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<b>Document Title:</b>	Initial Statement of Reasons
<b>Description:</b>	Initial Statement of Reasons for the proposed revisions to the California Building Energy Efficiency Standards, 2022 California Green Building Standards Code, Title 24, Part 11 and Parts 2, 2.5, 3, 4, and 5.
<b>Filer:</b>	Amber Beck
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**CALIFORNIA ENERGY COMMISSION**

1516 Ninth Street  
Sacramento, California 95814

[energy.ca.gov](http://energy.ca.gov)

CEC-057 (Revised 1/21)

**INITIAL STATEMENT OF REASONS****PROPOSED REVISIONS TO THE CALIFORNIA  
BUILDING ENERGY EFFICIENCY STANDARDS****2022 CALIFORNIA GREEN BUILDING STANDARDS CODE  
CALIFORNIA CODE OF REGULATIONS, TITLE 24,  
PART 11,  
And Parts 2, 2.5, 3, 4, and 5****California Energy Commission  
Docket No. 21-BSTD-03****INTRODUCTION**

Notice is hereby given that the California Energy Commission (Energy Commission) proposes to adopt, changes to the Building Energy Efficiency Standards contained in the California Green Building Standards Code, California Code of Regulations (CCR), Title 24, Part 11 (also known as CALGreen). In addition, the Energy Commission is making non-substantive changes to Parts 2, 2.5, 3, 4, and 5.

The Warren-Alquist Act (California Pub. Res. Code Sections 25001 et seq.) establishes the Energy Commission as California's primary energy policy and planning agency. Public Resource Code Sections 25213, 25218, 25218.5, 25402, 25402.1, 25402.4, 25402.5, 25402.8, 25910, 25942, and 25943 mandate and/or authorize that the Energy Commission adopt rules and regulations, as necessary, to reduce the inefficient consumption of energy and water in newly constructed buildings and certain additions and alterations to existing buildings. One of the ways the Energy Commission satisfies this requirement is through the California Green Building Standards Code, (California Code of Regulations, Title 24, Part 11) found in the California Building Standards Code. As a part of the California Building Standards Code, the California Green Building Standards Code follows the same three-year update cycle.

Therefore, the Energy Commission proposes to update the voluntary energy efficiency provisions of the California Green Building Standards (Title 24, Part 11) and provide non-substantive changes to Parts 2, 2.5, 3, 4, and 5 of the model code. The changes proposed for Part 11 are changes to example or model code language that are intended as templates and examples for local jurisdictions to use in considering above-code ordinances; as local jurisdictions are not compelled to use or follow these examples, the

proposed changes do not have regulatory effect. The changes to Parts 2, 2.5, 3, 4, and 5 add language that describe requirements within Part 1, Chapter 10, and Part 6 (Energy Code) for the benefit of readers that may not be aware of or familiar with Energy Code requirements; as these requirements are separately adopted into the Energy Code, the proposed amendments restating these requirements in the other noted Parts do not have any regulatory effect.

The Energy Commission proposes to adopt these amendments for publication in 2022 with an effective date of January 1, 2023.

## **STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS**

### **Part 11: California Green Building Standards**

**Section:** Appendix A4, Section A4.201.1

**Specific Purpose:** The specific purpose of the change to this section is to more specifically reference the California Building Standards Code (Title 24) and to replace the term “approval” with the terms “filing” and “finding” to improve the section’s consistency with the referenced sections of the Administrative Code as well as with the underlying statutory language in Public Resources Code Section 25402.1(h)2.

**Necessity:** Updating the terminology to improve consistency with referenced regulations and underlying statute is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Section A4.203.1

**Specific Purpose:** The specific purpose of the change to this section is to update a referenced section number consistent with proposed changes to the cross-referenced subsection’s numbering.

**Necessity:** Updating the reference to the section number of the final section of this appendix is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Section A4.203.1.1

**Specific Purpose:** The specific purpose of the changes to this Section is to remove a redundant and unneeded introductory section (the only purpose of the section was to state that its subsections were required), to update terminology relating to Energy Design Rating (EDR), to insert language specifying that the EDR targets in its associated table are required (making the language in Section A4.203.1.3 redundant and unneeded), to remove dependence on CALGreen tiers, and to renumber Subsection A4.203.1.1.1 to Section A4.203.1.1 consistent with the removal of the introductory section (essentially moving this section and its table up by one level). As these are changes to model code language that local jurisdictions may use as examples when considering local ordinances, these changes do not have regulatory effect.

**Necessity:** Removing dependence on CALGreen tiers is reasonably necessary to avoid a situation where the difficulty of demonstrating cost effectiveness for an EDR of zero would

prevent a local jurisdiction from easily adopting “CALGreen Tier 2” model language relating to the non-energy voluntary appendices.

Updating EDR targets, including referencing them in new Table A4.203.1.1, and updating terminology is reasonably necessary to ensure that targets considered by local jurisdictions are achievable within the context of updated statewide requirements in the Energy Code and associated updated modeling software, and that references to EDR are consistent with how the term is used by said modeling software.

Removing reference to QII requirements is reasonably necessary for consistency with the proposed removal of the subsection in question (Section A4.203.1.1.2). Removal of the remainder of the unneeded introductory parent section is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Table A4.203.1.1

**Specific Purpose:** The purpose of the changes to this Table are to update model EDR targets and state these targets in marginal rather than absolute terms, as well as to update the table’s title and numbering consistent with the changes in Section A4.203.1.1. This update also removes the Tier 2 targets so that the requirements are no longer dependent on tier. As these are changes to model code language that local jurisdictions may use as examples when considering local ordinances, these changes do not have regulatory effect.

**Necessity:** Updating EDR targets and terminology is reasonably necessary to ensure that targets considered by local jurisdictions are achievable within the context of updated statewide requirements in the Energy Code and associated updated modeling software, and that references to EDR are consistent with how the term is used by said modeling software.

Stating targets in marginal rather than absolute terms is reasonably necessary to ensure consistency in application across a broad range of building sizes and designs. Removing dependence on CALGreen tiers is reasonably necessary to avoid a situation where the difficulty of demonstrating cost effectiveness for an EDR of zero would prevent a local jurisdiction from easily adopting “CALGreen Tier 2” model language relating to the non-energy voluntary appendices.

Updating table title and numbering is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Section A4.203.1.1.2

**Specific Purpose:** The purpose of striking this section is to remove an out of place and unneeded reference to Quality Insulation Installation (QII). QII applies to the installation of insulation, and this model language does not include or reference any requirements to install insulation. As this is a change to model code language that local jurisdictions may use as examples when considering local ordinances, this change does not have regulatory effect.

**Necessity:** This change is reasonably necessary to prevent confusion and misapplication of QII provisions in the Energy Code.

**Section:** Appendix A4, Section A4.203.1.2 and subsections A4.203.1.2.1 through A4.203.1.2.8

**Specific Purpose:** The purpose of the changes to this Section and subsections are to more simply state that one of the items in the subsections must be selected for inclusion in the building, to improve the phrasing of the section and standardize the phrasing of each option / subsection, and to add four new options: high performance vertical fenestration, heat pump water heater demand management, battery storage system controls, and heat pump space and water heating. The edits to standardize phrasing include removing unneeded references to HERS verification; detailed verification requirements are specified in the referenced sections of the Residential Appendices, and these are not changed. As these are changes to model code language that local jurisdictions may use as examples when considering local ordinances, these changes do not have regulatory effect.

**Necessity:** The addition of new prerequisite options is reasonably necessary to provide additional model language to local jurisdictions covering a broader range of equipment types and construction approaches. Simplifying the statement that one prerequisite measure is required, as well as standardizing the phrasing of each option and removing unneeded detail, is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Section A4.203.1.3 and subsections A4.203.1.3.1 through A4.203.1.3.2

**Specific Purpose:** The specific purpose of the removal of this Section is to remove redundant language and unneeded reference to CALGreen tiers. The proposed model energy provisions for this Appendix no longer differ based on tiers, and the language added to Section A4.203.1.1 states in simpler and more direct terms that the EDR margins in Table A4.203.1.1 are required for compliance. As these are changes to model code language that local jurisdictions may use as examples when considering local ordinances, these changes do not have regulatory effect.

**Necessity:** Removing redundant statements that other sections are required is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements. Removing reference to CALGreen tiers consistent with proposed amendments to other sections is similarly reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Section A4.203.1.4 (renumbered to Section A4.203.1.3)

**Specific Purpose:** The specific purpose of amending this section is to remove reference to CALGreen tiers, consistent with the proposed language in prior sections that remove dependence on and reference to differing tiers, to remove reference to community shared solar or storage options, and to update the numbering to reflect the deletion of the previous section A4.203.1.3. As these are changes to model code language that local jurisdictions may use as examples when considering local ordinances, these changes do not have regulatory effect.

**Necessity:** This change to renumber and remove reference to CALGreen tiers is reasonably necessary to ensure consistency with the proposed changes to preceding

sections that remove reference to CALGreen tiers, and in so doing improve clarity and preclude misunderstanding or misapplication of associated requirements.

The change to remove reference to community shared solar and storage is reasonably necessary to prevent confusion: the interconnection issues applicable to oversizing panels on a residential building that this section is intending to address do not apply to a dedicated power generation or storage facility such as would be used for a community shared system. Correcting the scope of application of this language by removing reference to these systems is therefore reasonably necessary to improve clarity and preclude misunderstanding or misapplication of this section's requirements.

**Section:** Appendix A4, Section A4.601.4.2

**Specific Purpose:** The specific purpose of the change to this section is to update references to the sections and tables within Division A4.2 consistent with the proposed changes to the section and table numbers within Section A4.203 and its subsections.

**Necessity:** Updating the referenced section numbers for consistency with proposed changes to the sections being referenced is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A4, Section A4.601.5.2

**Specific Purpose:** The specific purpose of the change to this section is to update references to the sections and tables within Division A4.2 consistent with the proposed changes to the section and table numbers within Section A4.203 and its subsections.

**Necessity:** Updating the referenced section numbers for consistency with proposed changes to the sections being referenced is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Appendix A5, Section A5.201.1

**Specific Purpose:** The specific purpose of the change to this section is to replace the term "approval" with the terms "filing" and "finding" to improve the section's consistency with the referenced sections of the Administrative Code as well as with the underlying statutory language in Public Resources Code Section 25402.1(h)2.

**Necessity:** Updating the terminology to improve consistency with referenced regulations and underlying statute is reasonably necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

## **PART 5: California Plumbing Code**

**Section:** Chapter 1, Section 1.1.8.2

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by updating language that identifies additional statutory and regulatory requirements applicable to local ordinances that amend energy use- or efficiency-related measures. This addresses a problem where readers of the California Mechanical Code may be unaware that there are additional requirements that apply

to local adoption of building standards code amendments relating to energy use, conservation or efficiency.

**Necessity:**

Updating the language within a subsection that identifies additional requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Chapter 4, Section 401.3, Note 4

**Specific Purpose:**

The specific purpose of amending this section is to prevent possible confusion regarding the interaction between standards for plumbing fixtures and fittings subject to regulation as water-using appliances, under California Code of Regulations Title 20, and standards for plumbing systems specified in adopted model code language.

**Necessity:**

Adding a subsection that identifies the overlap of model California Plumbing Code requirements and requirements in California's Appliance Efficiency Regulations (Title 20, Sections 1601 et seq.) is necessary to improve clarity and preclude misapplication of associated requirements

**Section:** Chapter 5, Section 501.2

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Plumbing Code by identifying additional energy efficiency-based requirements in the Energy Code that are applicable to water heating systems. This addresses a problem where readers of the California Plumbing Code may be unaware that there are measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Chapter 6, Section 609.12.3

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Plumbing Code by identifying additional energy efficiency-based requirements in the Energy Code relating to pipe insulation. This addresses a problem where readers of the California Plumbing Code may be unaware that there are measures in the Energy Code that apply, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**PART 4: California Mechanical Code**

**Section:** Chapter 1, Section 1.1.8.2

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by updating language that identifies additional statutory and regulatory requirements applicable to local ordinances that amend energy use- or efficiency-related measures. This addresses a problem where readers of the California Mechanical Code may be unaware that there are additional requirements that apply to local adoption of building standards code amendments relating to energy use, conservation or efficiency.

**Necessity:**

Updating the language within a subsection that identifies additional requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Chapter 3, Section 311.5

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by identifying additional energy efficiency-based filtration requirements in the Energy Code that are applicable to mechanical ventilation systems. This addresses a problem where readers of the California Mechanical Code may be unaware that there are measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Chapter 6, Section 601.2.1

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by identifying energy efficiency-based duct sizing requirements in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Mechanical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements



**Section:** Chapter 6, Section 603.9.2.1

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by identifying additional energy efficiency-based duct leakage testing requirements in the Energy Code. This addresses a problem where readers of the California Mechanical Code may be unaware that there are measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements

**Section:** Chapter 12, Section 1217.5.2.1

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by identifying additional energy efficiency-based insulation requirements in the Energy Code that are applicable to heated slab floors. This addresses a problem where readers of the California Mechanical Code may be unaware that there are energy efficiency measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements

**Section:** Chapter 12, Section 1217.7.1

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by identifying additional energy efficiency-based insulation requirements in the Energy Code relating to pipe insulation. This addresses a problem where readers of the California Mechanical Code may be unaware that there are energy efficiency measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Chapter 12, Section 1220.4.5.1

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Mechanical Code by identifying additional energy efficiency-based insulation requirements in the Energy Code that are applicable to heated slab floors. This addresses a problem

where readers of the California Mechanical Code may be unaware that there are energy efficiency measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements

**PART 3:California Electrical Code**

**Section:** Article 89, Section 89.101.8.2

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by updating language that identifies additional energy efficiency-based electrical requirements in the Energy Code applicable to electrical power distribution systems. This addresses a problem where readers of the California Electrical Code may be unaware that there are measures in the Energy Code that apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Updating a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to preclude misunderstanding or misapplication of associated requirements.

**Section:** Article 408, Section 408.2(A)

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for panelboards in single-family buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Article 408, Section 408.2(B)

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for panelboards in multifamily buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Article 422, Section 422.3(A)

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for heat pump water heaters, electric cooktops, electric clothes dryers and their electric readiness in single-family buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding subsections that identify the additional Energy Code requirements and provide express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Article 422, Section 422.3(B)

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for electric cooktops, electric clothes dryers and their electric readiness in multifamily buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding subsections that identify the additional Energy Code requirements and provide express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Article 440, Section 440.3(E)

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for heat pump space heaters and their electric readiness in single-family buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements

**Section:** Article 440, Section 440.3(F)

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for heat pump space heaters and their electric readiness in multifamily buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**Section:** Article 706, Section 706.10

**Specific Purpose:**

The specific purpose of amending this section is to assist readers of the California Electrical Code by identifying energy efficiency-based electrical requirements for energy storage systems (ESS) and their electric readiness in multifamily buildings in the Energy Code that are potentially applicable if certain design options in the Energy Code are utilized. This addresses a problem where readers of the California Electrical Code may be unaware that there are energy efficiency measures in the Energy Code that potentially apply to these systems, or may know that the requirements exist but may be unsure of where they are located or what they entail.

**Necessity:**

Adding a subsection that identifies the additional Energy Code requirements and provides express section references is necessary to improve clarity and preclude misunderstanding or misapplication of associated requirements.

**PART 2.5: California Residential Code**

**Section:** Chapter 4, Section R408.8

**Specific Purpose:**

The specific purpose of adding this section is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the California Energy Code and to cross-reference Table R702.7.4, which describes the differences between these codes.

**Necessity:**

Adding a note clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is reasonably necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Chapter 7, Section R702.7.4 and Table R702.7.4

**Specific Purpose:**

The specific purpose of adding this section and table is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code by explaining the relationship between the two Codes and adding Table R702.7.4 to represent these differences.

**Necessity:**

Adding a subsection and table clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Chapter 8, Section R806

**Specific Purpose:**

The specific purpose of adding a note to this section is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code.

**Necessity:**

Adding a note clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is reasonably necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Appendix S

**Specific Purpose:**

The specific purpose of adding a note to this appendix is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code.

**Necessity:**

Adding a note clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is reasonably necessary to improve clarity and preclude misapplication of associated requirements.

**PART 2:California Building Code**

**Section:** Chapter 2, Section 202

**Specific Purpose:**

The specific purpose of amending this section is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code.

**Necessity:**

Adding language to the definition of “Climate Zone” that identifies the distinction between climate zones and provides reference to the relevant section of the Energy Code is necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Chapter 12, User Note

**Specific Purpose:**

The specific purpose of amending this section is to ensure correct reference to the Energy Code in places where the model codes would erroneously direct readers to the International Energy Conservation Code, given that California instead adopts the Energy Code.

**Necessity:**

Directly replacing references to model codes with references to California codes is necessary to ensure accuracy in statements that direct readers to the locations of adopted standards and regulatory requirements.

**Section:** Chapter 12, Table 1202.3

**Specific Purpose:**

The specific purpose of amending this table is to ensure correct reference to the Energy Code in places where the model codes would erroneously direct readers to the International Energy Conservation Code, given that California instead adopts the Energy Code.

**Necessity:**

Directly replacing references to model codes with references to California codes is necessary to ensure accuracy in statements that direct readers to the locations of adopted standards and regulatory requirements.

**Section:** Chapter 12, Section 1202.3.1 and Table 1202.3.1

**Specific Purpose:**

The specific purpose of adding this section and table is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code by explaining the relationship between the two Codes and adding Table 1202.3.1 to represent these differences.

**Necessity:**

Adding a subsection and table clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Chapter 14, Section 1404.3.3

**Specific Purpose:**

The specific purpose of adding this section is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code and to cross-reference Table 1202.3.1, which describes the differences between these codes.

**Necessity:**

Adding a subsection clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Chapter 21, Exception to Section 2109.2.4.8.2

**Specific Purpose:**

The specific purpose of amending this section is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code and to cross-reference Table 1202.3.1, which describes the differences between these codes.

**Necessity:**

Amendments to this exception clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is necessary to improve clarity and preclude misapplication of associated requirements.

**Section:** Chapter 25, Section 2510.6.3

**Specific Purpose:**

The specific purpose of adding this section is to prevent possible confusion between climate zones identified in ICC model codes and climate zones identified in the Energy Code and to cross-reference Table 1202.3.1, which describes the differences between these codes.

**Necessity:**

Adding a subsection clarifying the distinction and relationship between climate zones used by the ICC model codes and adopted into the California Residential Code, and those used by the California Energy Commission and adopted into the Energy Code, is necessary to improve clarity and preclude misapplication of associated requirements.

**TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS**

The Energy Commission relied on input from various stakeholders, subject matter experts, and interested parties that provided information, feedback, and subject matter expertise. The groups and organizations that participated included but not limited to:

California Building Standards Commission, California Independently Owned Utilities, California Business Properties Association, California Building Industry Association, Home Ventilating Institute, Air Conditioning, Heating and Refrigeration Institute, Sheet Metal and Air Conditioning Contractors National Association, National Electrical Manufacturing Association, American Society of Heating, Refrigerating and Air Conditioning Engineers, California Department of Consumer Affairs, Illuminating Engineering Society, and Building Owners and Managers Association.

The Energy Commission relied upon the following documents:

1. Voluntary Energy Efficiency Requirements For Title 24, Part 11 (CALGreen)  
Title 24, Part 11 (CALGreen) Recommendations  
Prepared by Energy Solutions, Frontier Energy and TRC  
February 2021

## 2. CALGreen EDR1 Targets 2022

The listed documents have been filed in this proceeding's docket, number 21-BSTD-03, and are available to the public unless subject to copyright or other restrictions,

The documents are posted at <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>.

In addition, all documents, including those protected by copyright, are available at the California Energy Commission, located at 1516 9th Street, in Sacramento, California.

### **STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS**

There are no prescriptive standards proposed.

### **CONSIDERATION OF REASONABLE ALTERNATIVES, INCLUDING THOSE THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.**

No reasonable alternatives to the proposed regulations have been proposed that would lessen any adverse impact on small businesses or that would be less burdensome and equally effective in achieving the purposes of the regulation in a manner that achieves the purposes of the statute being implemented.

The proposed regulations take additional steps in meeting California's energy resource conservation goals by updating the voluntary energy efficiency provisions of the California Green Building Standards (Title 24, Part 11) and directing readers to existing standards for the benefit of readers that may not be aware of or familiar with Energy Code requirements.

### **FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS**

The Energy Commission has made an initial determination that the proposed regulations are unlikely to have a significant statewide adverse economic impact on businesses, including the ability of California businesses to compete with businesses in other states.

The proposed regulations take additional steps in meeting California's energy resource conservation goals through updates to the voluntary energy efficiency provisions of the California Green Building Standards (Title 24, Part 11). The proposed amendments to the voluntary provisions are unlikely to create cost impacts due to their voluntary nature. Businesses may, but are not required, to comply with voluntary provisions. To the extent that actions taken by local agencies may include, modify, or not include all or part of the voluntary provisions, those actions would be subject to existing laws relating to the evaluation and disclosure of impacts of actions by those local agencies. While local agencies may use the provisions in these appendices as templates or examples for drafting of local ordinances, such agencies are not required to adhere to the specific language or requirements in these appendices. Consideration of potential future actions



taken by local agencies is therefore speculative and is not included in the assessment of the effects of the proposed standards.

The changes proposed to Parts 2, 2.5, 3, 4 and 5 are non-substantive changes to effectively communicate and direct readers to the regulations adopted into Part 6 in a precise and clear manner for the benefit of readers who may not be aware of or familiar with Energy Code requirements, in order to prevent misapplication of associated requirements. The changes, which consist entirely of cross-references to regulations in Part 6, do not materially alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any CCR provision, nor do they have any other regulatory effect.

## **ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION**

The Energy Commission has assessed whether or not and to what extent this proposal will affect the following:

### **The creation or elimination of jobs within the State of California.**

The proposed regulations take additional steps in meeting California's energy resource conservation goals through updates to the voluntary energy efficiency provisions of the California Green Building Standards (Title 24, Part 11). The proposed amendments to the voluntary provisions are unlikely to create cost impacts due to their voluntary nature. Businesses may, but are not required, to comply with voluntary provisions. To the extent that actions taken by local agencies may include, modify, or not include all or part of the voluntary provisions, those actions would be subject to existing laws relating to the evaluation and disclosure of impacts of actions by those local agencies. While local agencies may use the provisions in these appendices as templates or examples for drafting of local ordinances, such agencies are not required to adhere to the specific language or requirements in these appendices. Consideration of potential future actions taken by local agencies is therefore speculative and is not included in the assessment of the effects of the proposed standards. Therefore, the Energy Commission has determined it is unlikely any jobs will be created or eliminated as a result of the proposed regulation.

The changes proposed to Parts 2, 2.5, 3, 4 and 5 are non-substantive changes to effectively communicate and direct readers to the regulations adopted into Part 6 in a precise and clear manner for the benefit of readers who may not be aware of or familiar with Energy Code requirements, in order to prevent misapplication of associated requirements. The changes, which consist entirely of cross-references to regulations in Part 6, do not materially alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any CCR provision, nor do they have any other regulatory effect. Therefore, the Energy Commission has determined it is unlikely any jobs will be created or eliminated as a result of the proposed regulation.

### **The creation of new businesses or the elimination of existing businesses within the State of California.**

The proposed regulations take additional steps in meeting California's energy resource conservation goals through updates to the voluntary energy efficiency provisions of the California Green Building Standards (Title 24, Part 11). The proposed amendments to the voluntary provisions are unlikely to create cost impacts due to their voluntary nature.

Businesses may, but are not required, to comply with voluntary provisions. To the extent that actions taken by local agencies may include, modify, or not include all or part of the voluntary provisions, those actions would be subject to existing laws relating to the evaluation and disclosure of impacts of actions by those local agencies. While local agencies may use the provisions in these appendices as templates or examples for drafting of local ordinances, such agencies are not required to adhere to the specific language or requirements in these appendices. Consideration of potential future actions taken by local agencies is therefore speculative and is not included in the assessment of the effects of the proposed standards. Therefore, the Energy Commission has determined it is unlikely businesses will be eliminated or created as a result of the proposed regulation.

The changes proposed to Parts 2, 2.5, 3, 4 and 5 are non-substantive changes to effectively communicate and direct readers to the regulations adopted into Part 6 in a precise and clear manner for the benefit of readers who may not be aware of or familiar with Energy Code requirements, in order to prevent misapplication of associated requirements. The changes, which consist entirely of cross-references to regulations in Part 6, do not materially alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any CCR provision, nor do they have any other regulatory effect. Therefore, the Energy Commission has determined it is unlikely any businesses will be eliminated or created as a result of the proposed regulation.

**The expansion of businesses currently doing business within the State of California.**

The proposed regulations take additional steps in meeting California's energy resource conservation goals through updates to the voluntary energy efficiency provisions of the California Green Building Standards (Title 24, Part 11). The proposed amendments to the voluntary provisions are unlikely to create cost impacts due to their voluntary nature. Businesses may, but are not required, to comply with voluntary provisions. To the extent that actions taken by local agencies may include, modify, or not include all or part of the voluntary provisions, those actions would be subject to existing laws relating to the evaluation and disclosure of impacts of actions by those local agencies. While local agencies may use the provisions in these appendices as templates or examples for drafting of local ordinances, such agencies are not required to adhere to the specific language or requirements in these appendices. Consideration of potential future actions taken by local agencies is therefore speculative and is not included in the assessment of the effects of the proposed standards. Therefore, the Energy Commission has determined it is unlikely businesses will expand as a result of the proposed regulation.

The changes proposed to Parts 2, 2.5, 3, 4 and 5 are non-substantive changes to effectively communicate and direct readers to the regulations adopted into Part 6 in a precise and clear manner for the benefit of readers who may not be aware of or familiar with Energy Code requirements, in order to prevent misapplication of associated requirements. The changes, which consist entirely of cross-references to regulations in Part 6, do not materially alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any CCR provision, nor do they have any other regulatory effect. Therefore, the Energy Commission has determined it is unlikely any businesses will expand as a result of the proposed regulation.

**The benefits of the regulation to the health and welfare of California residents, worker safety, and the state’s environment.**

The proposed updates to the voluntary appendices will have no direct effect on health, welfare, worker safety, or the environment. The updates may encourage consideration and adoption of local ordinances relating to energy efficiency in buildings, and such ordinances, if adopted, may have positive impacts on health, welfare, and the environment known to result from energy efficiency. However, as such impacts are speculative, they are not considered in this rulemaking. The proposed non-substantive amendments to Parts 2, 2.5, 3, 4, and 5 are intended to improve the readability and clarity of the code, and may result in improved compliance with the Energy Code, which may also result in positive impacts on health, welfare, and the environment.

**ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS**

There are no estimated costs or savings associated with the proposed regulations because compliance with the Part 11 provisions are voluntary, not required, and because the proposed amendments to Parts 2, 2.5, 3, 4, and 5 do not add any requirements.

**DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

The Energy Commission has determined that there are no existing comparable federal regulations or statutes.

**FOR FURTHER INFORMATION**

Please direct general inquiries concerning aspects of the rulemaking process including requests for copies of the proposed text (express terms), the initial statement of reasons (ISOR), any modified version of the regulations, the substance of the proposed regulations, or any other information upon which the rulemaking is based to:

Corrine Fishman Regulations Manager,  
Efficiency Division  
(916) 805-7452  
[corrine.fishman@energy.ca.gov](mailto:corrine.fishman@energy.ca.gov)

Specific questions regarding the substantive and/or technical aspects of the proposed changes to the building standards should be addressed to:

Primary Contact: Payam Bozorgchami, PE  
Senior Civil Engineer  
California Energy Commission  
Building Standards Office, Efficiency Division  
(916) 931-9765  
[Payam.bozorgchami@energy.ca.gov](mailto:Payam.bozorgchami@energy.ca.gov)

Secondary Contact: Peter Strait, Supervisor  
California Energy Commission  
Building Standards Office, Efficiency Division  
(916) 805-7427  
[Peter.strait@energy.ca.gov](mailto:Peter.strait@energy.ca.gov)