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California Energy Commission
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UPDATED INFORMATIVE DIGEST

PROPOSED BUILDING STANDARDS OF THE CALIFORNIA ENERGY COMMISSION: CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11 (CALIFORNIA GREEN BUILDING CODE)

CALIFORNIA ENERGY COMMISSION DOCKET NUMBER 15-CALG-01: 2016 GREEN BUILDING STANDARDS

SUBMITTED TO THE CALIFORNIA BUILDING STANDARDS COMMISSION DECEMBER 4, 2015

Introduction

This Updated Informative Digest (UID) fulfills a requirement of California's Administrative Procedure Act[1] for the California Energy Commission's proposed amendments to the energy provisions in Part 11 of Title 24, which would go into effect on January 1, 2017, following approval by the California Building Standards Commission. This update to the California Building Code was adopted by the Energy Commission on October 14, 2015, and is known as the 2016 Green Building Standards.[2]

This document updates the Informative Digest[3] that was published in the Notice of Proposed Action[4] for these regulations.[5]

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.[6]

B. Consistency with Existing Comparable Federal Regulations and Statutes

As stated in the Informative Digest in the Notice of Proposed Action, there are no federal energy standards applicable to nonfederal buildings.[7] The 2016 Energy Provisions of CALGreen do not differ substantially from any existing comparable federal regulations or statutes.

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[1] Government Code § 11340 et seq.
[2] Documents included in the rulemaking package refer to the proposed standards in various ways, e.g., "2016 Green Building Standards," and "CALGreen"; In addition, "California Energy Commission" is sometimes shortened to "Energy Commission."
[3] See Gov. Code §§ 11346.2, Subd. (a)(3), 11346.9, Subd. (b).
[4] Notice of Proposed Action, Revisions to the California Green Building Standards Code, Cal. Code of Regulations, Tit. 24, Part 11, Feb. 13, 2015 (NOPA).
[5] Green Building Standards, Cal. Code of Regulations, Tit. 24, Part 11.
[6] See NOPA, pp. 3-5.
[7] NOPA, p. 5.

There is, however, a voluntary federal program for energy efficiency in residential buildings that has similar goals as the Energy Provisions of CALGreen. The California Energy Star Guidelines for 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 of the California Energy Star Guidelines for New Homes is currently in place, and is applicable to homes with a building permit date after September 30, 2012. The voluntary requirement for energy efficiency performance is 15% better than the 2008 California Energy Code. This matches the "Tier 1" voluntary energy provisions found in the currently-applicable 2016 iteration of CALGreen.

The 2016 Energy Provisions of CALGreen will be effective on January 1, 2017. At that time the "Tier 1" voluntary energy previsions in CALGreen will become 15% better than the 2016 California Energy Code.[8] Because of this, the 2016 Energy Provisions of CALGreen have the potential to save significantly more energy than version 3 of the California Energy Star Guidelines for New Homes. The EPA has released a draft of the version 3.1 of the California Energy Star Guidelines and intends to implement these requirements for all homes permitted after April 1, 2016.[9] The draft guidelines now reference the 2013 Energy Code and will require new homes to exceed the 2013 Energy Code by 10%. The EPA may issue a new version of Energy Star that complements the 2016 Energy Provisions of CALGreen after they become effective. But regardless, 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 2016 Energy Provisions of CALGreen employ 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.

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;
- Protection of energy, land and water resources, and the state's environmental quality;
- Creation of jobs; and
- Reduced energy costs for consumers and businesses.

The 2016 Energy Provisions of CALGreen provide example building energy efficiency provisions that will lead to additional energy and water savings than would be achieved by complying with the Energy Code. Interested persons may choose to follow these voluntary

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[8] On average, the 2016 California Energy Code represents a 28 percent increase in energy savings for residential buildings compared to the 2013 California Energy Code.
[9] http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_v3_1_california

measures, or local jurisdictions may elect to make the measures mandatory,[10] to realize the potential energy and cost savings and other benefits. These provisions help address three problems:[11] (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 Energy Code will better achieve the aforementioned goals.

D. Evaluation of Consistency with Existing State Regulations

The regulations' organization, structure, and text harmonize Part 11 with the Energy Code and make it more stringent. This makes it easier for local jurisdictions to adopt the voluntary measures in local building codes. If adopted in local building codes by a local jurisdiction, these changes will minimize the energy use of buildings and make significant strides toward the state's zero net energy building goals.

As stated in the Resolution adopting the regulations,[12] the Energy Commission has determined that the regulations are consistent with the Energy Code, the California Building Code,[13] the Warren-Alquist Act[14] and the California Building Standards Law.[15]

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[10] Pub. Resources Code § 25402.1, Subd. (h)(2), Cal. Code Regs., Tit. 24, Part 1, § 10-106.
[11] See Gov. Code § 11346.2, Subd. (b)(1).
[12] Resolution Adopting Proposed Regulations, 2016 Title 24 Building Energy Efficiency Standards Rulemaking Proceeding Cal. Code Regs., Tit. 24, Part 11, Reso. No. 15-1014-06, Oct. 14, 2015, pp. 2-9.
[13] Cal. Code Regs., Tit. 24.
[14] Pub. Resources Code § 25000 et seq.
[15] Health & Safety Code § 18901 et seq.