption of the building standards. The public interest includes, but is not limited to, health and safety, resource efficiency, fire safety, seismic safety, building and building system performance, and consistency with environmental, public health, and accessibility statutes and regulations.

California law declares that the welfare of California's citizens and economy depends on an adequate, reasonably-priced, and environmentally-sound supply of energy and that wasteful, uneconomic, inefficient, and unnecessary uses of energy will result in serious depletion or irreversible commitment of energy, land, and water resources, and potential threats to the state's environmental quality. It is the policy of the state to employ a range of measures to reduce wasteful, uneconomical, and unnecessary uses of energy, thereby reducing the rate of growth of energy consumption, prudently conserve energy resources, and assure statewide environmental, public safety, and land use goals. It is further the policy of the state to promote alternative energy generation, including through the use of solar photovoltaics.

The CALGreen voluntary efficiency provisions support local jurisdictions and other entities seeking to exceed the mandatory Energy Code building energy efficiency requirements, thereby helping to increase resource efficiency, building energy system performance, and improve consistency with and support other important environmental and public health statutes that aim to decarbonize of California's economy. These efforts include, but are not limited to, the following: the Global Warming Solutions Act of 2006 (AB 32, Núñez, Chapter 488, Statutes of 2006), the 2019 Integrated Energy Policy Report (IEPR), the Clean Energy and Pollution Reduction Act of 2015 (SB 350, de León, Chapter 547, Statutes of 2015), SB 32 (Pavley, Chapter 249, Statutes of 2016) which updated the Global Warming Solutions Act of 2006, the California 2019 Energy Efficiency Action Plan, and the 100 Percent Clean Energy Act of 2018 (SB 100, de León, Chapter 312, Statutes of 2018).

The 2022 CALGreen voluntary efficiency provisions will continue to improve upon these past successes and complement the mandatory Building Energy Efficiency Standards, as in previous cycles, by providing a clear framework for local jurisdictions to follow in adopting more stringent local ordinances, including those submitted to the CEC for review pursuant to Public Resources Code Section 25402.1(h)(2), widely referred to as "reach codes."

The proposed changes to CALGreen are therefore in the public interest.

Proposed changes to Parts 2, 2.5, 3, 4, and 5 consist entirely of nonsubstantive cross-references to the Energy Code made at the request of, and coordinated with, proposing agencies. These cross-references are in the public interest as they will serve to improve the clarity and usability of the standards by the regulated community (and are thus reasonably likely to improve compliance.)

Section 18930(a)(4)

The proposed building standards are not unreasonable, arbitrary, unfair, or capricious, in whole or in part.

As discussed above, the proposed changes respond to existing California law, regulations, and policy. The proposed changes to Parts 2, 2.5, 3, 4, and 5 support these efforts by improving the public's ability to understand and thus comply with the Energy Code. The proposed changes to Part 11 support these efforts by providing the public with a single voluntary standard that exceeds statewide mandatory standards. These changes do not impose new legal requirements, but rather provide clarity and informational guidance to the public. The proposed changes to Part 11 are carefully developed through an open, transparent, data-driven process that necessarily responds to, incorporates, and reasonably balances a broad array of interests, state policy goals, and legal requirements. The proposed changes originate with proposals that describe measures that are technically feasible and cost-effective, including supporting data and analysis. These proposals were vetted during the public pre-rulemaking process, including numerous public workshops, during which time CEC staff received stakeholder input and refined the proposed changes based on stakeholder input and evidence in the record.

The proposed changes to Part 11 and the record of the rulemaking proceeding through which the language is adopted shows that this criterion is met.

The proposed changes to Parts 2, 2.5, 3, 4, and 5 consist entirely of nonsubstantive cross-references to the Energy Code and are therefore also consistent with this criterion.

Section 18930(a)(5)

The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.

The CEC must determine that any efficiency or conservation standards it adopts, including the proposed Building Energy Efficiency Standards are cost-effective pursuant to Public Resources Code Section 25402. To be cost-effective, efficiency standards must result in greater savings to consumers than the up-front costs required to attain that efficiency.

These voluntary provisions do not impose or alter any legal requirement. Local jurisdictions may choose to adopt these voluntary provisions as mandatory local energy efficiency standards applicable within their jurisdiction. If so, that jurisdiction must first

submit an application to the CEC for review pursuant to Public Resources Code Section 25402.1(h)(2) and Title 24, Part 1, Section 10-106. The jurisdiction may then begin enforcing after CEC makes the requisite findings required by law.

Similarly, builders or other entities may choose to exceed applicable state and/or local efficiency standards by instead designing and constructing buildings that comply with these voluntary provisions. By taking this voluntary action, builders are still required to comply with appropriate permitting processes to ensure compliance with state and local standards.

Although the proposed changes to CALGreen voluntary efficiency provisions are voluntary provisions, the CEC continues to apply the same level of scrutiny to ensure, to the maximum extent possible, that the voluntary provisions proposed here would be cost-effective for local jurisdictions if enacted, or cost-effective to individual builders or other entities if followed voluntarily.

CEC continues its longstanding adoption process of requiring that each individual measure (except for indoor air quality measures) be cost-effective, not just the standards when taken in its entirety. In most cases, the total value of these economic and environmental benefits substantially outweighs up-front costs.

The primary impact of the CALGreen voluntary efficiency provisions is their adoption by local governmental agencies, which may adopt and enforce energy standards for newly constructed buildings, additions, alterations and repairs, provided the CEC finds that the standards will require buildings to be designed to consume no more energy than permitted by the Energy Code. (Public Resources Code, Section 25402.1(h)(2).)

As a result, to the extent that the proposed measures, if adopted by local jurisdictions as local standards, would result in any added up-front costs, they are very likely to be both directly offset by lifetime benefits to the individual consumer and to the broader public.

Additionally, this cost-benefit calculation does not take into account other co-benefits of the proposed standards, such as reduced pollution, improved public health, reduced greenhouse gas emissions, and other similar benefits. The proposed changes are significant to the state of California in that they support state clean energy goals, policies, and legislation. The proposed changes to Part 11 are likely to increase the deployment of on-site renewable energy generation, reduce carbon emissions from new buildings (building decarbonization), reduce growth in energy demand, increase energy demand flexibility, and ensure that California buildings are as energy efficient as is found to be technically feasible and cost-effective. The added construction costs that the building standards will impose are reasonable based on the economic and environmental benefits that will be derived from the building standards. Therefore, the benefits will substantially outweigh the upfront costs to the extent that the CALGreen measures are adopted as local standards or followed as voluntary measures by builders or other entities.

The proposed changes to Parts 2, 2.5, 3, 4, and 5 consist entirely of nonsubstantive cross-references to the Energy Code and are therefore also consistent with this criterion.

Section 18930(a)(6)

The proposed building standards are not unnecessarily ambiguous or vague, in whole or in part.

The proposed changes to Parts 2, 2.5, 3, 4, 5 and 11 improve clarity and prevent ambiguity. Public comments suggesting further clarifying improvements will be incorporated into the building standards if staff determines that they improve the clarity of the regulations without otherwise changing the application or effect of the intended regulatory change.

Section 18930(a)(7)

The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.

There are no federal laws applicable to nonfederal buildings in their entirety, so nothing in this realm has been incorporated into the building standards. However, the adopted building standards do incorporate (as previous editions of the building standards have for decades incorporated) federal energy standards for particular appliances that may be installed in buildings. In addition, the CEC included model and national codes and specifications in the proposed building standards wherever appropriate.

Section 18930(a)(8)

The format of the proposed building standards is consistent with that adopted by CBSC.

The proposed standards continue to use the format of the other building standards in the State Building Code.

Section 18930(a)(9)

The proposed building standards, if they promote fire and panic safety as determined by the State Fire Marshal, have the written approval of the State Fire Marshal.

The CEC has obtained the written approval of the State Fire Marshal, and determination that the proposed building standards do not promote fire or panic safety.