STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY

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California Energy Commission
DOCKETED
15-CALG-01
TN # 75527
MAR 27 2015

March 27, 2015

VIA email transmission: Docket@energy.ca.gov
California Energy Commission
Attention: **Docket No. 15-CALG-01**
Dockets Office
1516 Ninth Street, MS-4
Sacramento, CA 95814

California Energy Commission:

The Department of Housing and Community Development's State Housing Law (SHL) Program, in part, oversees the application of state laws, regulations, and code enforcement by local jurisdictions. The SHL also develops statewide building standards for residential construction.

The SHL Program has reviewed the Energy Commission's proposed revisions to the California Green Building Standards Code (CALGreen). Many of the program's comments are editorial in nature or involve formatting issues. However, there are two items of concern:

- According to the Notice of Proposed Action, the earliest Energy Commission-approval date for the proposed building standards is April 8, 2015. This is well ahead of the California Building Standards Commission's approval, in December 2015, of the other portions of the 2016 CALGreen Code. Thus, early approval of specific portions of CALGreen ahead of the rest of the code may make coordinated changes difficult.

- The proposal of a Tier 3 voluntary level of compliance is a new structure for CALGreen. Currently, CALGreen includes voluntary levels of compliance (Tier 1 or Tier 2) which provide a well-rounded framework for sustainable building – site planning issues, energy efficiency, water conservation, resources conservation and environmental quality. The proposed Tier 3 level only addresses energy efficiency and needs additional supporting documentation in CALGreen. In addition, although it is a voluntary standard, the Initial Statement of Reasons should provide decision makers with a general estimate of compliance costs to home builders and buyers, if locally adopted on a mandatory basis.

We thank the Energy Commission for the opportunity to comment on the proposed changes to CALGreen. If you have any questions on our comments, please feel free to contact the SHL Program:

Kyle Krause, Codes & Standards Administrator I (916) 263-4719
Emily Withers, Codes & Standards Administrator II (916) 263-2998

Sincerely,

Shawn Huff
Assistant Deputy Director

Attachment A

ATTACHMENT A

COMMENTS FROM THE DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGARDING THE CALIFORNIA ENERGY COMMISSION'S ENERGY PROVISIONS OF THE CALIFORNIA GREEN BUILDING STANDARDS 45-DAY LANGUAGE

Schedule of CALGreen rulemaking and solicitation for comments

The proposed earliest adoption date of the California Energy Commission's (CEC) energy provisions in the 2016 CALGreen is April 8, 2015. This date is significantly earlier than the California Building Standards Commission's (CBSC) proposed adoption date of mid-December 2015. CEC approval and adoption of CEC CALGreen energy provisions will be complete prior to the BSC's CALGreen Code formal rulemaking process including the Code Advisory Committee meetings and public comment periods.

HCD is concerned with the finalizing of the energy-related portions of CALGreen well before the CBSC process. During the 2013 Triennial Code Adoption Cycle this resulted in logistical problems with the content, formatting and organizational structure of CALGreen. The CEC's concept/proposal in CALGreen for a Tier 3 requirement is one current example.

Many CALGreen stakeholders are not familiar with, nor do they participate in, the CEC adoption processes making a parallel adoption of CALGreen with the CBSC more indispensable.

APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES
DIVISION A4.2 – ENERGY EFFICIENCY

Proposed Section A4.201. Scope. Last sentence.

- Correct "Commissions" to "Commission"
- Coordinate with BSC referenced text related to local amendment submittals to BSC.

Proposed Section A4.202 Definitions.

The format of CALGreen follows the other building standards codes with defined terms and their definitions in Chapter 2 and only a reference to defined terms and their locations in other chapters. It appears that CEC is not proposing any changes to the 2013 code so underscore is not needed on the terms and the term/definition text does not need to appear in strikeout. Sample format for retaining 2013 code text is below.

Section A4.202
DEFINITIONS

A4.202 Definitions. The following terms are defined in Chapter 2.

ENERGY DESIGN RATING.
ENERGY BUDGET.
TIME DEPENDENT VALUATION (TDV) ENERGY.

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General comment on Sections A4.203 and A4.204. Division A4.2 does not follow the format of the other voluntary A4 sections of CALGreen. CALGreen's voluntary divisions typically include specific prerequisite Tier measures, e.g., A4.408.1 65 percent construction waste reduction for Tier 1; plus a required number of electives. Since there are no electives proposed in Sections A4.203 or A4.204 it would seem that all the proposed provisions are prerequisites (versus electives) for either Tier 1, Tier 2, or Tier 3.

Section A4.203
PERFORMANCE APPROACH FOR NEW CONSTRUCTED BUILDINGS

Proposed Section A4.203.1.1.3 Lighting

- General comment: the provisions in this section seem to mirror the proposed 2016 CEC with minor differences. Specific comments follow.

Proposed Section A4.203.1.1.3 (2) and (3)

- The references to the 2016 CEC sections have been corrected, however, the Express Terms is not reflecting strikeout of the actual 2013 CALGreen text referencing the CEC sections.

Proposed Section A4.203.1.1.3 (4)

- The reference to the 2016 CEC section has been corrected, however, the Express Terms document should show Item 4 underscored, without strikeout, since it is a new text proposal.

Proposed Section A4.203.1.2.3 Tier 3 (Zero Net Energy)

- Why does the building need to meet Tier 2 requirements which require an Energy Budget less than or equal to 70 percent when the goal is net zero?
- The Initial Statement of Reasons for this section notes that "The rationale and benefit of this proposal is that it will further the state's ZNE goal and it will save energy while minimizing the energy costs of new homes." Although a voluntary section, there should be some indication of the costs impacts of building a ZNE residence vs. a similar non-ZNE residence. For example, would the ZNE provisions increase costs by $2,000 or $20,000? Would the ZNE energy savings offset the initial costs? These issues are not discussed.
- The proposal of a Tier 3 voluntary level of compliance does not follow the Tier framework format for Tier 1 or Tier 2. Tiers 1 and 2 include prerequisite measures and, in most cases, a specified number of electives. In addition, these prerequisites and elective measures cover a range of sustainable building practices related to site planning, energy efficiency, water conservation, materials conservation or environmental quality. Tier 3, as proposed, is solely directed at energy savings.

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- Existing Section A4.601.5 Tier 2 includes a note that the measures necessary to achieve Tier 2 are very stringent and that local adoption must consider the stringency of the measure and achievability. Similarly, the adoption of Tier 3, if adopted, should be considered for achievability on a jurisdiction-wide basis or whether it would only be applicable to certain projects.

Section A4.204
PERFORMANCE APPROACH FOR ADDITIONS

Proposed Section A4.204.1.1.1(2)

- The proposed 2016 CEC 150.0(k)(3)(A) includes provisions for outdoor lighting for single family residences. Also, the Express Terms document does not reflect strikeout of the actual 2013 CALGreen text referencing the CEC sections.

Proposed Section A4.204.1.1.1(3)

- The proposed 2016 CEC 150.0(k)(3)(B) includes provisions for outdoor lighting for multifamily residential patios, etc. Also, the Express Terms document does not reflect strikeout of the actual 2013 CALGreen text referencing the CEC sections.

Proposed Section A4.204.1.1.1(4)

- The proposed 2016 CEC 150.0(k)(3)(D) includes provisions for outdoor lighting for residential parking lots.

Proposed Sections A4.204.1.2 1 and A4.204.1.2.2 Exception

- Delete "a" before "Any"
- Complete citation for the California Home Energy Rating System Program by including reference to Division 2 and Section 1670 *et seq.*
- Is there a minimum HERS index to achieve to qualify for the exceptions?
- It is not clear whether the term "modification" refers to the modification of the mechanical system or to the low-rise residential dwelling.

Section A4.6
RESIDENTIAL VOLUNTARY MEASURES

Division A4.6 – Tier 1 and Tier 2
Section A4.601 General

- Might want to reference Sections A4.601.1, A4.601.2, A4.601.3, A4.601.4, and A4.601.4.1 as "no change to existing text".
- Existing Section A4.601.5 Tier 2 includes a note that the measures necessary to achieve Tier 2 are very stringent and that local adoption must consider the stringency of the measure and achievability. Similarly, the adoption of Tier 3, as

proposed, should be considered for achievability on a jurisdiction-wide basis or whether it would only be applicable to certain projects.

Proposed Sections A4.601.4.2 and A4.601.5.2

- Section A4.601.4.2 could use ellipses (...) to indicate sections with unchanged text.
- Proposed Section A4.601.6.2 will need additional proposed sections, e.g., A4.601.6, A4.601.6.1, to follow the format of CALGreen for Tier 1 and Tier 2. Otherwise, it will need to stand alone as A4.601.6.

Division A4.6 – Tier 1 and Tier 2
Section A4.602
Residential Occupancies Application Checklist

Proposed table heading
Everything in the column labeled "Tier 3" is new and should be underscored including the heading.

Proposed table heading Prerequisite Requirement: Performance Approach for Newly Constructed Buildings

- The title of the heading is "Performance Approach for Newly Constructed Buildings." "Prerequisite Requirement:" should be shown as new text and underscored. No underscore is needed for "Performance Approach" since it is existing text.

Proposed A4.203.1.2.1

- Parentheses not necessary for section title.
- Correct to read "Tier 1." Not Roman numeral "I."

Proposed A4.203.1.2.2

- Parentheses not necessary for section title.
- Correct to read "Tier 2." Not Roman numeral "II."

Proposed A4.203.1.2.3

- Parentheses not necessary for section title.
- Correct to read "Tier 3." Not Roman numeral "III."
- Why does the building need to meet Tier 2 requirements which require an Energy Budget less than or equal to 70 percent when the goal is net zero?

Proposed table heading Performance Approach for Additions
(No comment on heading)

Proposed A4.204.1.2.1 and A4.04.1.2.2

- Identify A4.204.1.2.1 as "Tier 1"; not Roman numeral "I."

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- Strikeouts not necessary in the "exception" since this is proposed new text.

Footnotes

- Correct footnotes to reflect current version of CALGreen (unless changed for 2016).
- Current footnotes for CALGreen read as follows:

1. Green building measures listed in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.
2. Required prerequisite for this Tier.
3. These measures are currently required elsewhere in statute or in regulation.

APPENDIX A5
NONRESIDENTIAL VOLUNTARY MEASURES
DIVISION A5.2 – ENERGY EFFICIENCY

Proposed Section A5.201.1 Scope.

- Second half of second sentence: correct "required approved" to "required approval" and "Commissions" to "Commission"
- Coordinate referenced text related to submittals to BSC with BSC.

Proposed Section A5.202 Definitions.

- References to other definitions for "geothermal," "process," and "solar access" are missing.
- See sample format for Section A4.202.

Proposed Section A5.203.1 Energy efficiency.

- Show deleted punctuation marks in strikeout.

Proposed Section A5.203.1.2.1 Tier 1.

- Insert number "2." Before "For building projects that include indoor lighting and mechanical systems…"

Section A4.601
NONRESIDENTIAL VOLUNTARY MEASURES

Division A5.6 – Voluntary Tiers
Section A5.601 CALGreen TIER 1 and TIER 2

- Reference Sections A5.601.1, A5.601.2, A5.601.2.1, A5.601.2.4, A5.601.3, A5.601.3.4 and A5.601.4; and Table A5.601 as "no change to existing text" for clarity.

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Division A5.6 – Voluntary Tiers
Section A5.602
Nonresidential Occupancies Application Checklist

Proposed table heading Performance Requirements for Newly Constructed Buildings

- Indicate text changes for description of Section A5.203.1, second sentence.
- Correct description in Section A5.203.1.1.2 to match content in actual section.

Proposed table footnotes

- Correct footnotes to reflect current version of CALGreen (unless changed for 2016).
- Current footnotes for CALGreen read as follows:

1. Green building measures in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.
2. Required prerequisite for this Tier.
3. These measures are currently required elsewhere in statute or in regulation.