

**DOCKETED**

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<b>Project Title:</b>	Local Ordinances Exceeding the 2019 Energy Code
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<b>Document Title:</b>	San Luis Obispo Local Ordinance No 1684
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<b>Filer:</b>	Danuta Drozdowicz
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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**ORDINANCE NO. 1684 (2020 SERIES)**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN LUIS OBISPO, CALIFORNIA, ESTABLISHING THE CLEAN ENERGY CHOICE PROGRAM BY AMENDING THE CITY OF SAN LUIS OBISPO BUILDING CODE TO REQUIRE HIGHER ENERGY PERFORMANCE FOR NEWLY CONSTRUCTED STRUCTURES**

**WHEREAS**, greenhouse gas accumulation in the atmosphere as the result of human activity is the primary cause of the global climate crisis; and

**WHEREAS**, in California alone, the initial impacts of climate change have resulted in unprecedented disasters with tremendous human, economic, and environmental costs; and

**WHEREAS**, the Intergovernmental Panel on Climate Change estimates that global emissions need to be reduced by 45 percent from 2010 levels by 2030, and 100 percent by 2050 to prevent global catastrophe; and

**WHEREAS**, the State of California enacted Senate Bill (SB) 32 to require greenhouse gas emissions to be reduced to 40 percent below 1990 levels by 2030 and Governor Brown issued Executive Order B-55-18 establishing a statewide target of carbon neutrality by 2045; and

**WHEREAS**, City of San Luis Obispo residents and businesses have repeatedly identified climate action as a top community priority; and

**WHEREAS**, the City of San Luis Obispo City Council has directed staff to evaluate strategies and options to achieve community-wide carbon neutrality by 2035; and

**WHEREAS**, the inventoried greenhouse gas emissions in the City of San Luis Obispo come from a variety of sources, primarily transportation and energy use in buildings and facilities; and

**WHEREAS**, as of January 2020, the community will have access to carbon neutral electricity procured by Monterey Bay Community Power; and

**WHEREAS**, the remaining source of greenhouse gas emissions from energy use in buildings will come from the onsite combustion of fossil fuels, primarily natural gas; and

**WHEREAS**, the direct global warming impact of natural gas is considerably higher than previously thought; and

**WHEREAS**, in order to achieve carbon neutrality, new sources of greenhouse gas emissions need to be substantially reduced or eliminated; and

**WHEREAS**, Public Resources Code Section 25402.1(h)(2) allows more stringent local amendments to the energy conservation provisions in the California Energy Code; and

**WHEREAS**, the California Statewide Codes and Standards Program, has determined specific modifications to the 2019 State Energy Code for each climate zone that are cost-effective; and that such modifications will result in designs that consume less energy than they would under the 2019 State Energy Code; and

**WHEREAS**, staff has reviewed the “2019 Nonresidential New Construction Reach Code Cost Effectiveness Study” and “2019 Cost-effectiveness Study: Low-Rise Residential New Construction” developed for the California Energy Codes and Standards Program and find them sufficient to illustrate compliance with the requirements set forth under California Administrative Code Chapter 10-106; and

**WHEREAS**, based on these studies, the City finds the proposed local amendments to the 2019 California Energy Code that affect building energy performance to be cost-effective and consume less energy than permitted by Title 24, Part 6; and

**WHEREAS**, the 2019 California Energy Code offers compliance options that were established through the public rulemaking process of the code update; and

**WHEREAS**, the Council expressly declares that the proposed amendments to the Energy Code are reasonably necessary because of local climatic, topological, and geological conditions; and

**WHEREAS**, the requirements specified in this Ordinance were reviewed via public comment, through a robust outreach process, and through a publicly noticed public hearing process; and

**WHEREAS**, Resolution No. 11133 (2020 Series) establishes a policy preference for all-electric buildings and resolves that new buildings in the city shall not cause a net increase in community greenhouse gas emissions as the result of on-site energy use; and

**WHEREAS**, a first reading of Ordinance 1668 (2019 Series) to establish local amendments to the California Building Code was approved by Council, but the ordinance was not adopted.

**NOW, THEREFORE, BE IT ORDAINED** by the Council of the City of San Luis Obispo as follows:

**SECTION 1. Purpose.** It is the purpose and intent of this Ordinance to establish the Clean Energy Choice Program, including standards for new buildings to exceed minimum 2019 Title 24 Part 6 requirements.

**SECTION 2. Adoption.** The 2019 California Building Code, Title 24, Part 6, is hereby adopted by the City of San Luis Obispo with local amendments to be codified under Chapter 15.04 as specified in Exhibit A. The Council hereby adopts the recitals herein as separate and additional findings of fact in support of adoption of the ordinance.

**SECTION 3. Severability.** If any word, phrase sentence part, section, subsection or other portion of this amendment or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this amendment, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The City of San Luis Obispo hereby declares that it would have passed this amendment and each section, subsection sentence, clause and phrase of this amendment, irrespective of the fact that any one or more sections, subsection, sentences, clauses or phrases is declared invalid or unconstitutional.

**SECTION 4 - Findings.** The City Council finds that each of the changes or modifications to measures referred to therein are reasonably necessary because of local climatic, geological, or topographical conditions in the area encompassed by the boundaries of the City of San Luis Obispo, and the City Council adopts the following findings in support of local necessity for the changes or modifications:

1. As a city located on the California Central Coast, San Luis Obispo is vulnerable to the effects of sea level rise and resultant flooding within the San Luis Creek watershed, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, which contribute to melting of glaciers and thermal expansion of ocean water – resulting in rising sea levels.
2. San Luis Obispo is already experiencing the repercussions of excessive greenhouse gas emissions as rising sea levels and severe weather events threaten the City’s nearby shoreline and infrastructure and cause significant erosion leading to infrastructure failures including the Mud Creek slide resulting in closure of Highway 1 for repairs, and economic impacts to surrounding communities.
3. San Luis Obispo is situated along a wildland-urban interface and has been identified as a Community at Risk from wildfire and is extremely vulnerable to wildfires and firestorms, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, drought conditions, vegetative fuel, and length of fire seasons- contributing to the likelihood and consequences of fire.
4. The City of San Luis Obispo is situated at the base of a watershed of the Santa Lucia Mountains and flooding of San Luis, Chorro, Stenner, Old Garden, and Brizzolara Creeks results in conditions rendering fire department vehicular traffic unduly burdensome or impossible, as witnessed in major floods that occurred in 1952, 1961, 1969, 1973, 1978, 1982, and 1995. Furthermore, flood conditions described above create the potential for overcoming the ability of the fire department to aid or assist in fire control, evacuations, rescues and other emergency task demands inherent in such situations. The resulting overburdening of fire department personnel may cause a substantial or total lack of protection against fire for the buildings and structures located in the City of San Luis Obispo. The afore-described conditions support the imposition of fire protection requirements greater than those set forth in the California State Building Standards Code and, in particular, support the imposition of more restrictive requirements than set forth in the California Energy Code for the purpose of reducing the City’s contributions to Greenhouse Gas Emissions resulting in a warming climate and related severe weather events.

5. The aforementioned flood and rain events result in conditions wherein stormwater can inundate the wastewater treatment system as witnessed in major floods that occurred in 1952, 1961, 1969, 1973, 1978, 1982, and 1995. Furthermore, rain events and flood conditions described above create a condition referred to as Inflow and Infiltration (I/I) that allow rain and flood waters to flow and/or seep into the wastewater system and overcome the ability of the wastewater collection system and Water Reclamation Facility (WRF) to convey and treat sewage. The resulting overburdening of the wastewater system can result in threats to public health, public and private property and water quality and violations and fines from the State of California, the Environmental Protection Agency (EPA) or others. To the extent that climate change has the potential to make these conditions worse, more restrictive Energy Code requirements to achieve reduced greenhouse gas emissions are necessary.
6. The City of San Luis Obispo is situated near three major faults each capable of generating earthquakes with a magnitude of 7.5. These are the San Andreas to the east of the City, the Nacimiento-Rinconada that crosses Hwy 101 north of the City then parallels the City to the east, and the Hosgri to the West. Other faults of importance are the Huasna and West Huasna to the Southeast of the City, the San Simeon to the Northwest, and the Edna and Edna Extended faults which enter the southern areas of the City. In as much as these faults are included as major California earthquake faults, which are subject to becoming active at any time, the City of San Luis Obispo is particularly vulnerable to devastation should such an earthquake occur. The potential effects include isolating the City of San Luis Obispo from the North and South due to the potential for collapsing of freeway overpasses or a slide on both the Cuesta and Ontario Grades and the potential for horizontal or vertical movement of the Edna fault rendering surface travel across the southern extremities of the city unduly burdensome or impossible. Additional potential situations inherent in such an occurrence include loss of the City's two main water sources (the Salinas and Whale Rock reservoirs), broken natural-gas mains causing structure and other fires, leakage of hazardous materials, the need for rescues from collapsed structures, and the demand for first aid and other medical attention to large numbers of people. As a result, the City is pursuing a policy to discourage additional natural gas extensions and the related, expanded risk of gas leaks and explosions during seismic events for the protection of human life and the preservation of property in the event of such an occurrence.
7. That seasonal climatic conditions during the late summer and fall create numerous serious difficulties in the control and protection against fire situations in the City of San Luis Obispo. The hot, dry weather in combination with Santa Lucia (offshore) winds frequently results in wildland fires in the brush-covered slopes on the Santa Lucia Mountains, San Luis Mountain, and the Irish Hills areas of the City of San Luis Obispo. The aforementioned areas surround the City. When a fire occurs in said areas, such as occurred in 1985 when the Los Pilitas fire burned six days and entered the City and damaged many structures, the entirety of local fire department personnel is required to control, monitor, fight and protect against such fire situations in an effort to protect life and preserve property and watershed land. The same climatic conditions may result in the concurrent occurrence of one or more fires in the more populated areas of the City without adequate fire department personnel to protect against and control such a situation. Therefore, the above-described findings support the imposition of measures

to increase the efficiency of new buildings in the City and reduce Green House Gas emissions from carbon, and support reducing the amount of natural gas distributed and used throughout the City.

**SECTION 5 CEQA.** This ordinance is categorically exempt from CEQA because it is an action taken by a regulatory agency for the purpose of protecting the environment (CEQA Guidelines Section 15308). In addition, this ordinance is exempt from CEQA under the general rule, 15061(b)(3), on the grounds that these standards are more stringent than the State energy standards, there are no reasonably foreseeable adverse impacts, and there is no possibility that the activity in question may have a significant effect on the environment.

The following findings are made in support of these determinations:

1. The purpose of the City's Clean Energy Choice Policy and the implementation of a Reach Code is to reduce the amount of greenhouse gas emissions in the City of San Luis Obispo that are produced from buildings.
2. All electric buildings constructed in the City of San Luis Obispo consistent with the Clean Energy Choice Policy and implementation of a Reach Code will reduce greenhouse gas emissions, improve indoor air quality, and reduce the risk of catastrophic infrastructure failure, including explosions and fires caused by breaks and leaks in the natural gas distribution system as a result of upset conditions due to deferred maintenance or following an earthquake.
3. The Reach Code approval process requires that City determine it is cost effective and that the local standards will require buildings to use no more energy than current statewide. Furthermore, the CEC approval process requires that the City make the findings as part of its approval process. Therefore, the Reach Code standards can only go into effect if they protect the environment by making buildings more efficient and in a cost-effective manner.
4. The City's Clean Choice Energy Program enables property owners and developers to take advantage of a statewide effort to build a clean, efficient, and reliable grid to serve expanding energy needs across the State of California.
5. The Intergovernmental Panel on Climate Change estimates that global emissions need to be reduced by 45 percent from 2010 levels by 2030, and 100 percent by 2050 to prevent global catastrophe. However, due to the lack of coordinated action or a comprehensive plan to address this threat at a national level, cities and states across the United States must lead the way.

**SECTION 6. Violations.** Violation of the requirements of this Ordinance shall be considered an infraction of the City of San Luis Obispo Municipal Code, punishable by all the sanctions prescribed in Chapter 1.12.

**SECTION 7. Effective Date.** This Ordinance shall be effective as of September 1, 2020.

**SECTION 8.** A summary of this ordinance, together with the names of Council members voting for and against, shall be published at least five (5) days prior to its final passage, in The New Times, a newspaper published and circulated in this City. This ordinance shall go into effect at the expiration of thirty (30) days after its final passage.

**INTRODUCED** on the 16<sup>th</sup> day of June 2020, **AND FINALLY ADOPTED** by the Council of the City of San Luis Obispo on the 7<sup>th</sup> day of July 2020, on the following vote:

**AYES:** Council Member Christianson, Stewart, Vice Mayor Gomez and Mayor Harmon

**NOES:** None

**RECUSED:** Council Member Pease

DocuSigned by:  
*Heidi Harmon*  
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\_\_\_\_\_  
Mayor Heidi Harmon

**ATTEST:**

DocuSigned by:  
*Teresa Purrington*  
B98BADBF9C78436...  
\_\_\_\_\_  
Teresa Purrington  
City Clerk

**APPROVED AS TO FORM:**

DocuSigned by:  
*J. Christine Dietrick*  
784AE55BC6BC44E...  
\_\_\_\_\_  
J. Christine Dietrick  
City Attorney

**IN WITNESS WHEREOF**, I have hereunto set my hand and affixed the official seal of the City of San Luis Obispo, California, on \_\_\_\_\_.

DocuSigned by:  
*Teresa Purrington*  
B98BADBF9C78436...  
\_\_\_\_\_  
Teresa Purrington  
City Clerk

**Ordinance No. 1684**  
**Exhibit A**  
**Section 15.04.110**  
**AMENDMENTS - CALIFORNIA ENERGY CODE**

**A. Adoption of Codes and Applicability.**

1. The City of San Luis Obispo hereby adopts the 2019 California Code of Regulations, Title 24, Part 6 (California Energy Code) with local amendments as set forth herein. The provisions of such are hereby referred to, adopted, and made a part hereof as if fully set out in this Chapter except as modified hereinafter. These regulations will be known as the City of San Luis Obispo Energy Reach Code and all prior provisions are hereby superseded.
2. The effective date of this ordinance shall be September 1, 2020 and is applicable to new construction buildings including those that are built after a demolition. The amendments contained in 15.04.110 do not apply to Additions, Alterations, or Attached Accessory Dwelling Units. Residential subdivisions in process of permitting or constructing initial public improvements for any phase of a final map recorded prior to January 1, 2020 are exempt, unless compliance is required by an existing Development Agreement. Additional exemptions and exceptions are identified below.
3. Notwithstanding the requirements of this Chapter and the Council's Clean Energy Choice Policy, and other public health and safety hazards associated with natural gas infrastructure, natural gas may be allowed in a building otherwise subject to the requirements of this ordinance if the authority responsible for entitling or permitting the project makes any of the following findings:
  - a. That current limitations of electric power infrastructure in the vicinity of the project site make it impossible to serve the project without significant upgrades, such as to transformers or other distribution equipment, that are outside the scope of the proposed project and would render it economically infeasible.
  - b. The proposed project would result in a de minimis use of natural gas that could be offset, such as through a sequestration project or other proposal directly tied to the development project.
  - c. Consistent with the purpose and intent of these regulations, the authority granting approval to a project may permit the use of natural gas without requiring the additional efficiency requirements or appliance pre-wiring if it is determined to be necessary to serve public health, safety and welfare.

**B. Amend Section 100.1(b) by adding the following definitions:**

**ALL-ELECTRIC BUILDING** is a building that has no natural gas plumbing installed within the building and that uses electricity as the source of energy for all space heating, water heating, cooking appliances, and clothes drying appliances. An All-Electric Building may be plumbed for the use of natural gas as fuel for appliances in a commercial kitchen.

**MIXED-FUEL BUILDING** is a building that is plumbed for the use of natural gas as fuel for space heating, water heating, cooking or clothes drying appliances.

**ACCESSORY DWELLING UNIT, DETACHED** is an Accessory Dwelling Unit (see City of San Luis Obispo Municipal Code 17.156.004) that provides new residential square footage not attached or sharing any walls with the primary existing single-unit dwelling.



**ACCESSORY DWELLING UNIT, ATTACHED** is an Accessory Dwelling Unit (see City of San Luis Obispo Municipal Code 17.156.004) that is either attached to (by a minimum of one shared wall), or completely contained within, the primary existing space of the single-unit dwelling unit or existing accessory structure..

**C. Amend Section 140.0(b) to read as follows:**

- (b) The requirements of Sections 120.0 through 130.5 (mandatory measures for nonresidential, high-rise residential and hotel/motel buildings):
  - 1. The entire solar zone of newly constructed buildings, as specified in Section 110.10, shall have a solar PV system installed that meets the minimum qualification requirements as specified in Joint Appendix JA11, subject to the exceptions in Section 110.10.

**D. Amend Section 140.0(c) to read as follows:**

- (c) Either the performance compliance approach (energy budgets) specified in Section 140.1 or the prescriptive compliance approach specified in Section 140.2 for the Climate Zone in which the building will be located. Climate zones are shown in FIGURE 100.1-A.

**Exception to 140.0(c):** Mixed-Fuel buildings shall use the performance compliance approach (energy budgets) specified in Section 140.1

**E. Section 140.1 is modified as follows:**

**SECTION 140.1 – PERFORMANCE APPROACH: ENERGY BUDGETS**

A newly constructed All-Electric Building complies with the performance approach if the energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the energy budget calculated for the Standard Design Building under Subsection (a).

A newly constructed Mixed-Fuel Building complies with the performance approach if the energy budget calculated for the Proposed Design Building under Subsection (b) has a compliance margin, relative to the energy budget calculated for the Standard Design Building under Subsection (a), of at least the value specified for the corresponding occupancy type in Table 140.1-A below.

Table 140.1-A MIXED FUEL BUILDING COMPLIANCE MARGINS

Occupancy Type	Compliance Margins
Office / Retail	15%
Hotel/motel and High-rise residential	9%
All other occupancies in buildings with both indoor lighting and mechanical systems	5%
All other occupancies in buildings with indoor lighting or mechanical systems but not both	5%

- a) **Energy Budget for the Standard Design Building.** The energy budget for the Standard Design Building is determined by applying the mandatory and prescriptive requirements to the Proposed Design Building. The energy budget is the sum of the TDV energy for space-conditioning, indoor lighting, mechanical ventilation, service water heating, and covered process loads.
- b) **Energy Budget for the Proposed Design Building.** The energy budget for a Proposed Design Building is determined by calculating the TDV energy for the Proposed Design Building. The energy budget is the sum of the TDV energy for space-conditioning, indoor lighting, mechanical ventilation and service water heating and covered process loads.
- c) **Calculation of Energy Budget.** The TDV energy for both the Standard Design Building and the Proposed Design Building shall be computed by Compliance Software certified for this use by the Commission. The processes for Compliance Software approval by the Commission are documented in the ACM Approval Manual.

**Note:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

**Exception 1 to 140.1:** The following buildings and uses shall comply with the performance approach if the energy budget calculated for the Proposed Design Building under Subsection (b) is no greater than the energy budget calculated for the Standard Design Building under Subsection (a):

- A. Essential Service buildings and public facilities where natural gas is necessary to meet the requirements of other permitting agencies or is demonstrated to be necessary for the purpose of protecting public health, safety and welfare.

**F. Amend Section 140.2 to read as follows:**

To comply using the prescriptive approach, a building shall be designed with and shall have constructed and installed systems and components meeting the applicable requirements of Sections 140.3 through 140.9.

**Note:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

**Exception to 140.2:** Mixed-Fuel Buildings, except those buildings and uses identified in Exception 1 to 140.1, shall only use the performance compliance approach (energy budgets) specified in Section 140.1.

**G. Amend the first two paragraphs of Section 150.0 to read as follows:****SECTION 150.0 – MANDATORY FEATURES AND DEVICES**

Low-rise residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(s).

**Note:** The requirements of Sections 150.0(a) through 150.0(s) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(s) also apply to additions or alterations.

**H. Add Subsection (5) to Section 150.0(h) to read as follows:**

5. Systems using gas space heating equipment shall include the following components:
  - A. A designated exterior location for a future heat pump compressor unit with either a drain or natural drainage for condensate from possible future operation as cooling equipment.
  - B. For equipment serving individual units, a dedicated 208/240 volt, 30-amp or greater electrical circuit that is able to be connected to the electric panel with conductors of adequate capacity, terminating within 3 feet from the designated future location of the compressor unit with no obstructions. In addition, all of the following:
    - i. Both ends of the conductor shall be labeled with the word "For Future Heat Pump Space Heater" and be electrically isolated; and
    - ii. A double pole circuit breaker in the electrical panel labeled with the words "For Future Heat Pump Space Heater"; and
    - iii. Other electrical components, including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

**Exception to Section 150.0(h)5.B:** If a 240 volt 30 amp or greater electrical circuit and compressor unit location exists for space cooling equipment.

- C. For equipment serving more than one dwelling unit, electric capacity, determined at 240 volts, in the form of raceway and service and subpanel capacity installed with a termination point of no more than 3 feet from each gas outlet. Capacities shall be determined to be sufficient for heat pump space heating equipment to provide the same heat output as the gas equipment.

**Exception 1 to Section 150.0(h)5:** If centralized space cooling equipment is installed for all the affected dwelling units.

**Exception 2 to Section 150.(h)5:** Systems serving Accessory Dwelling Units, Attached to an existing single-family home.

**I. Amend Section 150.0(n) to read as follows:**

n) Water Heating System.

1. Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:

A. A dedicated 125 volt, 20 amp receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and accessible to the water heater with no obstructions.

In addition, all of the following:

- i. Both ends of the unused conductor shall be labeled with the words "For Future Heat Pump Water Heater" and be electrically isolated; and
- ii. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "For Future Heat Pump Water Heater"; and
- iii. Other electrical components, including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

**NOTE:** Appliances shall not be considered "obstructions".

**Exception to 150(n)1.A:** Systems serving Accessory Dwelling Unit, Attached to an existing single-family home.

B. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; and

C. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance, and

D. A gas supply line with a capacity of at least 200,000 Btu/hr.

E. Located in an area that is both:

- i. At least 3 feet by 3 feet by 7 feet high; and
- ii. Has a minimum volume of 760 cubic feet or a ventilation plan that includes the equivalent of one 16 inch by 24 inch grill for warm supply air and one 8 inch duct of no more than 10 feet in length for cool exhaust air.

**Exception to 150.0(n)1.E:** Located in Accessory Dwelling Units, Detached

2. Water heating recirculation loops serving multiple dwelling units shall meet the requirements of Section 110.3(c)5.

3. Solar water-heating systems and collectors shall be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
4. Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2kW) shall meet the requirements of Section 110.3(c)7.
5. Systems using gas water heaters to serve multiple dwelling units and/or common areas shall:
  - A. Be located in a space that can accommodate a heat pump water heating system of equivalent capacity and performance; and
  - B. Have electrical capacity installed for a heat pump water heater(s) in the form of raceway and service and subpanel capacity, with a termination point of no more than 3 feet from each gas outlet. The electrical capacity shall be determined at 208/240 volts and shall be sufficient to power a heat pump hot water heater of equivalent capacity and performance. Plans shall include calculations and installations for equivalent capacity and performance, electrical power, conductors, raceway sizes and panel capacities in accordance with the California Electrical Code.

**J. Add Subsection (s) to Section 150.0 to read as follows:**

- s) Clothes Drying and Cooking. Buildings plumbed for natural gas clothes drying or cooking equipment shall include the following components for each gas terminal or stub out:
  1. Clothes Drying.
    - A. A dedicated 208/240-volt, 30 amp or greater electrical receptacle that is able to be connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions. In addition, all of the following:
      - i. Both ends of the conductor shall be labeled with the word "For Future Electric Clothes Dryer" and be electrically isolated;
      - ii. A double pole circuit breaker in the electrical panel labeled with the words "For Future Electric Clothes Dryer"; and
      - iii. All electrical components including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.
  2. Cooktop or Range
    - A. A dedicated 208/240-volt, 40 amp or greater circuit and 50 amp or greater electrical receptacle that is able to be connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions. In addition, all of the following:
      - i. Both ends of the conductor shall be labeled with the word "For Future Electric Range" and be electrically isolated; and
      - ii. A double pole circuit breaker in the electrical panel labeled with the words "For Future Electric Range"; and

- iii. All electrical components, including conductors, receptacles, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.
3. Stand Alone Cooking Oven
- A. A dedicated 208/240-volt, 20 amp or greater receptacle that is able to be connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions. In addition, all of the following:
    - i. Both ends of the conductor shall be labeled with the word “For Future Electric Oven” and be electrically isolated; and
    - ii. A double pole circuit breaker in the electrical panel labeled with the words "For Future Electric Oven"; and
    - iii. All electrical components, including conductors, receptacles or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

**NOTE:** Appliances shall not be considered “obstructions”

**K. Amend Section 150.1(b) to read as follows:**

- b) Performance Standards. A building complies with the performance standards if the energy consumption for the Proposed Design Building is no greater than the energy budget calculated for the Standard Design Building using Commission-certified compliance software as specified by the Alternative Calculation Methods Approval Manual. Mixed-Fuel Buildings must additionally reach an EDR threshold beyond the Standard Design in order to comply with performance standards.

**L. Amend Section 150.1(b)1 and 2 to read as follows:**

- 1. Newly Constructed Buildings. The Energy Budget for newly constructed buildings or newly constructed Detached Accessory Dwelling Units is expressed in terms of the Energy Design Rating, which is based on TDV energy. The Energy Design Rating (EDR) has two components, the Energy Efficiency Design Rating, and the Solar Electric Generation and Demand Flexibility Design Rating. The Solar Electric Generation and Demand Flexibility Design Rating shall be subtracted from the Energy Efficiency Design Rating to determine the Total Energy Design Rating. The Proposed Building shall separately comply with the Energy Efficiency Design Rating and the Total Energy Design Rating.
  - A. An All-Electric Building complies with the performance standards if both the Total Energy Design Rating and the Energy Efficiency Design Rating for the Proposed Building are no greater than the corresponding Energy Design Ratings for the Standard Design Building.
  - B. A Mixed-Fuel Building complies with the performance standards if:
    - i. The Energy Efficiency Design Rating of the Proposed Building is no greater than the Energy Efficiency Design Rating for the Standard Design Building;
    - ii. The Total Energy Design Rating of the Proposed Building is less than the Total Energy Design Rating of the Standard Design Building by at least 9 for a single-family dwelling unit and 9.5 for a multi-family dwelling unit.

**Exception to Section 150.1(b)1.B.ii.** Buildings with limited solar access are excepted if all of the following are true:

1. The Total Energy Design Rating for the Proposed Building is no greater than the Total Energy Design Rating for Standard Design Building; and
2. A photovoltaic (PV) system(s) meeting the minimum qualification requirements as specified in Joint Appendix JA11 is installed on all available areas of 80 contiguous square feet or more with effective annual solar access. Effective annual solar access shall be 70 percent or greater of the output of an unshaded PV array on an annual basis, wherein shade is due to existing permanent natural or manmade barriers external to the dwelling, including but not limited to trees, hills, and adjacent structures; and
3. The Energy Efficiency Energy Design Rating for the Proposed Building is no greater than the respective value for the Standard Design Building by the EDR margin in Table 150.1(b)1 below.

**Table 150.1(b)1 Energy Efficiency EDR Margins**

Building Type	Energy Efficiency EDR Margin
Single Family	2.5
Multifamily	0.5

**Exception to Section 150.1(b)1.:** A community shared solar electric generation system, or other renewable electric generation system, and/or community shared battery storage system, which provides dedicated power, utility energy reduction credits, or payments for energy bill reductions, to the permitted building and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system Energy Design Rating required to comply with the Standards, as calculated according to methods established by the Commission in the Residential ACM Reference Manual.

**M. Amend Section 150.1(c) to read as follows:**

**Prescriptive Standards/Component Package.** All-Electric Buildings that comply with the prescriptive standards shall be designed, constructed, and equipped to meet all of the requirements for the appropriate Climate Zone shown in TABLE 150.1-A or B. In TABLE 150.1-A and TABLE 150.1-B, a NA (not allowed) means that feature is not permitted in a particular Climate Zone and a NR (no requirement) means that there is no prescriptive requirement for that feature in a particular Climate Zone. Mixed-fuel buildings shall comply with requirements of section 150.1(b). Installed components for All-Electric Buildings shall meet the following requirements:

**NOTE:** The rest of the Section 150.1(c) applies without modifications but is not reproduced here for brevity.