

**CALIFORNIA ENERGY COMMISSION**

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**UPDATED INFORMATIVE DIGEST**

**PROPOSED REVISIONS TO THE CALIFORNIA BUILDING  
ENERGY EFFICIENCY STANDARDS  
CALIFORNIA CODE OF REGULATIONS, TITLE 24,  
PART 11, APPENDICES A4 AND A5  
(2019 CALIFORNIA GREEN BUILDING STANDARDS CODE)**

**CALIFORNIA ENERGY COMMISSION DOCKET NUMBER 17-BSTD-03:  
2019 BUILDING ENERGY EFFICIENCY STANDARDS**

**SUBMITTED TO THE CALIFORNIA BUILDING STANDARDS COMMISSION  
OCTOBER 17, 2018**

**Introduction**

This Updated Informative Digest (UID) fulfills a requirement of California's Administrative Procedure Act<sup>1</sup> for the California Energy Commission's proposed amendments to its Building Energy Efficiency Standards in Part 11 of Title 24, which would go into effect on January 1, 2020, following approval by the California Building Standards Commission. The Energy Commission adopted this update to the Part 11 of the California Building Standards Code, also known as CALGreen, on October 3, 2018. Amendments are proposed to two voluntary Appendices (A4 and A5) within CALGreen.

This document updates the Informative Digest<sup>2</sup> that was published in the Notice of Proposed Action<sup>3</sup> for these proposed revisions.<sup>4</sup>

**A. Summary of Existing Laws and Regulations Related Directly to the Proposed Action or to the Effect of the Proposed Action**

There have been no changes in the description of the existing laws or regulations related directly to these regulations (or to their effects) from those described in the Notice of Proposed Action (NOPA).

**B. Consistency with Existing Comparable Federal Regulations and Statutes**

As stated in the Informative Digest in the NOPA, there are no federal energy standards applicable to nonfederal buildings. The 2019 Energy Provisions of CALGreen do not differ substantially from any existing comparable federal regulations or statutes.

<sup>1</sup> Government Code § 11340 et seq.

<sup>2</sup> See Gov. Code §§ 11346.2, Subd. (a)(3), 11346.9, Subd. (b).

<sup>3</sup> Notice of Proposed Action, Revisions to the California Building Energy Efficiency Standards, Cal. Code of Regulations, Tit. 24, Parts 1 and 6 (California Energy Code), Jan. 18, 2018 (NOPA).

<sup>4</sup> CALGreen, Cal. Code of Regulations, Tit. 24, Part 11 (and specifically the voluntary energy efficiency appendices therein).

There is, however, a voluntary federal program for energy efficiency in residential buildings that has similar goals as the voluntary energy provisions within CALGreen. The program requirements for ENERGY STAR® Certified New Homes are developed as a regional specification by the U.S. Environmental Protection Agency (EPA) and have similar voluntary energy efficiency requirements to those found in CALGreen. Both require a performance approach to achieve advanced levels of energy efficiency. Typically, the advanced level of energy efficiency targeted by ENERGY STAR will be met by employing a combination of efficient walls, windows, air duct systems, space heating, space cooling, water heating equipment, and lighting.

Version 3.2 (rev 9) of the California Program Requirements is in place and applicable to homes with a building permit date after January 1, 2019. The voluntary requirement for energy efficiency performance is either three Energy Design Rating (EDR) points lower than, or 10 percent less energy consumptive than, a building complying with Part 6 (and considering only the impacts of energy efficiency on EDR, that is, the “Efficiency EDR” under CALGreen). This is a less stringent target than the Tier 1 targets, however Tier 1 includes consideration of both efficiency improvements and renewable energy generation.

As both programs use the same metric (EDR), they are fundamentally compatible: ENERGY STAR requires a modest improvement to the building’s efficiency EDR, and CALGreen requires a larger improvement to the building’s total EDR. It’s worth noting that an improvement to efficiency EDR also improves total EDR, meaning that participation in the ENERGY STAR Certified New Homes program is complimentary to the CALGreen provisions. Because both of these programs are voluntary and complementary, they are not inconsistent.

### **C. Policy Statement Overview and Specific Benefits of the Proposed Regulations**

The CALGreen Appendices specify a range of voluntary energy efficiency 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 are met. These specifications are provided as model codes for local jurisdictions to use in drafting local ordinances. To date, 15 jurisdictions have adopted local building energy efficiency ordinances under the 2016 version of CALGreen.

The benefits of building energy efficiency standards may be enumerated as follows:

- A more reliable electrical system
- Mitigation of wasteful, uneconomic, inefficient, and unnecessary uses of electricity
- Reduction in the trend of increasing electricity consumption (and its byproducts)
- Protection of energy, land and water resources, and the state’s environmental quality
- Creation of jobs
- Reduction of energy costs for consumers and businesses

By providing these model energy efficiency codes for adoption by local jurisdictions, the voluntary appendices will lead to additional energy and water savings than would be achieved by complying with only the mandatory building energy efficiency measures in the Energy Code (Title 24, Part 6). Interested persons may choose to follow these voluntary measures, or local jurisdictions may elect to make the measures mandatory<sup>5</sup> to realize the potential energy and

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<sup>5</sup> Public Resources Code § 25402.1(h)(2); see also California Code of Regulations, Title 24, Part 1, §10-106.

cost savings and other benefits. These provisions also help address three challenges: (1) achieving the State's goals described above, including reducing energy consumption and greenhouse gas emissions associated with energy production; (2) having zero net energy buildings (i.e., buildings whose energy consumption is balanced by on-site generation), which helps reach the aforementioned goals; and (3) testing energy efficiency-related measures for future inclusion in the Energy Code, so that the Building Standards Code as a whole will better achieve the aforementioned goals.

#### **D. Evaluation of Consistency with Existing State Regulations**

The regulations' organization, structure, and text harmonize CALGreen with the Energy Code. This makes it easier for local jurisdictions to adopt the voluntary measures into local ordinances. If adopted by a local jurisdiction as a new local ordinance, these changes will minimize the energy use of buildings and make significant strides toward California's zero net energy building goals while ensuring that local codes do not inadvertently conflict with California law.

As stated in the resolution adopting the regulations,<sup>6</sup> the Energy Commission has determined that the regulations are consistent with the Energy Code, the other parts of the California Standards Building Code,<sup>7</sup> the Warren-Alquist Act,<sup>8</sup> and the statutory law behind California's building standards.<sup>9</sup>

An update to the summary of the proposed changes in this rulemaking proceeding, and to the detailed explanations of each section, is in the Final Statement of Reasons (FSOR).

#### **E. Other Applicable Matters Prescribed by Statute**

Other applicable matters prescribed by statute are described in the FSOR, and in the Nine Point Criteria Analysis.

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<sup>6</sup> <https://efiling.energy.ca.gov/GetDocument.aspx?tn=224908>

<sup>7</sup> California Code of Regulations, Title 24.

<sup>8</sup> Public Resources Code § 25000 et. seq.

<sup>9</sup> Health and Safety Code § 18901 et. seq.