

STATE OF CALIFORNIA

STATE ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

California Energy Commission

**DOCKETED**

**15-CALG-01**

TN # 76218

OCT 19 2015

Part 11	)	
2016 Title 24 Building Energy Efficiency	)	Resolution No. 15-1014-06
Standards Rulemaking Proceeding	)	
California Code of Regulations, Title 24	)	Docket No. 15-CALG-01
_____	)	

**RESOLUTION ADOPTING AMENDMENTS TO THE ENERGY PROVISIONS OF THE  
CALIFORNIA GREEN BUILDING STANDARDS CODE**

**I. INTRODUCTION**

The California Energy Commission (Energy Commission) hereby adopts amendments to the voluntary energy standards for buildings found in Title 24 of the California Code of Regulations (“CCR”), Part 11 (also known as the California Green Building Standards Code of CALGreen), Chapter 4 and Appendix A4 and A5. These standards apply to residential, nonresidential, high-rise residential, and hotel and motel buildings. The standards are called the “2016 Energy Provisions of CALGreen,” as proposed on September 29, 2015, for a 15-day review period. The 2016 Energy Provisions of CALGreen will go into effect on January 1, 2017, following approval of the California Building Standards Commission.

The Energy Commission takes this action under the authority given by the Public Resources Code sections 25218, subd. (e), 25402, 25402.1, 25402.4, 25402.5, 25402.5.4, 25402.8, 25910, and 25943, and Health and Safety Code sections 18930.5 and 18941.5, to implement, interpret and make specific sections 25402, subd. (a)-(c), 25402.1, 25402.4, 25402.5, 25402.5.4, 25402.8, 25910, and 25943, and Health and Safety Code sections 18930.5 and 18941.5.

**II. HISTORY OF THE PROCEEDING**

The development of the 2016 Energy Provisions of CALGreen was included in the larger overall development process for updates to the building standards in Part 6 (also known as the California Energy Code) and the associated administrative regulations in Part 1 of Title 24 of the CCR. Those standards in Parts 1 and 6 are called the “2016 Building Energy Efficiency Standards” (or 2016 Standards), and were adopted by the Energy Commission at a June 10, 2015 public hearing, except for certain lighting alteration provisions.

On February 13, 2015, the Energy Commission published a Notice of Proposed Action (NOPA) regarding proposed revisions to the California Building Energy Efficiency Standards, California Code of Regulations, Title 24, Part 1 and Part 6, and the energy provisions of CALGreen California Code of Regulations, Title 24, Part 11. In the NOPA, the Energy Commission listed April 8, 2015, as a potential adoption date for the proposed language. The proposed language was made available

for public comment for 45 days as required by law. The proposed language was also known as the “45-Day Language” or “45-Day Express Terms”. The NOPA also stated that:

A hearing before the full Energy Commission, for possible final adoption of the 45-Day Language Express Terms will be held on the date below [April 8, 2015]; however, if the Energy Commission decides to make substantive changes to the Express Terms through 15-Day Language, the public hearing may be continued to a later noticed date.

Staff considered comments submitted during the 45-day public comment period and made substantive and sufficiently related changes to the Draft Express Terms based on these comments. The Energy Commission subsequently released a revision of the Draft Express Terms for 15-day public review and comment on May 26, 2015.

As a result of comments received during the 15-Day comment period, substantive changes were once again made to the Draft Express Terms and revised CALGreen 15-Day Language documents were prepared and published on the Energy Commission’s website.

The rulemaking documents were provided to every contact on the Energy Commission's mailing lists for nonresidential and residential building energy efficiency standards, to every person on the Energy Commission's *Efficiency* and *Building Standards* electronic mail listserves, and to every person who had requested notice of such matters. The rulemaking documents were also posted on the Commission's website as were all later iterations, including the 15-day language. The most recent comment period on the rulemaking documents and 15-day language went from September 29, 2015, through the public hearing on October 14, 2015.

The NOPA, the ISOR, and the 45-day and 15-day language (discussed below) were also timely posted on the Energy Commission's website.<sup>1</sup>

None of the comments received in the 15-day comment period, and nothing else in the record, justify any changes to the proposed amendments as published on September 29, 2015.

### III. FINDINGS

Several different statutory schemes govern the Commission’s adoption of building standards: the Warren-Alquist State Energy Resources Conservation and Development Act,<sup>2</sup> the administrative rulemaking provisions of the Administrative Procedure Act,<sup>3</sup> and the Building Standards Law.<sup>4</sup> Pursuant to these statutes, the Commission has reviewed the entire record of this proceeding, including public comments, reports and other documents, transcripts of public events, and all other materials that have been filed in this proceeding (Docket No. 15-CALG-01). Based on that record, the Commission makes the following findings and conclusions:

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<sup>1</sup> See <http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/>.

<sup>2</sup> Pub. Resources Code, § 25000 et seq.

<sup>3</sup> Gov. Code, § 11340 et seq.

<sup>4</sup> Health & Safety Code, § 18901 et seq.

A. The Warren-Alquist Act

1. Public Resources Code Sections 25402, subdivisions (a)-(b)

Section 25402 of the Warren-Alquist Act directs the Energy Commission to adopt “building design and construction standards that increase the efficiency in the use of energy and water for new residential and new nonresidential buildings” and “energy and water conservation design standards for new residential and new nonresidential buildings.”

The Energy Provisions of CALGreen adopted today are part of a voluntary standard that accomplishes the goals of Section 25402. However, as voluntary measures, they are not required to satisfy the requirements of subdivisions (a) and (b) for mandatory regulations. Such measures must be “cost effective when taken in their entirety, and when amortized over the economic life of the structure when compared with historic practice.”

The adopted 2016 Standards were previously found to fulfill these directives. They increase the efficiency of and conserve the use of energy and water. Moreover, they are cost-effective.

Buildings constructed pursuant to the 2016 Standards are projected to:

- save \$2.98 billion in energy over a 30-year life;
- save 106.2 million gallons of water per year, and;
- avoid more than 160 thousand metric tons of greenhouse gas emissions per year.

The Commission previously found and concluded that the adopted 2016 Standards are cost effective.

The 2016 Energy Provisions of CALGreen are extensions of aspects of the 2016 Standards. They are voluntary and do not include any standards which alter the previous findings for the 2016 Standards. Although voluntary in nature, the 2016 Energy Provisions of CALGreen have the potential to increase the efficiency of and conserve the use of energy by reducing the energy budget otherwise allotted to a building in the 2016 Standards. If a local jurisdiction wishes to require these voluntary standards via local ordinance, it must establish cost effectiveness and submit its proposed local ordinance to the Energy Commission for approval.<sup>5</sup>

2. Public Resources Code Section 25402.8

Section 25402.8 of the Warren-Alquist Act directs the Energy Commission, when adopting new building energy conservation standards to “include in its deliberations the impact that those standards would have on indoor air pollution problems.” The Energy Commission must take into account both the indoor air quality concerns embodied in Section 25402.8 and the mandate to achieve cost-effective energy conservation in Sections 25402 subdivisions (a) and (b).

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<sup>5</sup> Pub. Res. Code § 25402.1, subdiv. (h)(2); Cal. Code Regs., tit. 24, part 6, § 10-106.

The Commission previously found that the 2016 Standards included provision which are reasonably necessary to carry out the mandate of Section 25402.8, and that they strike an appropriate balance between the requirements of this Section and the energy-savings and cost-effectiveness mandates of Sections 25402 subdivisions (a) and (b). The 2016 Energy Provisions of CALGreen are voluntary, provide more of the same energy and environmental benefits of the 2016 Standards, and do not include any standards which alter the previous findings for the 2016 Standards.

3. Public Resources Code Section 25910

Section 25910 of the Warren-Alquist Act requires standards for insulation. The 2016 Standards establish such standards, along with requirements to ensure quality installation. The 2016 Energy Provisions of CALGreen encourage greater energy efficiency according to performance targets and quality installation.

4. Public Resources Code Section 25943

Section 25943 requires the Energy Commission to

Implement a comprehensive program to achieve greater energy savings in California's existing residential and nonresidential building stock. This program shall comprise a complementary portfolio of techniques, applications, and practices that will achieve greater energy efficiency in existing residential and nonresidential structures that fall significantly below the current standards in Title 24 . . . [para.] The comprehensive program may include, but need not be limited to, a broad range of energy assessments, building benchmarking, energy rating, cost-effective energy efficiency improvements, public and private sector energy efficiency financing options, public outreach and education efforts, and green workforce training.<sup>6</sup>

Voluntary standards, if considered or made mandatory in certain jurisdictions, will improve the energy efficiency of existing buildings when improvements are made to such buildings.

B. The Administrative Procedure Act.

The California Administrative Procedure Act (APA) requires all state agencies to take certain steps and assess several matters when adopting regulations. Many of these matters, analyses and findings are required to be addressed in the ISOR prepared as part of the NOPA, or in the Final Statement of Reasons (FSOR) that is required to be prepared after the regulations are adopted. In support of those documents, the Commission made the following findings and determinations here in adopting the 2016 Standards.

1. Reports Required of Businesses, Government Code section 11346.3, subdivision (d)

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<sup>6</sup> Pub. Res. Code, § 25943, subd. (a)(1)-(2).

In addition to the economic analysis required by Section 11346.3 of the APA, discussed further below, subdivision (d) of this statute mandates that agencies that require the preparation of reports by businesses find that such reports are necessary to protect the health, safety or welfare of the people of California.

The 2016 Energy Provisions of CALGreen are extensions of aspects of the 2016 Standards and do not include any standards which require completion of any additional compliance documentation beyond what is required by the 2016 Standards, nor do they impose any other requirements for the preparation of reports by businesses.

2. Public Participation, Government Code section 11346.45

State agencies must “involve parties who would be subject to the proposed regulations in public discussions regarding those proposed regulations, when the proposed regulations involve complex proposals or a large number of proposals that cannot easily be reviewed during the comment period.” The Energy Commission conducted extensive outreach with industry and other stakeholders, over the course of the past 18 months on the structure and contents of the regulations. The Commission finds compliance with Government Code section 11346.45.

On March 3, 2015, the Energy Commission presented information on the proposed 2016 Energy Provisions of CALGreen to the California Building Standards Commission Green Code Advisory Committee’s publicly noticed meeting. This further extended the Energy Commission’s outreach activities and encompassed additional stakeholders who were participating in the California Building Standards Commission’s separate building standards rulemaking activities.

3. Economic Impact Assessment, Government Code sections 11346.3, 11346.5 and 11346.9

Sections 11346.3, 11346.5, and 11346.9 of the APA require State agencies to assess various potential economic and fiscal impacts of proposed regulations and potential alternatives. Briefly stated, the Energy Commission finds that the 2016 Standards:

- a) Will not result in a significant statewide adverse impact directly affecting business (including small businesses), including the ability of California businesses to compete with businesses in other states, and job creation;
- b) Will not have significant impacts on housing costs;
- c) Do not have alternatives that would be more effective in implementing the policies and provisions of the Warren-Alquist Act without increasing burdens, or that would be as effective and less burdensome to affected private persons in implementing the policies and provisions; and
- d) Will not impose any direct costs or direct or indirect requirements on state agencies, local agencies, or school districts, including but not limited to costs that are required to be reimbursed under Part 7 (commencing with Section 17500) of the Government Code.

For complete details of the Energy Commission’s fiscal and economic analysis of the 2016

Standards, see the Economic and Fiscal Analysis (Form 399), previously published with the NOPA.

The 2016 Energy Provisions of CALGreen are voluntary and do not include any standards which alter the previous finding for the 2016 Standards. Although voluntary in nature, the 2016 Energy Provisions of CALGreen provide a framework for drafting and adopting local ordinances and thus have the potential to increase the efficiency of and conserve the use of energy by reducing the energy budget otherwise allotted to a building in the 2016 Standards. If a local jurisdiction wishes to require these voluntary standards via local ordinance, it must establish cost-effectiveness and submit its proposed local ordinance along with its cost-effectiveness analysis to the Energy Commission for approval.

#### **IV. THE STATE BUILDING STANDARDS LAW**

CALGreen was initially developed and adopted in response to policy directives from the Governor, founded on statutory directives to address climate change.<sup>7</sup> In 2008, the Building Standards Commission was given the express authority to adopt green building codes:

If no state agency has the authority or expertise to propose green building standards applicable to a particular occupancy, the Commission shall adopt, approve, codify, update, and publish green building standards for those occupancies.<sup>8</sup>

But the statute also recognizes that other agencies, including the Energy Commission, may adopt such standards.

The Building Standards Law requires that state agencies adopting building standards submit to the California Building Standards Commission both their adopted building standards and a justification of how the standards meet the criteria in Section 18930 of the Health and Safety Code. For the reasons described below, we find, determine, and conclude that the 2016 Energy Provisions of CALGreen comply with each one of the applicable criteria.

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

The 2016 Energy Provisions of CALGreen are extensions of aspects of the 2016 Standards and are voluntary in nature.

There is no overlap or duplication with other regulations because no other agency has adopted or is proposing to adopt voluntary standards for buildings for the 2016 CALGreen.

If a local jurisdiction wishes to require these voluntary standards via local ordinance, it must submit its proposed local ordinance to the Energy Commission for approval. As part of the Energy Commission's approval process, the proposed local ordinance is evaluated to ensure it does not

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<sup>7</sup> See CALGreen, *The 2010 California Green Building Standards Code Are You Ready?*, pp. 2-3, available at: <http://www.documents.dgs.ca.gov/bsc/CALGreen/The-CALGreen-Story.pdf>.

<sup>8</sup> Senate Bill 1473, Stats. 2008, ch. 719, enacting Health & Safety Code § 18930.5.

conflict with, overlap, or duplicate other building standards.

2. The provisions are within the parameters established by enabling legislation and are not expressly within the exclusive jurisdiction of another agency

The “enabling legislation” for the 2016 Standards is the Warren-Alquist Act; compliance with its “parameters” is discussed above. The Warren-Alquist Act gives to the Energy Commission, and not to any other agency, the exclusive jurisdiction to set energy standards for buildings.

The 2016 Energy Provisions of CALGreen are extensions of aspects of the 2016 Standards and do not include any standards which alter the previous finding for the 2016 Standards. The Energy Commission has the expertise to adopt voluntary energy efficiency standards for buildings.

3. The public interest requires the adoption of the provisions

The Warren-Alquist Act requires the Energy Commission to adopt and “periodically update” its building standards, which indicates that the legislature itself deems adoption of cost-effective building standards to be in the public interest.<sup>9</sup> Moreover, as we have discussed at length above, the extensive public record of this proceeding demonstrates that the 2016 Standards will save substantial amounts of energy and money, and will reduce adverse environmental impacts, all of which are in the public interest.

The 2016 Energy Provisions of CALGreen are voluntary, provide more of the same energy and environmental benefits of the 2016 Standards, and do not include any standards which alter the previous finding for the 2016 Standards.

4. The provisions are not unreasonable, arbitrary, unfair, or capricious, in whole or in part

Not only the content of the 2016 Energy Provisions of CALGreen, but also the process through which they were adopted (including comments both supporting and suggesting edits which were incorporated into the 2016 Energy Provisions of CALGreen) show that this criterion was met.

5. The cost to the public is reasonable based on the overall benefit to be derived from the provisions

As mentioned above, the 2016 Standards are cost-effective. The costs that are imposed are reasonable based on the economic, environmental and other benefits to be derived.

The 2016 Energy Provisions of CALGreen are extensions of aspects of the 2016 Standards. They are voluntary and do not include any standards which alter the previous findings for the 2016 Standards. If a local jurisdiction wishes to require these voluntary standards via local ordinance, it must submit its proposed local ordinance to the Energy Commission for approval.

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<sup>9</sup> Pub. Res. Code, § 25402, subdiv. (a)(1).

6. The provisions are not unnecessarily ambiguous or vague, in whole or in part

Throughout the rulemaking process, the Energy Commission made many changes to draft proposals to ensure their clarity. There were no comments on the 15-day Language for the 2016 Energy Provisions of CALGreen regarding unnecessary ambiguity or vagueness.

7. The applicable national specifications, published standards, and model codes have been incorporated in the provisions as provided in the State Building Standards Law, where appropriate

There are no federal laws applicable to nonfederal buildings in their entirety, so nothing in this realm could have been incorporated into the 2016 Energy Provisions of CALGreen.

There are no national specifications, published standards, or model codes, beyond those which were previously included in the 2016 Standards, which are applicable to the 2016 Energy Provisions of CALGreen.

8. The format of the provisions is consistent with that adopted by the California building Standards Commission

The 2016 Energy Provisions of CALGreen continue to use the format of the other building standards in the State Building Code, and in particular the format of Part 11 of the Building Code.

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 2016 Standards are not intended to promote fire and panic safety. Nevertheless, the Energy Commission submitted the 2016 Energy Provisions of CALGreen to the State Fire Marshal for review and approval. The Office of the State Fire Marshal reviewed the proposed revisions to regulations, found no conflict in the proposed changes, and granted approval in a signed letter provided on October 1, 2015.

The 2016 Energy Provisions of CALGreen are voluntary, provide more of the same energy and environmental benefits of the 2016 Standards, and do not include any standards that promote fire and panic safety, or would affect the Fire Marshal's approval of the 2016 Standards.

## **V. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.; see also CEQA Guidelines, Cal. Code Regs., tit. 14, § 15000 et seq.) requires that state agencies consider the environmental impact of their discretionary decisions. An activity is not subject to CEQA if, (1) the activity is not a "project" as defined in section 15378 of the regulations. (Cal. Code Regs., tit. 14, § 15060(c)), or (2) the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment. (Cal. Code Regs., tit. 14, § 15061(b)(3).)

After considering the entire record, including the Notice of Exemption, (attached as Exhibit A) the

Commission finds the regulations are voluntary, categorize existing energy efficiency features into a new elective, remove requirements made redundant by adopted changes in Part 6, and improve the readability of the CalGreen standards. The language changes would not result in a direct or indirect physical change to the environment because they are voluntary and either definitional in nature, procedural, or clarifications of existing voluntary standards. The Notice of Exemption is appropriate because the rulemaking activity is not a project under the CEQA Guidelines. (Cal. Code Regs., tit. 14, § 15378(b)(5).) In this case, the regulations would not result in any impact on the environment. In addition, because it can be seen with certainty that there is no possibility that the CALGreen regulation changes would have a significant effect on the environment, and nothing in the record suggests otherwise, adoption of the CALGreen regulations would not be subject to CEQA under the *common sense* exemption of section 15061(b)(3).

#### **VI. ADOPTION OF PROPOSED AMENDMENTS FOR DOCKET 15-CALG-01**

The California Energy Commission adopts the amendments in the 15-day language dated September 29, 2015, in Title 24, Part 11, of the California Code of Regulations.

The California Energy Commission directs the Executive Director to take, on behalf of the Commission, all actions reasonably necessary to have the adopted regulations approved by the California Building Standards Commission and go into effect, including but not limited to preparing and filing all appropriate documents, such as the Final Statement of Reasons, and correcting grammatical, typographical, and other nonsubstantial errors and changes for consistency within the regulations.

#### CERTIFICATION

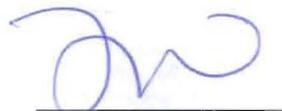
The undersigned Secretariat to the California Energy Commission does hereby certify that the foregoing is a full, true, and correct copy of an approved RESOLUTION duly and regularly adopted at a meeting of the California Energy Commission held on October 14, 2015:

AYE: Douglas, McAllister, Hochschild, Scott

NAY: None

ABSENT: Weisenmiller

ABSTAIN: None



Tiffani Winter,  
Secretariat

EXHIBIT A

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

From: (Public Agency): California Energy Commission
1516 9th Street,
Sacramento CA, 95814

County Clerk

County of:
State wide

(Address)

Project Title: 2016 CalGreen Efficiency Standards, California Code of Regulations title 24 part 11

Project Applicant: California Energy Commission

Project Location - Specific:

State wide

Project Location - City: Project Location - County:

Description of Nature, Purpose and Beneficiaries of Project:

The proposed changes to Title 24, Part 11, contribute to California's path to zero net energy buildings by establishing a third tier of efficient residential buildings in the voluntary CALGreen provisions, following the existing Tier 1 and Tier 2. Other changes improve readability of code language.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: California Energy Commission

Exempt Status: (check one):

- Ministerial (Sec. 21080(b)(1); 15268);
Declared Emergency (Sec. 21080(b)(3); 15269(a));
Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
[X] Categorical Exemption. State type and section number: 15060(c), 15061 (b)(3). 15378(b)(5)
Statutory Exemptions. State code number:

Reasons why project is exempt:

The proposed regulations are voluntary and categorize existing energy efficiency features into a new tier. Other changes improve readability of the CalGreen standards. The language changes would not result in a direct or indirect physical change to the environment because they are voluntary and either definitional in nature, procedural or clarifications of existing voluntary standards.

Lead Agency

Contact Person: Peter Strait Area Code/Telephone/Extension: 916-654-2817

If filed by applicant:

- 1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: Date: 10/13/15 Title: Supervisor, Standards Development

[X] Signed by Lead Agency [ ] Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR:

